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Correspondence, Columbia, 1890-1891.

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Florence, July 13, 1890.

My dear Mr. Low.

As my long vacation draws to an end I begin to forecast my next Winter's work, and to wonder how best I can devote my time & strength. I am, for several seasons, somewhat averse to taking up my old tasks and my old mode of life. It had gradually become a very undesirable one in every point of view, needlessly laborious and exhausting to myself, and at the same time wasteful and unproductive as regarded the interests of the school. The methods that were appropriate to a school of twenty students, with a single assistant, had become unsuitable with eighty students and four or five assistants. When I had once begun, however, with all the strings in my own hands it was not easy to drop them, and it ended in my giving pretty much all my time to details of administration. Besides carrying on a large correspondence with parents & guardians and young men making inquiry about the course, and doing a good deal of talking to those who were not satisfied without a personal interview, I was liable to constant

interruptions from the students themselves, who were all the time running to me for advice or assistance. That time remained did not more than suffice for the necessary conferences with my assistants who were as anxious as I was that they should do their work just to my mind. All this was just what I was glad to do, and in organizing the work and establishing the personal relations I considered essential, it was unavoidable. But the necessity had been outgrown and it was time for a change ~~in~~ reading & studying and any thing beyond mere routine-work in instruction had become impossible. Now this has all been broken up by my absence from the scene, and I have no wish to re-establish it.

Another reason for keeping away from the School as much as possible, and continuing to my assistants as much as possible of the responsibility that they this year have had to assume, is that this more independent attitude is greatly to their ^{own} advantage, and thus ultimately to the advantage of the department. They have each written me in turn, to say how much the others have grown and developed, and I accept the united testimony. I would

not if I could put them back into a too subordinate position.

Besides, it is due to them that they should have a chance of making an independent name, & of becoming personally known, to the Trustees & to the community.

But my chief reason for wishing to continue, as far as possible, after my return, the arrangements made for my absence, is that they can do all these things as well as I can do them & some of them much better than I ~~can do~~ ^{ever have done} them, either because they can devote ~~more~~ to them more time and attention than I have ever been able to command, or because they have had special opportunities, or natural gifts, that specially qualify them for the work in hand. Even the subjects that are most distinctive of the School, and the treatment of which I have myself had to devise and to perfect by experiment, are now in such shape that they can as well be administered by my assistants as by myself. I find indeed that they gain in completeness of treatment by passing through new hands. But there are other topics equally important which I have never yet had a chance to work up and to which I am very desirous

now to turn my attention. Some of my old subjects will of course come back into my hands. But I hope that if as many as possible are continued in the hands that have this year administered them I may have time still left to cultivate fresh fields. I am sure that the best work I can do is, as it always has been, that of a pioneer. The whole work of Technical education in schools is a new one, and the first step in it is to devise methods by which things that have hitherto been learned & taught in workshops and draughting rooms, by methods of apprenticeship, shall be included in courses of academic instruction. So far as Architecture is concerned we have had to solve the problem almost from the beginning, neither English nor Continental examples being much to our purpose. I have, as it were, succeeded in surveying, breaking up, and turning over to the Mrs Bandman a part of the field, and have taken a hand at the sowing & reaping. But now I think I had better turn my attention, again, to extending the fences.

What we already have brought into good shape, and are now carrying on by methods of our own devising, is

to give my personal attention & oversight.

Very much the same is to be said of the study of the Decorative Arts, auxiliary to Architecture. I have been in the habit of telling what I happened to know of Stained Glass, Mosaics, Frescoes, Enamel, Faience, etc. etc., but in a very superficial & unsatisfactory manner, & with very imperfect illustration. I want very much to bring all this into proper shape by giving it study and collecting material. There is a great deal of illustrative material already available in the Museums. But this needs to be carefully examined with reference to our special needs, and that will take time.

So will it also to make proper acquaintance with the city itself, which is virtually a great museum of architectural examples, arranged somewhat miscellaneously, but containing excellent examples of almost every thing we study, if the student can only know just where to find them. It is a scandalous waste of opportunity not to be availing ourselves of them.

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the teaching of Architectural History, Ancient, Medieval & Modern, with as much of Archaeology as is convenient, - of various kinds of Draughtmanship, - of Shades and Shadows, and of Perspective, - of Design, in which the study of planning needs to be strengthened, - of Ornament, - and of the modern Languages, which we manage to combine with that of Archaeology & History. Besides this we have tried a good many experiments and at last I think, a fairly successful one, in bringing within our range a knowledge of the theory, and to some extent of the practice, of the building arts. It seems as if this might be left to be learned in Architects offices. But it is becoming clearer & clearer that the more of this ground we can cover at the school, the more welcome will our men be as office-students and assistants, and the more rapid will be their progress & the less their loss of time when school is left behind. Moreover we have made some progress in utilizing the ^{resources of the} other Departments in the School to this end, so that these arts may be understood in their relations to Mechanics, Chemistry & Physics. This is one of the things to the perfecting of which I want

Another thing which I have found of value and am encouraged to make more useful still, is a course of lectures in which, under the general name of the "Theory of Architecture," I have tried to expound some of the various theories of aesthetics that have had and still have currency, in regard to form and to color. Most of these are indeed, like rival systems of Theology, mutually destructive, and their exhibition side by side seems mainly to show how little basis of objective reality any of them possess. But here, as in Chemistry, a negative result is a positive gain. Unless forewarned, men are likely to fall victims to the first plausible theory they happen upon. The recent history of art is a record of such shipwrecks.

But I have had another object in view in these discourses, an object that I should like to find time to develop with more care. These subjects touch upon Metaphysics, or at least upon Psychology, as nearly as the others upon Physics & Chemistry, and they afford an excellent opportunity of

introducing into the course something of these studies. They may at least serve to make the students acquainted with the spirit of philosophy, as visible in its application to a subject-matter with which they are already conversant.

In the same way I should be glad if the discussion of Contracts could be made the occasion for saying something pertinent in regard to the principles of Law, & indeed of the principles of Political Economy. Having a concrete example already in hand makes it possible to enforce certain leading ideas which it would take a long time to reach through the textbooks of those sciences.

But more than almost any thing our men need practice in the critical use of their own tongue, — of their own tongues, I may say, for the looseness of expression in which most of them seem to have been brought up is appalling. I should be glad to have them write half a page ^{every} day, and re-write it the next, after excoriation. Such exercises could be made serviceable to give precision to their tech-

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nical knowledge. "Writing makes an accurate man." But to work out & administer such a scheme would take much time and thought.

So also in regard to their reading. It is a problem of no easy solution to make our books really useful. This we have solved to a certain extent so far as regards the illustrations, and if we can get our card catalogue completed, it will be a very satisfactory solution. But the text is a different matter. I have a notion of assigning all the books I can find relating to any topic to different men of the class which is studying it, and making them report to the class, in good shape, whatever they find not already covered in their regular instruction. As most books consist mainly, necessarily, in a rehearsal of common places, even though these are ^{usually} made to lead up to a new idea, I fancy that an exercise of this sort might prove of value. But this notion, again, would need much time & thought in working out the details, & preparing material

for use.

Making the material at hand really available to the students, without loss of time they can ill spare, in mere groping, is indeed one of our chief problems. This applies to the books, photographs, prints & drawings in our own hands, as well as to the museums and buildings that are within our reach. It is one form of the "Library Problem".

The department has now grown so large, too, and the instruction so various, and administered by so many different persons, that it needs time & thought to be spent in mere supervision. Half the good is lost unless the different branches are made to co-operate with and illustrate each other. The value of each is doubled if this can be done, as we have found where it has been tried.

But this cannot properly be left to the instructors to arrange among themselves. It is just for this sort of thing that a department needs a head, and I am myself in such

relations with my assistants that I could easily effect this if I had time to give to the details.

Another thing that I want to effect, and which could be arranged for at the same time, is the enforcement in all the classes of good methods of work. It is often said that the best thing a man learns at college is how to study. But this is just what many never learn at all, as it is not taught. I am sure it can be taught to good purpose. I think also that the enforcement of a certain system & regularity through the inspection of note-books & sketch-books, might be of value in the formation of business like habits and character.

In all this I think we should not forget that most of our men rely upon the four years they entrust us with for not only their professional but their general education, & that we are bound to make the course as liberal as is consistent with the technical object in view. To succeed in this would be a great success, and would go far to solve, by example,

the standing problem of reconciling the claims of general & special studies.

But whether we aim at turning out good citizens or only good architects we shall not do our best unless we enable every body to make the most of himself. I doubt whether we shall succeed in this so long as exactly the same work is expected of every body, wise and foolish alike, and am disposed to think that some means should be provided by which the brighter men can do more ^{or a better kind of} work, not merely better work, of the same kind as the rest. These achievements might be stimulated by the establishment of special distinctions, such as Honors, on graduating. Men who are capable of finding things out for themselves, instead of being told them, should have a chance to do so. Then they can tell the rest. This would foster both discovery and invention.

I do not know just what provision has been made for carrying on the work of the department

had a chance to look them over, and shrink from that labor. How disagreeable it is to do the things which we expect our fellows to do as a matter of course. Also I found it very fatiguing, & after the first hour held a listless pencil. Still, in the third hour it revived, under provocation.

Whatever at any time may come best in regard to all these things, I am minded hitherto to make a push, all along the line, for the application of the principle of which we were speaking a fortnight ago. I am sure that half the things we tell the men, & that they receive as so much mere fact, more or less interesting & reasonable, they could smile, be made to dread & second for themselves. Then they would understand & appreciate the parts in their vital relations, and, besides, get a notion of independent ways that would be revolutionary. At present they are told everything, ^{simple} and never asked to think until they come to something difficult. We formulate things for them, so that they may find it easy to remember them. But keep close the profit of working the formula, which, as we discover, is the most instructive thing in the world. Then we wonder that they don't find them as interesting & significant as we do.

This would involve a certain reorganization
of our own material, & would cost of the men
time for thinking, a tedious operation. But it
would be worth the time it cost. It might be
best, as I was suggesting, to prepare the data
and perform the question, indicating the method
of solution. The men who get through would gain,
every way. The men who didn't would be no
more off than otherwise, & could be used. This
would establish a discrimination of discipline
between the capable & incapable and thus
meet a felt want.

Some of these things we may get a
chance to talk over before return. Mean-
while I send you Jordan's address, which
you will read with interest. It sheds a sort
of side light on these discussions. He seems
to think that the notion of a liberal ed-
ucation, like the notion of the gentleman,
is a special product of English & American
civilization, not found on the continent. This
is important if true. The chief practical re-
sult of seeing it was to make me hope
that John may see his way to Cambridge
a year hence. He will be ripe by that time
for that society.

Yours always, and where I send my love it
includes all your little family, Wm. Ware.

P.S.

Sunday.

Florence. 1890

My letter has not yet gone and as I have had a chat with you for a couple of days I feel as if you were close by and naturally turn your way, at my next leisure.

Meanwhile I have been reading, & more than once, Mr. Giddie's & B.R. poem, greatly to my satisfaction. Save one or two points of obscurity, which I should think might have been laid for it as a spoken piece, it is as good as can be, and it has the merit of uttering the note of the time, or of the time presently to come, which is better. All this panoply of religions, ancient & modern, among which I have been wandering for the last six months, seems to me just a monument of the practical genius of the human race. Truth, scientific truth, the truth of things, as we now understand it, it is all sufficiently known for. But fancy & imagination, stimulated by fear & wonder, have from all time till now conjured up and

handed along a monumental mass of myths and miracles, pagan and Christian, until later ages have sustained and perpetuated them in monuments of art. What strikes me next is that it is all one, the story + its treatment, both alive products of the poetic artistic spirit, imagination forming first the substance + then the form. (But it is better to say, perhaps, that there are two imaginations, but the creature is inventive, and then the moulding and perfecting, whose function is, as Mr Austin said, to "see in everything the perfection the thing itself suggests.") All the religions, modern as well as ancient, seem to me, more + more, to be mainly poetry, + their expression in art to be of a piece with their origin + nature, + this is finely hit off in the poem.

To all this the spirit of truth, the scientific spirit, is as fatal as it is to

the other element of the historical reli-
gions, — Magic, founded on the notion
that the universe is at the mercy of a
certain spiritual hierarchy, whether gods,
witches, demons, saints or goblins, &
that certain times or places or things
are sacred or accursed, as the case
may be, luckily or unluckily. In this
point of view the new world seems to be the
home of freedom chiefly in this, that ~~there~~^{we}
have no saints and no holy places. In this
alone is a whole declaration of independ-
ence, an emancipation proclamation
for the human mind. You can hardly
understand how bright & clear it looks,
seen from Egypt, Turkey, Greece & Italy,
in contrast with paganism & mahome-
danism — & the Eastern & Western churches.
This incubus, of ^{the} superstitious habit of
mind, Protestantism largely threw off,
and I am not sure that this freedom
is not its distinguishing & characteristic
note. Yet ⁱⁿ point of doctrine, certainly,
the protestant sects made but a halting
progress towards common sense and

an open mind. Even when they recog-
nized the principle of using their reason
+ of the right of private judgment, which
is its cotemporary, circumstances were
too much for them, ever here.

But with us circumstances are so
worse, both in the respects I have men-
tioned and in the point I have men-
tioned before, that the political situation
makes the Eastern belief that of the
government of the world seem absurd —
with its "warms" + "punishments", and
"rankship" and "glory", and "praise", and
"pomp" + "ceremonies" — so novel that one
wonders how long it will be before the
old scales will suddenly fall from peo-
ple's eyes. Truth is one, and intellectual
consistency the yard of price. There will
arise presently a prophet who will preach
a religious truth that is not inconsis-
tent with ^{requisite} facts. Then we may hope to
find Sunday more powerful on work days,
+ work days more in accord with
Sunday. Farewell.

to setting up an electrical system, with Mechanic I
(Descriptive) and Mechanic II (Mathematical). Con-
sidering the internal composition of most of the
men who naturally take to architecture, I
am not sure that the objective & practical
aspect of construction is not the best for them.
Neither am I sure that this view is not far
more germane to architectural design than
the mathematical aspect. It is the thing itself
not ~~the~~ abstract relations that the architect needs
to have familiar. Above all a man needs to
have unity in his intellectual life. All our ef-
forts go to establishing relations between the
different studies. Between algebra and historical
forms this is impossible, but not between his-
torical prescriptions and building requirements. This
consideration is so fundamental that, if it is
really valid, one would abandon scientific en-
gineering, for most of our men, with sadness.

But the other alternative may still, in
spite of defeat, be a possibility, and I am
still disposed towards it, not entirely because
it still contemplates all our present results,
but because the course of study would be of va-
lue in itself for discipline and enlargement of
mind. I cannot help fancying, though it may
be no more than a fancy, that a narrow
but not by any means a shallow channel
might be dug that would lead our men
straight through ~~the~~ ~~the~~ Algebra, Trigonometry,
Analytic Calculus, Mechanics & Engineering

to the few practical problems of statics or dynamics that architectural operators in-
volve, excluding all side issues, dimming
them with an et cetera, leading them as it
was "by title." The little that such a course
would include, could, I imagine, be made so
abundantly familiar, that it ^{would} enter into the
general mental furniture far more efficiently
than often happens with the present range
of studies in this kind. To most of our men
these ideas lie outside of their habitual con-
templations, & degenerate with disuse into use-
less intellectual lumber. Now this may be a
fancy. Your judgment is better, I dare say, than
mine.

As to social science I fancy that if this
element could once obtain recognition, it would
add ~~the~~ interest to all our historical work, &
that this could in time be made to illustrate
at every turn ~~its~~ main precepts. If this proved
possible it would, for once, realize the definition
of history as "philosophy taught by example."

I amused myself yesterday by trying
to take notes of some of the lectures, ap-
plying the method I have been accustomed
to recommend, but of which I have real-
ly had but little experience. I have not

RESIDENT'S ROOM,
COLUMBIA COLLEGE.

New York, Dec.4th,1890.

Prof. William R. Ware,
Professor of Architecture.

My dear Sir:

Herewith I beg to hand you copy of a series of resolutions passed by the Trustees at their meeting of Dec.1,1890. In connection with these resolutions I desire certain information, which, so far as it affects persons, I shall esteem strictly confidential.

1. Please give the name and present title of each member of the department of Architecture, including fellows and honorary fellows.

2. Outline the duty of each, and give me your opinion of his capacity and serviceableness.

He letter in this
my?
3. State what you think would be an ideal equipment for the work in the regular courses of your department, as to number of instructors and their grade, based upon the present numbers in the School of Mines.

W
4. Indicate what increase of numbers among the students in the regular courses would necessitate additional force in your department, and of what grade such new officer should be.

W
5. State what work, if any, is being done in your department outside of the regular courses. *Appendix*

W
6. State what University courses in pure science, as distinguished from applied science, you are prepared to offer, giv-

ing the number of hours per week.

7. State what new courses you would like to offer, and in this connection state what additional equipment in men and laboratories and apparatus, if any, would be needed.

8. State in what respect, if any, the work of your department in its entire range does not come up to your desires, and what development, if any, you hope to see it achieve.

9. As you are among those entitled to a year's leave of absence on half pay, state whether you desire to avail of this privilege during the year beginning July 1, 1891. If so, please give any reasons which move you to desire to be absent next year rather than later.

10. Kindly let me have your reply not later than Dec. 31st.

Respectfully,

Lute Low.

President.

men. 1/2 bro. asst - Lab.
hon - 1/4 } | Br. R. & Inst. R. -
reci - 1/4 }
loger
Am - 1/4 } | Lab.
Prin - 1/4 }

C O P Y.

New York, Dec. 30, 1890.

President Low,

Dear Sir:

The consideration of the questions contained in your letter of Dec. 4th has suggested certain changes in the studies of the department under my charge, which seem to me equally desirable whether the work is to continue upon its present basis, or is presently to assume larger dimensions. The specific answers to the questions you ask will be more easily understood if these changes are first described.

The disciplinary and more elementary topics at present pursued in the department, both professional and scientific, seem to me to need no special changes. Algebra, trigonometry, the calculus and mechanics, physics, chemistry and geology, free hand and architectural drawing, projections, descriptive geometry, shades, shadows and perspective, architectural history, ancient, mediaeval and modern, in English, French and German, the study of design, of the history of ornament, of the theory of architecture and of the decorative arts-- all these although susceptible of improvement in certain particulars, seem to me in their main range and general intention to be just about what is requisite and necessary.

On the other hand the time bestowed on hygiene and botany, general studies with no special bearing upon our work, can I be-

lieve be better devoted to the study of the English language. I find the bulk of my students singularly deficient in its use. They all need constant practice in it as part of their professional training.

But though the scheme of elementary and disciplinary studies is fairly satisfactory, the more advanced work, either in construction or in design, is much too restricted in range, and to a large extent unsuitable in character. It is not such as may properly be expected of us, nor does it bring into play the resources already at our command. We are prepared to give far more thorough and pertinent instruction, but the students have no time to learn what they most need to know. Their four years are already full, and they leave school just as they are ready to receive the best thing we have to give. Moreover the little time now given to advanced work, work which requires consecutive attention in order to be pursued to advantage, is greatly broken up and frittered away, too many important studies being pursued at the same time.

What I would propose is that all the elementary and disciplinary studies as enumerated above should be pursued in the first three years of the course, the Applied Engineering and the Practice of the third year being omitted, and the architectural history of the second, third and fourth years being given in the first, second and third. For the fourth year I would then es-

establish two parallel courses, one in history and design, one in engineering construction and professional practice, each so comprehensive as to occupy the whole year.

Between these two courses the students of the fourth year would accordingly have to make a choice, an elective system always becoming necessary as soon as a school or a college, in the extension of its work, begins to teach more things than any one man has time to learn. At the end of the year the students would graduate in construction or in design as the case might be. They would then have a fair acquaintance with the whole range of professional attainments, and would know well the things for which their tastes and talents had given them the preference, and both they and ourselves would be spared the mortification of having young men go out into the world but half-trained in the chief things they come here to learn.

These two courses would constitute, together, the basis for a body of post-graduate or University instruction. The students who had pursued one of these courses while in the school could return at any later period and take the other. This might perhaps be done under such conditions as would render the degree of Master of Arts the proper recognition of these additional attainments. I am led to believe that such an arrangement would prove extremely attractive to students, who, after several years of office work, were desirous of further serious

study, but could not afford the time or money for further study abroad. It would moreover afford a capital training for the traveling fellowships.

For such a development of the work of the department, which would thus virtually be extended to cover five years, our present personal equipment would probably suffice, provided the present instructors gave to the work their whole time, free from interruption by private pupils and other outside occupations, and provided also that we had the assistance in the elementary and disciplinary work of the first three years of a certain number of Fellows or Assistants, say one for each year.

As the services of these men would be required chiefly in the afternoon, in the three drawing rooms, they would be able to pursue at the same time either of the two University courses they might prefer, and would thus form a nucleus for the class of University or Graduate students, of which they would swell the number. The presence of these men would be likely to attract others, through the mere force, of example.

I find that these changes could easily be made without interfering with the present scheme of attendance. I enclose a modified scheme exhibiting these arrangements.

training for the Travelling Fellowships.

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As the services of these men would be required chiefly in the afternoon, in the three drawing rooms, they would be able to pursue at the same time either of the two University Courses they might prefer, and would thus form a nucleus ^{for} ~~in~~ the class of University or Graduate students, of which they would swell the number. The presence of these men would be likely to attract others, through the mere force of example.

I find that these changes could easily be made without interfering with the present Scheme of Attendance. I enclose a modified Scheme exhibiting these arrangements. =

It would be practicable ultimately to add other University Courses, and thereby greatly to extend the range of our work, but these possibilities can best be discussed in answering the eighth of the questions you propose. These questions I will now proceed to consider in their order.

QUESTION FIRST: Please give the name and present title of each member of the department of Architecture, including Fellows and Honorary Fellows?

The instruction in the department is carried on by myself as Professor, and by one Adjunct Professor, Mr. Hamlin, by one Instructor, Mr. Sherman, by one Assistant, Mr. Snelling, and by the Curator of the Collections, Mr. Kress. Besides these, there is a teacher of Architectural Drawing, Mr. Harriman, who however holds no appointment from the Trustees, but is paid out of the appropriation for Assistantce. There are no Fellows or Honorary Fellows.

QUESTION SECOND: Outline the duty of each, and give me your opinion of his capacity and serviceableness?

I myself formerly gave all the stated instruction in the department except that in the history of Ornament, besides directing and superintending a part of the work in the Drawing Rooms. This was when we had less than a dozen students. Some years ago I gave up to Mr. Hamlin the Freehand Drawing and most the Drawing Room instruction, and to Mr. Sherman the Lectures on the Elements of Architecture and on Shades and Shadows. Last year on taking my leave of absence I committed the Ancient Architectural History to Mr. Kress, ~~and~~ the Modern History to Mr. Hamlin, and the instruc-

tion in Practice or Specifications and in Perspective to Mr. Snelling, who also took my place in reading to the first year class a text book in French. At the same time Mr. Russell Sturgis, by appointment of the Trustees gave Lectures in my stead upon the Theory of Color.

In accordance with the suggestions of my letter written from Florence in July, I have on resuming^{to} my post left the chief part of this work in these hands, resuming into my own only the Lectures on Theory and on Design, in which I meet the two upper classes. The Perspective with the second year men, and the French text book with the first year. This arrangement brings me into personal contact with every student every week. It occupies me in the Lecture Room for about eight hours a week, and leaves most of my afternoons and some of ^{The} mornings quite free. This has given me leisure to introduce a new subject. I have this year devoted the whole of one afternoon each week to an exercise in Architectural Design with the second year, taking up Planning, and combining with it Design by dictation or description. I find, however, that I have gained for study less time than I had hoped, much being taken up by conferences with visitors, with my Assistants, and with the students themselves, so that ~~X~~ if I come to the School at all, I can seldom get away until the end of the day.

The success of this new class in Design has been such that I am hoping next term to find time for a similar exercise with the first year class.

Mr. Hamlin has been in the service of the school since February, 1883, nearly eight years. His work was at first confined to giving a couple of Lectures a week upon the History of Ornament. Now in addition to this course, which he has meantime brought to a high degree of excellence, he has the main charge of the Fourth Year work in Design, which occupies two afternoons in the week. He has two afternoons with the First and Second Year men in Freehand Drawing, and gives two hours a week to more advanced work of the same sort with the more advanced classes. During my absence in Europe, in May, 1883, and again during the whole of the last year, he was placed in entire charge of the department.

During all this time he has to a certain extent continued the private practice of his profession, executing a number of works both in this city and in the country, and making for me all the drawings for the School of Classical Studies at Athens, in 1887. This work has been done at his room in the school, (where he has sometimes employed a draughtsman) so that its prosecution has not prevented his being almost constantly in personal attendance. Besides this he has done some private teaching, and he has given courses of Lectures occasionally in Schools, in Brooklyn and in Connecticut. As his school work has grown these outside labors have become very irksome, and have seriously interfered with his health. The increase of salary he has this year received has lightened these burdens. But it is very desirable that he should be relieved of them altogether.

This is to be desired not only that his strength may not be overtaxed, but because the school needs it. Unlike instruction by lectures or recitations, the personal service involved in teaching Drawing and Design increases with the increased size of the classes as does also the labor of preparing, supervising and correcting the work done. Moreover, what we now need more than anything is a series of manuals or text books which we can put into our students' hands, and thus save for them and for ourselves the time lost in imparting information by word of mouth. Our experience during the last six or eight years has produced a body of Notes or Memoranda that would form an excellent basis for such hand books, books that would certainly be of great value to ourselves, and might perhaps be of service to other persons engaged in like pursuits. I myself spent the comparative leisure of my first two years in New York in writing a work upon Perspective, embodying the results of my studies during the ten years that had gone before, and Mr. Hamlin a couple of years ago undertook to prepare for the American Architect ^a ~~the~~ corresponding series of chapters upon Shades and Shadows, founded upon my Lecture Notes and embodying my own methods, though largely supplemented by the result of his own investigations. But this work he has as yet had no time to bring to completion.

Of his personal qualifications for the work which has been put into his hands it is hardly necessary to speak, as they are constantly been in evidence during the past year. His education

and training have also been such as to fit him for this service. He was born in Constantinople in 1855, and is accordingly now 35 years of age. His father is the Rev. Dr. **Cyrus** Hamlin, at that time a missionary in Turkey, and afterwards President of Robert College, which owes to his extraordinary energy and sagacity the chief part of its unique success. Mr. Hamlin graduated at Amherst College in 1876, and spent the next year in my class at the Institute of Technology, and was afterward for some time at the *Ecole des Beaux-Arts*, in Paris. When he first came to the school in February, 1883, he was attached to the office of Messrs McKim, Mead & White. To the school he brought besides the knowledge and skill gained in this varied experience, scholarly tastes and an industrious intellectual habit. Moreover, what under the circumstances has been of the greatest practical convenience, he was well acquainted with my own methods, and cordially sympathized with my plans. I count it a great piece of good fortune that so able and accomplished a man has been willing to enter this service.

Dec. 1890- 10

Abstract
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Mr. Sherman who is the son of a book-seller and school teacher in Peekskill, a man of marked intellectual character, was the only student who when I came here in the Autumn of 1881 had presented himself in advance as a candidate for admission to the course, and though circumstances led him to spend the next year in Mr. McKim's office, during which time he worked for me upon the plates of my Perspective Book, he joined my first class the year following in advanced standing, and was one of our ^{five} four first graduates in 1884. Though easily in the lead in all mathematical studies, it was in the direction of literary work that his tastes and capacities were the most pronounced, and although already twenty four years of age he determined on graduating to proceed at once to Cambridge in order to profit by the special advantages offered by Harvard College to young men in his position. Though he knew no Greek, and as I can myself testify had forgotten all his Latin, he managed between the beginning of July and the end of September to read enough of Caesar, Cicero and Virgil to pass his entrance examinations without conditions, except in Greek, and in virtue of his School of Mines Diploma, which was taken as an equivalent for five Freshman courses, was enrolled in the Sophomore class at the beginning of October. The next year he spent in Cambridge, taking as his five courses Greek, Latin, History, Philosophy, and as a relaxation, Italian. His unusual promise excited the lively interest of his instructors, and as he was fortunate enough to find himself in com-

pany with a number of young man with whom he was wholly in sympathy, what seemed at first a somewhat doubtful experiment proved full of happiness and profit.

Meanwhile, as from the ~~XXXXXXXX~~ moment of entering the School of Mines, he had been entirely dependent upon his own exertions, supporting himself partly by teaching private pupils, partly by writing for the journals, both in prose and in verse, his name having by this time become so well known as to make his work easily acceptable, though a chief part of what he wrote appeared without his name.

The hopes and expectations thus encouraged were however rudely shattered when, in June 1885, he received news that his father had been incapacitated for work by a stroke of paralysis. He left Cambridge, and spent the next year in the Peekskill shop, setting in order his father's affairs. This being accomplished, the drudgery of the life became insupportable, and he came down every day to New York, occupying himself with pupils until February 1887. The Department then needing additional force, I gave him work during the Spring; in the Summer he was made a Fellow in Architecture, and in the Summer of 1888 an instructor. All this time, his father's family being largely dependent upon him, he has continued at work up to and indeed beyond the limit of his strength, with his private teaching and his writing, printing a small volume of poems in 1887 and another the present season.

His work at the school was at first entirely mathematical. I was very desirous to try the experiment of abridging the time spent

by my men over analytical geometry and the Calculus, being encouraged to think that a more limited course would suffice for them than that needed for the Engineers. There were also certain methods of instruction in these subjects of which I was eager to try the efficiency. Mr. Sherman entered heartily into my scheme, and with the cordial approbation of Professor Van Amringe the students in Architecture were taken out of his hands and taught these subjects for two years by Mr. Sherman under my own supervision, under the name of Graphical Geometry. The experiment was only partially successful, though I think in a third trial it might have proved more satisfactory, and when, a year ago, it was arranged to put these subjects mainly into the first year, thus effecting for the second year the relief I had desired, my men were restored to Mr. Van Amringe's care.

Meanwhile Mr. Sherman had relieved^e me of the care of the classes in the Elements of Architecture and in Shades and Shadows, taking the methods that I had devised and administering them with a fulness of illustration and completeness of system to which I had myself never attained. To these he has added a course of his own upon Elementary Projections, introductory to Descriptive Geometry. These embody problems which are special to Architecture, and which are not treated ⁱⁿ the standard works on the subject, which have been prepared mostly for the use of Engineers. This, as well as the notes on the Elements, is material for a text book or manual which is greatly needed, and which he could prepare without delay

if he could find the time.

These subjects having now been brought into shape and the Graphical Geometry being discontinued, I have at last been able to put into Mr. Sherman's hands a branch of instruction more germane to his real tastes and his best powers, in entrusting to him the class in Mediaeval Architectural History. This he is this year^x conducting, bringing to it the same precision of method and quick intelligence that have marked all his work. In this I am myself constantly at his elbow, furnishing him with my notes and revising^h his own, and although it is as yet too early for either of us to judge of his success, I am sanguine of its proving all that we could wish.

Meantime I am proposing in several branches of study to supplement the oral and graphical exercises with written papers, hoping thus not only to induce more active and accurate thinking upon the topics in hand, but to make these papers incidentally the means of culture in the English language. As this advances Mr. Sherman's literary experience will be just what we need^e. I hope that he will presently be able to hand over to younger men the elementary and geometrical work which^{he} has so far been occupied in putting into shape, and ~~can~~^{to} devote himself mainly to ~~the~~ historical and literary work.

I think we may well bear it in mind ~~XXXX~~ to give to our work

as far as ^{it} is possible ^{to do so} without sacrificing its professional character, the quality of a liberal education. While preparing them to become Architects, we owe it to the community, and to the young man themselves, to do as much for their personal culture and development as we can. I believe that it is possible so to administer the subject^s already upon our programme that the elementary notions at least not only of Rhetoric and Logic, but even of Mental Science and Sociology, may be made familiar to our classes in connection with their historical and critical studies. To do this will require a good deal of original work, for it is very much a new field, but this is a task for which Mr. Sherman's special gifts and personal predilections seem to me to be very well adapted.

^{He} Mr. Sherman now gives eight hours a week to work in the Lecture Room, and three afternoons to work in the Second Year Drawing Room. His studying^s mostly ~~is~~ done at home.

Mr. Kress was born in Vienna in the year 1859, his father being a Hungarian, and his mother an Austrian. After his father's death, his mother married an American physician, and brought her son with her to New York, when he was about seven years old. He was sent to me by a friend in 1883, and explained that he had come for advice, being determined to give up his place as clerk in an Insurance Office where he had been for a number of years, and become an architectural draughtsman. I recommended him to Mr. Hamlin as a private pupil, and presently learned that he had made rapid ~~MM~~ progress, and ^{had} soon obtained work in an architect's office. At a ~~le~~ later period Mr. Hamlin himself employed him as a draughtsman at the school, and he then became so much interested in our work as to beg to be allowed to take part in it, if there were ever need of such services as he could render. This happened at last in the Autumn of 1888, when I put the care of the Library and Collections experimentally into his hands, a work for which his business training well fitted him. At the same time he made for me a number of Lecture diagrams, for which his great interest in archaeological studies was a marked qualification. At a later period, finding my men very ignorant of German, I asked him to read ^{wit} ~~to~~ the second year class ~~from~~ a German text book, and last year put into his hands during my absence the instruction in Ancient Architectural History, which he still holds. Meanwhile having found that his zeal and fidelity as well as his knowledge of French and German and his scholarly tastes made him an invaluable element in our force, I

asked the Trustees a year ago to put him upon their list as Curator of our Collection. I propose to ask presently that he shall be made also a Lecturer in Ancient History.

Mr. Kress spends almost all his time at the school, giving five hours a week to work in the class room, and the rest of his time to the Collections, and to arranging material in illustration of the different courses of lectures.

Mr. Snelling was the son of the late Edward T. Snelling, a well known Lawyer of New York. At the time of his father's death, in 1879, he was in my classes at the Institute of Technology. Resisting all offers of his relations to put him into business, and determined to give himself the best education at hand, he remained at the Institute until 1882, when he graduated with credit, and then after spending several years in Mr. Haight's office, went to Paris, where he remained in the Ecole des Beaux-Arts from 1885 until 1889, taking the course in Construction, as well as that in Design. Though not exceptionally gifted with the special qualities of an artist, he has by sheer force of character and clear intelligence made himself one of the most thoroughly accomplished and best informed young men who have come back to us from abroad, while the fact that he has acquired what he knows by a conscious effort of the understanding rather than by instinct and feeling makes him unusually ready in imparting his information to others. Fortunately he is eager to do so, and thus makes a capital teacher.

The class in Design having grown so large that it was necessary to divide it, I last year asked Mr. Snelling to take charge of the third year Drawing Room, which Mr. Hamlin had previously looked after, along with that of the fourth year. I also on going abroad entrusted to him the instruction in Perspective in the second year, and in Practice of the third and fourth years, including the supervision of the work done at the Trade School. He also as I have said read the French text book with the first year class. At the same time the Trustees at my request appointed him an Assistant. I have now resumed the French class and the Perspective but have left the instruction in Practice in his hands, as well as the Third Year Design. To both these studies he has given a marked impulse. At present he is in attendance at the school upon only three afternoons of the week, and I do not know that his business engagements would allow him to give more. The only lecture he gives is the weekly lecture on Specifications. But if the study of Design and that of Construction and Practice should take on the development I have indicated above, it would be worth our while to secure as much of his time as we could.

Mr. Harriman has but little claim to consideration on the score of education, especially in a School of Science, for his schooling has been very incomplete; except that he writes excellent English he has hardly any pretensions to intellectual culture. It was only by accident that I discovered that he was a born teacher. The thing that he possesses which is of value to us is an admirable style of architectural draughtsmanship. But this is just what our first year men most need, and they need to have it taught them by a man whose personal qualities command their liking and respect, and who has the tact at once firm and friendly to control them and to keep them busy. In this he has made a real success; rumors of it reached me while I was away, but I was not prepared for the results I found on my return. This year, left almost entirely to himself with a class of nearly forty men, he is perfectly in command of the situation and is getting out of them even better work than last year's, and is bringing to the administration and arrangement of his subject, an intelligence and invention that are a constant source of gratification.

He too is now about thirty years of age. He first came to the School in 1884 as a draughtsman and clerk. It is only within a couple of years that his special gifts have come to light. It would be difficult to find anyone exactly to fill his place.

Mr. Harriman is constantly in attendance, except on Wednesday afternoons, when Mr. Hamlin takes his class for Freehand Drawing. When not busy with the students in the Drawing Room, he is busy in preparing work for them or in making diagrams for the Department.

New York, January 22nd, 1891.

My dear Mr. Low:-

I enclose my "quantitative determination" as you desired. The upshot of it is, that to do all that we might, could, would and should do, will cost about forty per cent more than is spent on the Department at present. This I have no hesitation in recommending. I am sure we can spend it to advantage. Much of the present outlay is spent upon preliminaries, and necessarily goes into the foundations, with but little to show for it above ground. Every thousand dollars added, adds another story to our structure.

After all, about half of the total expenses will probably be supplied by students' fees.

But if the provision asked for seems to the Trustees to be exceptional ~~in~~ in amount, the requirements are exceptional. The whole subject is a new one and one exceptionally varied and extensive in its range. So far we have profited by the experience of the last twenty-five years, which have furnished us with methods of work and with men trained in them and capable of carrying them on. But this experience has also taught that work of this sort cannot be well done without a large amount of personal instruction, employing a larger proportional force than strictly

scientific or literary subjects require. For the work of the immediate future we ^{have} still to devise methods, train ~~the~~ the men and prepare the books. It will take ten years to bring this to completion. If the work is impeded by lack of funds, it will take twenty years, twenty years of poor results instead of ten years of good. This would be bad both for the students, whom we are bound to serve as well as we can, and for the good name of the School.

Moreover, whatever development of the school I am myself to take part in must probably be accomplished within that time. I cannot expect to be good for much after I am sixty-eight or seventy, if I last as long as that. It has taken ten years, when I had more work in me than I have now, to bring the Department even to its present condition, and we are now only at the beginnings of things. It will take all of ten years, under the most favorable circumstances as to men and money, to put in shape the work now in prospect. Then I can relinquish the School into other hands for other people to carry on in their own way. But my own plans I should like to have a chance to carry out myself.

The recent action of the Trustees in abrogating ~~the~~ the provision for Tutorial Fellows would seem to make impracticable my suggestion

that young men might lend a hand in the minor details of elementary instruction, while themselves^{ve} pursuing a Post-Graduate or University Course. But I suppose that if this arrangement is really desirable it can in some way be made possible.

The votes offering large gratuities to students, and the resolutions in regard to the titles and salaries of teachers, also, which were enclosed with your letter for my information, need not I suppose stand in the way of paying my assistances whatever circumstances require, especially as it was understood when I came here, that I should not be stinted as to their number and quality. I do not imagine that the Trustees really intend to fill the minor places with inferior men, worth less than \$2,000 a year, or to require the ~~Faculty~~^{Faculty} to admit to their deliberations, with an equal voice and title, every grown man who gives his whole time to his work.

That my own men should be enabled to give us their^{ir} whole time and strength, is, I am sure, the only sound policy. I was fifteen years at the Institute of Technology working at my profession with one hand and at my school with the other, and I know how intolerable such a life is, and how meagre and inferior its results. I cannot ask able men spend the best years of their lives under similar

conditions, and it would be folly for the Trustees to imperil
the work they have undertaken by offering half pay for half time.
The work would be only half done.

I am, Very respectfully yours,

POSTSCRIPT.

The extension of the work of the Department, as suggested above, so that beside the preliminary work done in the first three years of the Course, the practical study of Design should occupy the entire year, would not entail a great deal of additional instruction. The work would be of the same kind as that now done, and though taking more of the students' time would not require much more of our own. Advanced students need, of course, less personal supervision than beginners.

The Corresponding Course in practical and Scientific ^{Construction,} on the other hand, ought to cover a number of subjects not at present taught. The additional ^eaching force would probably involve an additional expenditure of \$1,000 or \$1,500. Except for this the requirements for the efficient conduct of the Department would be apparently about the same, whether the changes suggested are carried out or not, and whether the number of students remains at 70, as at present, or is increased to eighty or ninety.

But it is evident from what has been said above, that a considerable increase of expense is necessary in the immediate future, in order ~~to~~ properly ^{to} carry on the work already in hand. To do

efficiently what we are already attempting, we need ^{to command} ~~the command~~ the entire time and strength of the men already in our service, and this cannot be done without making good to them the income they now derive from private teaching and ^{from} other outside occupations.

A married man between thirty and forty years of age cannot live in New York with decent comfort for less than \$2,500 or \$3,000 a year. If he is to lay up anything, as at that time of life he ought to begin to do, and if he has relations in any way dependent upon him it will cost him \$500 or \$1,000 more.

Mr. Hamlin last year had a salary of \$2,000 and to this he was obliged, in order to meet the needs of his own and his father's family, to add \$1,500 from outside sources. This he was able to make up partly from what I gave him from my own salary, for taking my place during my absence, partly as I have explained by lecturing and ^{by} the practice of his profession. The advance of \$500 in

his salary has this year given him some relief. But we need his whole time and strength, not only for the daily ^u routine of his instruction, but for the prosecution of his studies, so that that work may not be mere routine work, and for the ^a preparation of the

1890-91

text books which no one is so competent to prepare, and the lack of which cost our students and ourselves great waste of time and labor.

Mr. Sherman's salary, is but \$1,500, and he is obliged to add \$2,000 a year to his income, in order to meet the expenses, which his father's ~~has~~ help ~~to~~ ^{his} condition brings upon him. This he can accomplish only by incessant labor, ^etaching private pupils ten or twelve hours a week, which he finds extremely exhausting, and writing constantly for the journals. His share of my own salary during my absence, somewhat lightened these labors last year; but even with that he quite broke down at the end of the winter and, not being able to take proper recreation during the summer, he has again this winter again been threatened with serious trouble. This ^{has} obliged him to give up everything, but his school work.

Unless he can accordingly receive a large increase of salary he will be obliged to leave our service. Fortunately for him his exceptional abilities are well understood and he can obtain at once a choice of position ^{s worth} with \$4,000 or \$5,000 a year. But I do not think the Trustees can afford to let him go. He can do the work we need better than any one else is likely to do it, not only because he is a man of better natural parts than any one else we

are likely to lay hand upon, but because the six years he has spent at the school, as pupil and as instructor~~or~~ have given him special attainments that no one else possesses, and that it would be folly for us to throw away. | It is better worth while to pay him \$3,500 than to pay \$2,000 to a new man. | Even if just such another man were ready at hand, we could not afford to waste time in training him.

Mr. Kress at present has \$1,500 a year as Curator of our Collection. In addition to this he reads a German text book with a Second Year men, and last year during my absence he had the class in Ancient ~~Architectural~~ History. This he conducted with such success that since my return I have left it in his hands, giving my own time to new work. It is desirable, ~~as~~ as I have intimated above, that he should be made ^a ~~the~~ lecturer in Ancient Architectural History, at an additional salary of \$500, thus raising his compensation to \$2,000.

Mr. Snelling gives three afternoons a week to the school and for that the \$1,200 assigned him is sufficient. ⁵ Last year I paid him from my own salary for taking the work in ~~Perspective~~ and for reading a French text book with the First Year men. This instruction I have now resumed into my own hands.

But if the course in Construction, which I have suggested, should be ^est on foot, he or some one else would have to be paid ~~1~~ \$1,000 or \$1,500 more.

When Mr. Harriman was put in charge of the First Year drawing room I agreed to pay him \$125 a month, and I ask^{ed} this year for an appropriation for Assistance enough to carry this outlay. The Committee, however, voted only \$1,200, which will not suffice to carry him through the year. If, however, they will vote \$2,000 next year it will suffice to cover this def~~icit~~ and at the same time to afford him the advance in compensation which is increased usefulness and responsibilities deserve. If things go~~on~~ as satisfactorily next year as they are doing this, I may hope then, if he continues in the work, to be able to recommend him to the Trustees for a regular appointment.

The \$1,200 voted this year for Supplies, instead of the \$2,000 asked for, ²⁵ ~~is~~ ~~burdened~~, in addition, with the charge of certain minor personal services, which have hitherto been defrayed from the appropriation for assistance. It is inadequate for all these purposes, and I hope that next year it will be made \$2,000.

The following table shows the present cost of the Department

as I understand it, the increase of cost as indicated above, and the total amount. The increase is about forty per cent of the present expenses. This represents the cost of the additional year of post-graduate work and of securing time to my assistants for a certain amount of study and research, and for the preparation of the required text books and hand books, so that they may "add something to the sum of human knowledge".

Present	Present Payments	INCREASE	Total.
W. R.W.	3,000.00		3,000.00
Mr. Hamlin	2,500.00	1,000.00	3,500.00
Mr. Sherman	1,500.00	2,000.00	3,500.00
Mr. Kress	1,500.00	500.00	2,000.00
Mr. Snelling	1,200.00	? <i>1/2</i> 1,300.00	? 2,500.00
Mr. Harriman	12,00.00	800.00	2,000.00
Supplies & Assistancel	200.00	800.00	2,000.00
Trade Schools	500.00		500.00
	<u>\$15,600.00</u>	<u>\$6,400.00</u>	<u>\$22,000.00</u>

This is to be finished.
I have marked on
the paper, as far
as I have written
30 don't forget to
erase it, when you
have completed.

When there is one
more letter to be
finished I have
put a check mark
on it, so you
will know which
one it is.

19

For _____

WHILE YOU WERE OUT

M _____

Telephone No. _____

CALLED on 'phone
on you

Time _____

Message _____

Signed _____

FOR A HAPPY, LAUGHING RELEASE
FROM YOUR BUSINESS WORRIES

— SEE —

LIGHTNIN

AT THE HOLLIS ST. THEATRE

BOSTON

Wilmington. Sept. 26. 1891.

Dear Sherman -

Your note says just what I am glad to hear, all round. To me too your Wilmington visit was a special satisfaction. It seems to have filled a void, besides being pleasurable in itself, and felicitous. In fact I could almost feel as if things had really adjusted themselves, upon a permanent basis, until Mrs. Sherman had been here too.

I have been away ever since, at Newton Tuesday night, thence I walked over to Weston six or seven miles on Wednesday, and Thursday I went to Magnolia to hit Cummings. With him & also with William Longfellow I had some talk about the Mathematics & Engineering question, and with cordiality approved the solution we were proposing. Longfellow was a little skeptical about the narrow furrow and deep plough, but I was able to meet all his objections. Cummings was very jealous of

the whole topic, except for educational purposes, is taking time needed for more essential things.

These talks have served to clear my own mind and to prepare the way for a deliberate attack this winter. It is high time. Ten years have brought the problem no further in its solution. But I can't help knowing that its solution is now at hand. I am in better case for attacking it than I ever have been, being in good condition every way and not overburdened with work. I shall lean upon you and Snelling, step by step, but do not mean to tax either of you heavily, certainly not enough to interfere with your own studies.

This definite task will oblige me to keep to my plan of limiting to the utmost my attendance at the school, and, at least, so ordering my days as to make possible some cultural reading and writing. [After ten years of experimenting, during which I have stood ready like any man, to lend a hand at any thing that needed doing, being responsible for everything, the school has not reached a permanent constitution, not likely to change for half a dozen years. What I want to do myself must be done during that time. The

rest of you, too, are now for the first time in a fixed and definite position, not likely to change for five or six years. We have tumbled up the hill and now have a level upland to traverse. Then more hills, or a descent into the valley. These five or six years are to determine the character & quality of the enterprise, so far as I and my methods & my men are to shape it. So far the main effort has been to make it the right kind of thing, and I think it is the right kind of thing. It has prospered on the lines laid down and I have not changed my mind as to what those lines be. What now needs to be done is to make it good of its kind, to improve the performance, to raise the tone, both artistic and intellectual. This is in one respect easier in that the quality of the students is improving. But that is only to reveal our own shortcomings unless the quality of the instruction improves too, and the quality of the instructors. That means study. We are all of us in danger of sacrificing the permanent interests of the work to mere fidelity and momentary efficiency. It would be better for all of us to teach less & study more, to be less at the school and work more at home.

If I feel this so keenly for myself and Stambler, who are after a fashion fairly equipped by the work, with a certain professional training and experience, it is of

course still more the care into yourself, whose studies of all sorts have been pretty much interrupted for the last six years, and also for ten years have used your into more to give out than to take in, more for production than for discipline and acquisition. Kind Fortune, by a stroke of her wand, has rescued you from this, setting you, before it is too late, where you can make up these losses, if you can so far resume the student's attitude as to do so. I think I have at one time and another spoken of one or another of my friends who finding themselves a little belated in life's journey have been unwilling to do this, have been unwilling to take up at thirty the disciplines they had missed or tardily, fancied that maturity of judgment would enable them to dispense with the lessons of experience and that knowing about things would answer in place of knowing the things themselves. At forty they were stranded. It is then too late to begin. But at thirty it is not, and it is because I found in you a sane and lowly mind, ready to look facts in the face and meet their requirements, that I have contemplated without misgivings your entrance upon a career for which your special preparation is so inadequate. Think, on the other hand, where you would be if you could have finished your three years at Cambridge,

and then, before coming to us, had, with
a view to doing so, been abroad for a cou-
ple of years, or three, taking the discipline
of the school and the instruction of travel. No-
body was seen better fitted to profit by it, and
returning, to hand it all over to us. It was
not to be, and your artistic capacities, for
which your apt draughts were long offered an
easy development, have lain in a napkin
along with the chief part of your literary
& intellectual capacities. There is still
the promise, a hope deferred, and if it
is to be fulfilled it is in this next five
or six years that the work must be done. The
bias is of course naturally the other way,
and just as at school the fellows with a spe-
cial gift are disposed to make a success, ⁱⁿ do-
ing the things they can rather than ~~rather~~
~~than~~ practice doing what they need to learn,
so, all the more, after a certain amount
of successful endeavor in actual work
we hate to begin any new thing and to
encounter the rebuffs of pupillage. Yet really
there is nothing more delightful than to
be a school-boy again, with no respon-
sibility but to do as one is told. I said
that Hawley and I had a fair equip-
ment for our tasks, but that is true only of
him. When they asked me to go to the

Intelligence, being 34, with nothing behind me but six months in Richard Hunt's studio by way of school experience, I felt this so keenly that when I got to Paris I doubted greatly whether I ought not to go into an atelier for six months and be chastised, instead of coming the grand tour and posing for a swell. Even after I had decided for the grand tour I went every day for a couple of months to learn rendering, and was just beginning to see a possibility of becoming a good draftsman when the time was up. It would have been better since, and I should have been much happier & more useful, if I had sat down to six months of it. I was happy enough at the time. I should like, now, to begin taking lessons of some sort, going into training, and under discipline, and being set to do what I can do least well, instead of always following, as in artistic work one needs must, the line of least resistance, as ^{being} the line of most efficiency, and doing what I can do best.

It was with something of this in mind that I made the somewhat inept suggestion of the Master's degree. Your own suggestion of the doctor's degree was more to the purpose. The value of either lies, in this point of view, in its bringing one again into the attitude of pupillage, of acquisition, of receptivity. The best thing that could happen to you would be to spend a

trunk-month in entirely new fields, bringing up your untrained powers to the level of those which you habitually exercise.

The thing I want to urge is that it is not too late to undertake anything that you desire, and circumstances, which history has been adverse, so that your ignorances are not your own fault, is now propitious, so that, in a measure, they will be. In this case it is a friend, the child of pride and self-deception, that whispers resignation. The present constitution of the scheme will run for five or six years. By that time changes will come and new questions arise. I want you to be armed at all points to meet any such way that present itself.

But the second person singular is a difficult location, as dangerous as the first person, and I will say no more. But these are matters which I ponder much in my heart.

The work has vacillated in the joggings of which I have spoken, and the work to come seems all too short for what I have set to put into it. So I may not come on till Sunday night after all.

Yours, always, with my very best regards to Mrs. Sherman in which my sister joins
G. R. Waver,

✓ I enclose this envelope, with gladness.

✓
Hilton. August. 13. 1891.
Thursday.

Dear Sherman -

Getting back last night after a week in Plymouth I found a pile of letters with yours on top. Now I shall be here off and on for a fortnight. But Saturday I am going to Beverly Farms to spend Sunday, and this seems so near by that I am tempted to run (this is a new run) down to East River on Monday by an early train and spend the day.

So pray don't select that occasion to come up to town. By that time let us hope this hot spell will be over. Then perhaps in the afternoon, if the tide is right or might all go up the river to Annisquam, & then, if the tide is wrong, come back by the Boston Neck train. Pray make a few inquiries about this, if it pleases. (This is my treat.) I see that there is no train

of a morning, from Boston between 8.10
and 10.45, while means 9 and 11.15
from Beverly. I shall take the former, if
I find I can do so without disturbing
my hostess' breakfast table. But do not
trouble, as they say in England, to meet
me. I shall manifest myself in the ful-
ness of time. I have dropped a line to
Stamminee & perhaps he can secure my
same little room for the night.

I was just in time, yesterday and
the day before, for the last two days of
the School of Ethical Ethics. Six lec-
tures in twenty-five hours, gave me a feel-
ing sense of what our fellows have to sur-
vive. We came to them some what fresh and
hardly believe how jaded and forced is their
attention. This enforces the doctrine of few
studies at a time, concentrated attention &
continuous interest, which has several times
of late been urged upon us. But these phy-
sical lectures, and one or two books I have
been reading, have also enforced the need our
men have of a wider & more liberal culture.
A school cannot evade its responsibility for
the four best years of a man's life, by call-

ling itself technical or professional and pro-
ceeding to ignore the humanities. Society can
not get along with poor architects & poor engineers,
nor with without good citizens. That consideration
is paramount & not to be belated. In this age
the humanities mean something besides literature.
(In fact I am not quite sure what literature does
mean, though. It seems to be rather a method
than an end, in education.) Every body seems to
agree that questions of extraordinary difficulty will
presently be requiring a practical answer, and
as the answer must be the one which is the do-
minant one at the time the only safety will lie in
a sane public opinion. These questions are as to
what ought to be aimed at & what it is practi-
cally to effect, questions of ~~social~~ ^{social} Ethics & politi-
cal economy, ~~not~~ taking the peace of the old
questions of religion & politics, though many
of these still challenge discussion. Now to turn
at a hundred men a year into the front ranks
of society perfectly green on all these matters, is
not what a public institution should do. Either
they will neglect them altogether, & so fail to ful-
fill their part, leaving the work to less competent
hands, or they will enter into it unprepared and
fail to make the contribution of good sense & judg-
ment that educated men ought.

I think it would be possible to open up these
subjects so as to create an intelligent interest &
to make all the current literature intelligible
& instructive instead of being a solid block, -
a block that would doubtless be interesting & improving

of our ~~own~~ ^{own} ~~country~~ to read it. It is the object of a liberal education to reduce their number, to bring all fields of thought within range, and I am sure it should be our object to make our work as liberal in diameter as possible.

The possibilities are limited chiefly by limitations of time, and this brings up again the perturbing spirit of Mathematics. I do not want to be obstructive in returning to the field of defect. But I cannot ~~understand~~ ^{help thinking} ~~that~~ that, for our purposes, the present arrangements are indefensible. What they ~~get~~ ^{release} as it is, costs more than our men can afford. The time given to Mathematics not only cuts them off from some important studies altogether, but, which is less obvious, leaves them no time to pursue the work they do take, in an intelligent scholarly manner. They have no time to read well or think. Independent observation & discovery, which in the beginning of all subjects is easily organized, they get no experience of. The college instead of replacing the dead and stilted methods of the schoolroom by manlier exercises is forced, for lack of time, to continue them, as we have so often deplored; and the situation does not ameliorate with the development of our own work. Rather the contrary. We are only the more crowded.

It is getting clear to me that we must either give up the game, & reduce our engineering programme for the mass of the students, with liberty of range in those fields for those so inclined, or try one more and on a more comprehensive scale, our experiment of three or four years ago. The former alternative would amount