

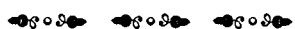
The Beginnings of the Thayer School of Engineering at Dartmouth College

*The correspondence of
General Sylvanus Thayer with
President Asa Dodge Smith of Dartmouth
and Robert Fletcher, first Director of the School*

EDITED BY
Edward Connery Lathem

INTRODUCTION BY
Dean Myron Tribus

THE BEGINNINGS OF
THE THAYER SCHOOL



“ . . . to draw the outline of the new Institution.”

The Beginnings of The Thayer School of Engineering at Dartmouth College

*as revealed in selections from the correspondence
between General Sylvanus Thayer & President
Asa Dodge Smith, as well as that exchanged by
General Thayer and Professor Robert Fletcher,
during the years 1867–1871*



EDITED BY
Edward Connery Lathem

WITH AN INTRODUCTION BY
Dean Myron Tribus

The Thayer School of Engineering
HANOVER · NEW HAMPSHIRE

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Introduction

WITHIN the first year of my tenure as Dean of the Thayer School, I became aware of a set of attitudes—an underlying philosophy—that seemed to pervade all faculty discussions. Whatever disagreements there might be among staff members about teaching methods or the priorities to be accorded different subject matter, there was no disagreement about the value of a liberal arts and scientific education in the preparation of an engineer, nor was there any questioning of the virtue of stressing the development of the *professional* approach to engineering. It seemed unlikely that chance alone had brought together men of such diverse interests who could still agree so completely on such basic matters. A brief study of various bulletins of the Thayer School, going back to 1873, soon made it evident to me that these views had been part of the Thayer School's traditions from the beginning. The School has obviously attracted men who believe in the Thayer program, and this has given the School its unique character.

Our librarian, Miss Abbie Metcalf, who has a great concern for our historic books and who has watched over the Sylvanus Thayer library collection for many years, noticed my interest and proposed that I meet Miss Mary Fletcher, daughter of the first head of Thayer. While having tea with Miss Fletcher at her home in Hanover, I spoke of my desire to trace the development of the Thayer School's educational philosophy and of my interest in what she could tell me of her father, Professor Robert Fletcher. Miss Fletcher drew my attention to the existence within the Dartmouth Archives of early records, which I subsequently examined with much interest.

Included among these archival papers is to be found an extremely illuminating set of letters by General Sylvanus Thayer (Dartmouth 1807 and U. S. Military Academy 1808), the "Father of West Point" and founder of the Thayer School; Asa Dodge Smith (Dartmouth 1830), President of Dartmouth College from 1853 to 1877; and, later, Professor Fletcher himself. These letters clearly reveal the

source of the Thayer School "personality." Greatly impressed by their historical importance, I suggested to Miss Fletcher that the letters between General Thayer and President Smith, as well as those between Thayer and Professor Fletcher, should be published in book form. She proved not only to be enthusiastic about the idea, but generously donated a sum of money to cover the cost of the printing. Mr. E. C. Lathem, Dartmouth's Associate Librarian, agreed to do the editing, and the results you now hold in your hands.

Within the correspondence are found frequent references to "Programme A." A copy of this document, as published in 1873, reposes on my desk as I write: two hundred pages of closely spaced type, describing the technical content of the "pre-engineering" education required for entrance to Thayer. The standards are impressive even today; in 1873 these requirements were, it has been established, of a generally more exacting character than those maintained by any other comparable institution. A further outline, "Programme B," to which much careful attention was devoted during the years of preparatory planning, prescribed in detail the vigorous and thoroughgoing curriculum that was to be followed in the School.

In addition to their interest for Dartmouth and Thayer School alumni and future students, who will value the opportunity to read of the aims, aspirations, and efforts of those who founded the School and nurtured it into being, as well as for all who would like to know more about the early influences which shaped American engineering education generally, the letters published here give us some insight into the character and personality of the men who wrote them; and they teach us, also, something about the fine art of letter-writing and the spirit of discourse among these gentlemen of a century ago.

MYRON TRIBUS



Editor's Preface

THE correspondence presented here is drawn from the Archives of Dartmouth College and constitutes selections and extracts from the exchanges which, in the period April 4, 1867, through September 20, 1871, passed between Sylvanus Thayer and President Smith, and between General Thayer and Robert Fletcher.

Except for the first letter in each of the four sections into which this publication has been divided, and save, also, for the initial letter by Fletcher and the final one of the collection as a whole, the printed transcripts herein do not reproduce formal textual material preceding a letter's salutation, nor the texts of complimentary closes or the writers' signatures. Thus, while a few representative letters are rendered in full, with all preliminary and terminal matter present (providing examples of these elements as they typically appear in all of the originals), it has been possible to achieve, with reference to all other letters, the necessary goal of saving much space in their presentation. Letters in which the opening matter is not given in its entirety have been supplied with a heading of standard form, which cites the writer, addressee, and date.

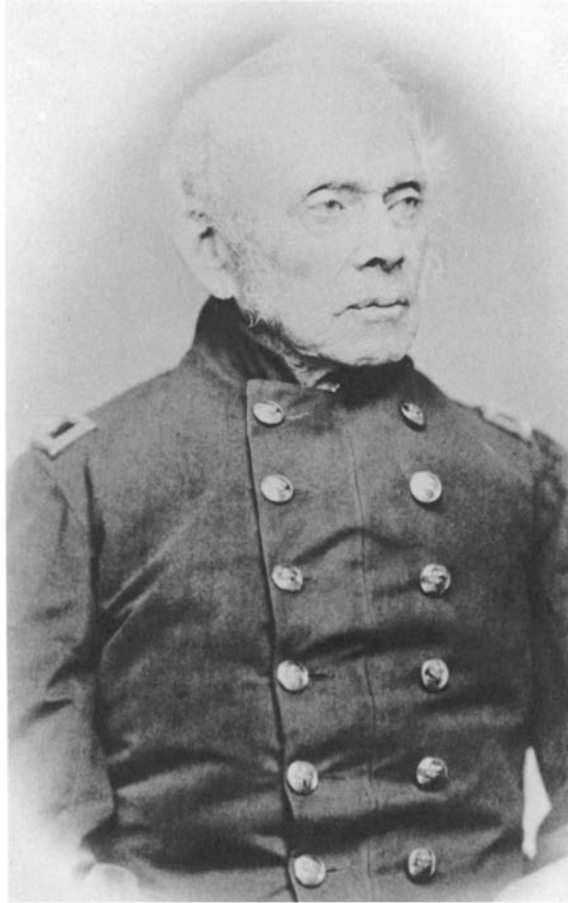
To aid reading, missing words or characters are sometimes supplied in brackets. Otherwise manuscripts are transcribed exactly. Textual deletions, other than those for elements mentioned above, are in all instances indicated by bracketed ellipses, thus: [. . .].

General Thayer's letters were all written from South Braintree, Massachusetts, while all of President Smith's were sent from Hanover, except one written at New York City on December 18, 1867. The Fletcher letters were from New York during the interval July 4 through August 25, 1870, from West Point in the period August 31, 1870, through early January, 1871, and from Hanover thereafter, except for two (July 25 and August 18) written at Francistown, New Hampshire, in the summer of 1871. Where originals have not been located, transcriptions have been made from writer's copies found within the Dartmouth Archives.

I

“... the important points touching its organization

& government & the Programmes. . . .”



SYLVANUS THAYER
As he appeared in retirement, aged 84
Braintree Historical Society



South Braintree

April 4th 1867

Rev. Asa Dodge Smith D.D. L.L.D.

President of Dartmouth College

Dear sir,

Sometime next year, not later than February, probably, I hope to be prepared to place in the hands of trustees the sum of thirty thousand dollars the income derived therefrom to be applied to the establishment and maintenance of a Department or School of Architecture and Civil Engineering connected with Dartmouth College, the institution in which I was educated and in the prosperity of which as my Alma Mater I feel the deepest interest

It is also my intention, circumstances permitting, to give another sum not exceeding four thousand dollars to be added to that first given whenever and as soon as a professor shall be appointed and installed and the school opened for the admission of pupils; and if this be done at any time prior to January 1869 my trustees will be authorized to draw upon me for the requisite funds to pay the professor his salary for one year

I give this early notice of my intentions that you may, if you think proper, be looking about for a suitable person to fill the Chair, To secure the services of such a person will, I fear, be no easy task. I would not, myself know where to look for him outside the graduates of the United States Military Academy but even there the field for selection is extremely contracted; almost all the graduates being in the military service & receiving higher pay, even those of the lowest grade, than is given to a Dartmouth professor besides having the prospect of early promotion with increase of pay, Nevertheless there are some among them; doubtless, who, for one reason, or another, especially in time of Peace, would prefer the Chair in question to a military life spent in Camp or Garrison

Before drawing up the instrument fixing the conditions of the gift, naming my trustees & defining their powers and duties &c. I shall need your views and suggestions on some points not yet set-

tled in my own mind, nor can well be without your assistance.

I am, dear sir,

With the highest respect

& regard ever yours

S. Thayer

✂ SMITH TO THAYER: *April 12, 1867*

MY DEAR SIR, I have waited a few days, under some special pressures of duty, that I might have leisure to express fully my gratification at the receipt of your favor of the 4th inst. I was deeply affected by the communication you made to me during my very pleasant visit at your house. But I am still more profoundly impressed by the fact disclosed in your letter, that your thoughts have been busy with our College affairs, & that you have come to the conclusion to give your proposed generosity the direction you indicate. I am pleased with the thought, that you may have the satisfaction of seeing, in some measure, the results of your munificence during your life-time. And I am glad to know that we shall have the aid of your experience & matured judgment, in arranging the details of the Contemplated foundation. I shall count much on your help, too, in selecting the first incumbent of the Chair. This will be a matter, as you suggest, of great importance & of some difficulty.

You speak of the possibility of finding a Professor among the West Point Graduates. It is natural to look in that direction. I have some knowledge of Professor Kendrick, one of the West Point Faculty;¹ and I should be inclined to make, confidentially, inquiry of him. Possibly your own correspondence will give you some clue to the proper candidate. Besides a proficiency in the particular department Committed to him, he should be a man of scholarly habits, in general, and of broad culture—a culture based, I think you would say, on the College Curriculum. You will go with me, too, in the view, that he should be a gentleman and a man of elevated moral character—a man reverent, at least, toward our Common Christianity. A College Professor must needs exert, you know, a great influence in all respects, especially if he is a man of high scholastic attainments. But I need not multiply suggestions on a subject with which your thoughts are so familiar.

You speak of desiring my views, before you draw up the instrument of gift, "on some points not yet settled." I shall probably be in Boston the latter part of next week, after the close of our present term; & I will endeavor then to call on you—say, either Saturday, or the following Monday, as my engagements may permit. When I can settle positively upon the day, I will drop you a line.

As you are interested in all that pertains to us, I send, herewith, several College pamphlets. Among them are the first three numbers of "*The Dartmouth*," a new Magazine which our young men have started.² You will find in it some things about the olden time, & more about the present. While we know that boys cannot be expected to do things faultlessly, I think you will agree with me that the Magazine is creditable to all concerned, taking it as a whole.

1. Henry L. Kendrick, then Professor of Chemistry, Mineralogy, and Geology at the U. S. Military Academy, was a native of Lebanon, New Hampshire, and a graduate of West Point in 1835. He had received an honorary A.M. from Dartmouth in 1844.

2. Adopting the name of an earlier literary periodical of the College (which

was carried on by undergraduates from 1839 to 1844), *The Dartmouth* had begun publication in January 1867. Evolving in character with the passage of time into a newspaper, it appeared regularly over a period of seventy-five years, until it was suspended during World War II. Issuance was resumed in 1946.

✿ THAYER TO SMITH: *April 15, 1867*

MY DEAR SIR Looking forward with the greatest pleasure to the early visit you encourage me to hope for & reserving 'till then what I would otherwise desire to say concerning the "school" I write merely to acknow[...ledge the receipt of your most kind & gratifying letter of the 12th together with a package of pamphlets among which I find the three first numbers of the "Dartmouth" I shall take an interest in that publication which deserves encouragement & shall ask to have my name on the list of subscribers

✿ THAYER TO SMITH: *May 2, 1867*

MY DEAR SIR, I enclose for your perusal a letter just received from Professor Mahan¹ Referring to the Registers of the U. S. Military

Academy for the years 1860, 1861, 1862 & 1863 I find his² standing on the merit rolls of his Class to be as follows. In Mathematics—*Second* English studies *Second*— French, *First*— Natural Philosophy—*Second*— Chemistry, *Second*— Drawing the *fourth*— Mineralogy & Geology, the *Second*— Engineering, the *Second*— Spanish the *fourth* In Conduct among the very best in each of the four years of his residence at West Point The last year he had *no demerits* From the time he was graduated to the close of the War he served with distinction having received two Brevets, one as Major & the other as Lieut. Colonel. He also served for a time as Brig^r General of Volunteers. From such a record & his present position at the Academy it may be fairly inferred that his bearing as a gentleman & general character leave nothing to be desired. He is twenty eight years of age, but it may be well, if you think proper, to write confidentially, of course, to Professor Kendrick to obtain whatever information he may be able to give in regard to Col Michi[e]’s standing & char[ac]ter. Should you become satisfied that he (Col M.) is the right man for the Chair in question you will communicate with him directly or through Professor Mahan & until then the subject will not be mentioned to any one by me, or by Prof. Mahan.

1. Upon graduation from West Point at the head of his class in 1824, Dennis H. Mahan began his long career as a member of the Academy’s faculty. He served first as Assistant Professor of Mathematics (1824–1825) and then as Principal Assistant Professor of Engineering, before going to Europe on professional duty in 1826. Following his return he was Acting Professor of Engineering during 1830 and 1831 and became Professor in 1832, a post he was to hold with distinction for nearly forty years. A close friend of General Thayer’s, he participated centrally and importantly in the various stages of the planning and organization of the Thayer School.

In the letter here mentioned, Professor Mahan had written to Thayer on April 30, 1867:

“I have not been negligent in looking around among our officers to see if any one would be suitable for and would be

likely to desire a position like the one you offer; but I confess that, whether from age which leads me to underestimate the capacity of younger men, or from setting up too high a standard for professional requirements, but one has occurred to me, who, from all that I know of him, would fill the place with credit. He is Bvt. Lieut. Col. Michie, now among the Junior Captains of Engineers; and now, on my own application, my 1st Assistant. Michie is a man of very good scientific abilities, active and energetic, of untiring working capacity and showed himself a capable and reliable Cadet assistant in Mathematics. Could sufficient inducements be offered him I think he would be willing to leave the Service for civil life, and should he take the place I have no question but he would work up to all its requirements. I have not spoken to him nor shall I without your instructions.[. . .]”

2. Peter S. Michie (U.S.M.A. 1863) Principal Assistant Professor of Engineering at West Point 1867 to 1871, when he became the Academy's Professor of Natural and Experimental Philosophy. He was an Overseer of the Thayer School 1871-1901.

✂ SMITH TO THAYER: *May 6, 1867*

MY DEAR SIR, I have the pleasure of acknowledging the receipt of your favor of the 2d, with the letter of Prof. Mahan. I feel myself greatly indebted to the Professor for his interest in the subject matter of his letter. Providence seems to be favoring your worthy design.

I regard your opinion & Professor Mahan's, in such a case, as the end of all questioning. Yet, at your suggestion, I will write a confidential letter to Prof. Kendrick.

I have had a conference with Mr. Blaisdell,¹ in regard to the document we talked of; & I am confident that we can draw up an instrument that will meet your views, & all the exigencies of the case. The more I think of the plan which met your favor as we conferred at your house, the stronger is my impression that it will prove itself a good one.

1. Daniel Blaisdell (Dartmouth 1827), Treasurer of the College 1835-1875.

✂ THAYER TO SMITH: *May 13, 1867*

MY DEAR SIR, I duly received your favor under date May 6th conveying the gratifying information that M^r Blaisdell will draw up the Instrument for the establishment of the School of Engineering. The work will be better done by him than it could be by me. Your proposal that the School shall be under the management & control of Overseers taken outside the College excepting the President I heartily approved. The more I have considered since the better I like it. That problem I had found so difficult is solved. The Board of Overseers will therefore consist of the President of the College & four other members: who shall they be? You proposed Prof Hubbard.¹ He is entirely acceptable to me. M^r Ticknor² suggested the name of Professor Mahan. The others mentioned were General Andrews & Col Palfrey.³ You may think of others, or some other whom you deem more suitable. If so, please name them to me. We agreed, If I re-

member aright that there should be a Board of Examiners consisting of the Pres^{dt} of the College, the College professors of Mathematics, Natural Philosophy & Astronomy, Chemistry Mineralogy & Geology & the professor filling the Chair of Architecture & Civil Engineering, all the five acting *ex officio* & for the time being. Their sole duty will be to examine Candidates for admission & pupils for advancement from Class to Class & for graduation & their decisions will be subject to the approval of the Board of Overseers. This last to be a self perpetuating Board save the President who is, of course, an *ex officio* member. The money given to found the School together with any additions that may be made thereto by the founder, or by accumulations of interest is given to the Trustees of the College in trust & in confidence that the same will be invested in the safest & best manner & that the income only will be applied to the sole purposes set forth in the Instrument of Gift & in the manner that shall, in the opinion of the Overseers, best fulfill the intentions of the founder. In case the information you get touching the fitness of Col Peter S. Michie shall be satisfactory, you will, probably, wish to have him *first sounded* by Prof. Mahan & 'till then I hope he will get no hint of what is in *the wind* Should he respond in a manner promising a favorable result you may think best to arrange a meeting with him either in New York, or better still at Hanover if he can be persuaded to go there as I think he should prior to definitive agreement You cannot expect to get him without paying as high a salary as is given to any Dartmouth professor. If an excess over that be absolutely necessary he might, perhaps, consent to have the increase take place only on the opening of the School or only when the number of pupils shall not be less than a fixed number, say *ten* However, if you are satisfied that he is the *right man* for the place get him if you can, *coute qui coute*, *provided* the salary demanded be within the means provided for the object. D'ont let these matters interfere with your more important College duties & reply only at your perfect convenience.

1. Oliver P. Hubbard (Yale 1828), long-time member of the collegiate and medical faculties at Dartmouth, removed to New Haven in 1866 but continued for a time to hold a Dartmouth appointment as Lecturer on Mineralogy, Geology,

Chemistry, and Pharmacy. He was an Overseer of the Thayer School 1870–1895. He also conducted with Mrs. Hubbard, first at Hanover and subsequently in New Haven, a school for young ladies.

2. George Ticknor (Dartmouth 1807,

a classmate of General Thayer's), lawyer, distinguished scholar, and for two decades Professor of French and Spanish Language and Literature and Belles-Lettres at Harvard.

3. George L. Andrews at this time was U. S. Marshal for Massachusetts, a post he held until February 1871, when he became Professor of French at West Point.

A graduate of the Academy in 1851, he had attained the rank of Brevet Major-General during the Civil War. He was an Overseer of the Thayer School 1870-1899.

John C. Palfrey was a manufacturer and a graduate of Harvard, Class of 1853. He served as a Thayer School Overseer 1870-1906.

✂ SMITH TO THAYER: *May 17, 1867*

MY DEAR SIR, I am obliged to you for your favor of the 13th, and for the particular suggestions it contains. I shall bear them in mind, and endeavor to carry them out. Before the instrument of gift is prepared, I wish to obtain your views on a single point.

It is this: Will you set forth in it—at least in the outline—the *requisites for admission to the Course*, & the *programme of that Course*? Or will you commit that to the Board of Overseers? It strikes me that it would be well for you to make at least a general statement, even if you leave it to the Board, as perhaps may be best, to determine and arrange the details.

If you accord with this view, you will, of course, prepare, at your Convenience, such a statement as seems best to you. I will leave a blank for it in the Instrument.

In this connection, I take the liberty to mention a suggestion made to me this morning by Judge Steele,¹ a very intelligent gentleman of Vermont, to whom I mentioned your generous design. He accorded fully with you as to the importance of the Department, in view of the unfolding resources of our country; and spoke of the desirableness of including *Mining* in the course. Mining is really a part of Civil Engineering, & is doubtless embraced, to some extent, in your scheme. How far it should go, your good judgment will determine. There can be no question that Mining, & its natural adjunct, Metallurgy, are to have greater & greater prominence in the curriculum of our Scientific Schools. I have, once or twice, called the attention of our Trustees to the matter of providing instruction in these branches. You need, however, no hint from me as to what will be wise.

I am obliged to you for the suggestion, that I need not hurry matters in the line of your foundation. I have a number of other things of great importance in hand; but you may be sure I shall not neglect the very important work you have referred to me. I write, to-day, confidentially, to Professor Kendrick. I see no reason, by the way, why Professor Mahan should not be in the Board of Overseers, if you wish it, & will consent. He would certainly be an admirable man for the place. If he were a Professor in another College like ours, there might be a question. But his Connection with West Point, it strikes me, would be a consideration in favor of his being an Overseer of such a Department.

1. Benjamin H. Steele (Dartmouth 1857), a justice of the Supreme Court of Vermont 1865-1870.

¶ THAYER TO SMITH: *May 21, 1867*

MY DEAR SIR, In your favor of the 17th I find the following questions "Will you set forth in it (the Instrument)—at least in the Outline—the *requisites* for admission to the Course & the Programme of that Course, or will you commit that to the Board of Overseers"? I would do neither, unless on further reflexion you shall disapprove of my plan which is, to *append* detailed Programmes & merely refer to these in the body of the Instrument, or if you think it would be better to insert a very compendi₁ous Outline or Summary & then refer to the appended Programmes for a more particular specification of the subjects of the Course. Each Programme—that for the entrance examination & that of the studies & instruction in the School¹ will be an absolute minimum; Each may be expanded & improved but not curtailed, in the dis₁cretion of the Board of Overseers. *No* subject mentioned in either Programme shall be eliminated nor shall any new subject be added to the Programme for the School not having a direct bearing on the *technical* branches mentioned & prescribed The Programme for the School will be drawn up in less minute detail than the other for the reason that experience only can indicate how much instruction can be given in each subject within the limits prescribed for the duration of the Course viz two years or two Winter & two Summer Terms. The former extending

from the 1st of November to May 1st. The latter filling up the intervals, The Winter Terms to be devoted entirely to *in-door* instructions. The Overseers will be empowered to add one Winter Term to the Course, if at any future time it shall deem it expedient so to do, and it is a question presented for your consideration whether the Overseers should not be authorized to grant leaves of absence during, at least, one of the Summer Terms to such pupils as may desire & receive employment as Civil Engineers but in cases only wher [e] in the pupil would be likely to derive useful instruction from the employment.

There are other points, probably, that will require consideration before the "Instrument" can be drawn up but I have not time to touch them now.

P.S. I forgot to allude to the suggestion of Judge Steele. I agree with him fully as to the importance of instruction in *Mining*. In every great nation of the world excepting our own there [is] a school of Mining support[ed] by the Government & yet no where is the field of the mining Engineer wider than here. Some instruction in this department of science is professed to be given in Prof Rodgers School of Technology Boston & in some other institutions in the United States & a little may perhaps be taught in our School but all this will not supply the great national want. The [re] should be a Department of Mines at Washington & in connection with it a school of Mines supported by the Government, or under its patronage

1. That is, Programmes A and B, respectively.

✂ THAYER TO SMITH : *May 27, 1867*

MY DEAR SIR, In a letter to me from Prof. Mahan, May 17th, he says "I did not answer your former note May 4th as I was led from it to infer that President Smith might probably write to me & I thought it would be as well to defer doing so until I should hear from him which I have not yet" If you conclude to offer the Chair in question to Col Michie it would be well to do so soon as possible. If he accept I would wish him to enter l'Ecole des Ponts et Chaussées at Paris¹

as a pupil for the Term commencing 1st Nov. '67 & ending 1st April '68 & for that purpose he should embark about the 1st of September I have some work for him to do before he leaves & he will require time to make preparations for his absence Tempus fugit; The time seems to me very short, albeit it is sixty years since I bade adieu to my Alma Mater with a deep sense of my obligations to her.

On June 9th a week from next Sunday I shall enter upon my Eighty third year, reminding me, forcibly, that whatever I have to do in relation to the School should be done quickly. I can scarcely expect to live long enough to see the School in full & successful operation but if all the important points touching its organization & government & the Programmes are settled & understood & the fund for its support is well secured I shall feel perfectly assured that the plan, sooner or later, will be carried out as designed by the founder. My mind will not be at ease, however, 'till the money passes from mine into the hands of those who are to receive it.

1. This famous institution, the world's first school of engineering, founded in 1747, attracted students from various parts of the world.

✂ SMITH TO THAYER: *May 30, 1867*

MY DEAR SIR, Your esteemed favor of the 27th is before me. I have not been neglectful of the important subject of our Correspondence, albeit I have had occasion to be absent several days of late. I have written to Prof. Kendrick, confidentially, according to our conversation when I last saw you, & have received from him the letter which I enclose. It is, in general, consonant with your views & those of Prof. Mahan. As to architecture, I presume the course of study which you propose for Col. M., would insure his competency.

If it is your pleasure, after having read Prof. Mahan's letter, I will write to Col. Michie, laying before him the subject of the Professorship. Or, if it seems best to you, I will, according to a suggestion in your letter of May 13th, write to Prof. Mahan, asking that he sound him. I understand that in view of all your knowledge and information, you are satisfied that Col. Michie is the man. Your judgment, with Prof. Mahan's, & the generally concurring testimony of Prof. Kendrick, would be conclusive with me. Your plan of having

him spend the next winter in Paris seems to me an admirable one. [. . .]

I sympathize with your desire to have your munificent design put in practical shape as soon as may be, not only from my sense of its worthiness, but because I would have you enjoy, as many years as possible, the carrying out & the early fruits of your purpose. I trust it may take such form before the meeting of our Trustees in July next, that I can bring it before them, and secure their express approval. This may be desirable with reference to a consummation of the arrangement with Col. Michie. Not that I question the readiness of the Board to accept your generous proposal; but careful men, you know, like to have every thing fixed beyond a doubt.

My interest deepens in this matter, & in your views respecting it. I count it one of the most felicitous things in my position here, that it has brought me into such intimate acquaintance not only with your broad plans but with yourself. I meet with so many narrow men even among those who are called educators, that I am specially refreshed by communion with a mind of larger scope. [. . .]

✂ THAYER TO SMITH: *June 3, 1867*

MY DEAR SIR Yours of May 31st is rec^d. It seems to me that it would be best to sound Col Michie through Prof. Mahan. Should Prof Kendriks conjecture turn out to be correct, as I fear it may, If it be ascertained that the Colonel would not exchange his commission for any professorship, then we must give him up although I would do so with great regret Should he decline I know not where we could hopefully look for a competent person to fill the chair in question & years might elapse before any such could be found. [. . .]

I cannot close this hasty note without saying how grateful to me were the kind words in your letter & assuring you that the feelings expressed are warmly reciprocated on my part

✂ SMITH TO THAYER: *June 22, 1867*

MY DEAR SIR, I have, at length, heard decisively from Col. Michie, through Professor Mahan. He declines the proffered chair, preferring the Military Service. Prof Mahan will look further, & I trust

the right man will be found. He also consents to serve as one of the Board of Overseers, which I am very glad of.

I send herewith what Mr. Blaisdell and myself deem a suitable form of an instrument of gift. It is a Communication to the Trustees of Dartmouth College, designed to be placed by them upon their records, with resolutions pledging them & their successors to a faithful carrying out of your wishes.

I have made the paper as brief & simple as I could, consistently with a just presentation of the matter. There are blanks to be filled up. I have followed your suggestions so far as I had them. Where I was left to my own judgment, I have sought counsel of Mr. Blaisdell, & have endeavored to provide adequate safeguards. The provision in regard to a voice of our Trustees, both in appointing & removing Teachers, seemed proper on the score of organic unity, & as a protection against Certain possible evils. I have said "Professor or Professors," because we may, some time want two. I have referred to your possible decease before the organization is complete, simply because it seemed desirable to forecast every thing. You can put in what name you please in the blank in the 5th Section.¹ Knowing your views, I should be willing, in the event suggested—(which may a kind Providence forbid!)—to act in your stead. But I have no wish to express.

I have supposed you might like to have this matter come before our Trustees *at Commencement*. It would be very gratifying to them. They could act upon it, & we could then take time to perfect the organization. Please suggest any changes that you desire—or make them yourself. When the paper is in readiness, with your signature, I shall be happy to present it to our Trustees. Please write me soon.

P.S. At the close of the document, there are blanks to be filled with the requisites for admission & the Course of study—both, I suppose, in general

1. See General Thayer's "Instrument of Gift" dated July 4, 1867, the paragraph numbered 5.

✍ SMITH TO THAYER: *June 24, 1867*

DEAR SIR, It occurs to me to say a few words more on the subject embraced in a letter dated the 22d inst.

The only thing that needs any further explanation—if, indeed, that does—is the provision, in the letter of gift which I send, respecting the choice of a Professor. There is a great deal of interest felt here in the matter of *organic unity*, & of avoiding every thing like an annoying & embarrassing *imperium in imperio*. In all our present Departments, the Professors are elected by the Trustees of Dartmouth College. And it occurred to me that while the wisdom of the Board of Overseers should be invoked in the choice of teachers, & while it might lie *primarily* with them—it would be well to have their action in this particular subject to the approval of the Board of Trustees. Practically, it would make, in all probability, no difference. Yet it would be more satisfactory, &, in a possible case, might furnish a desirable safeguard. So as to the removal of a Professor—giving the power, not only to a majority of the Board of Overseers, but to *three-fourths*—(a large vote you will see)—of the Trustees, to remove a man found incompetent or of injurious influence.

Following your suggestion, I have drawn the plan so as to leave much, in the particulars, to the wisdom of the Board of Overseers.

I have supposed it might be agreeable to you to announce your purpose to our Trustees at their next meeting. I hope, if you feel able, you will put the document *in your own handwriting*. Should you think of any desirable change, I should be pleased to hear from you. I am full of cares, just now, but nothing interests me more than the carrying out of your wishes.

✂ THAYER TO SMITH: *June 26, 1867*

DEAR SIR, I just now rec^d your several letters under dates June 22 & 24th with the draught of the instrument of gift. I write merely to acknowledge their receipt by the return mail about to close. From a glance of the instrument I should say that “*il laisse peu ou rien à désirer*” & that I shall only have to copy it filling up the blanks. As to a profes[sor] we cannot do better, I think than to leave the selection to Professor Mahan giving him a *carte blanche*. If he cannot find the “right man” I doubt whether any one could during my lifetime. He failing I should almost despair.

I shall write again as soon as I can find time to examine the instrument carefully. I am now *making hay while the sun shines* & am very busy not being able to procure the needful help.

✂ THAYER TO SMITH: *July 1, 1867*

MY DEAR SIR, I can only reply very hurriedly to your favor of June 27th. I did not, as you know, intend to "confine the Course *unalterably* to two years" On the contrary I proposed to empower the Overseers to extend it so as to embrace three winter & two summer terms should such extension be found expedient as it probably will be. This should be the maximum for reasons I will take some future occasion to explain more at large. In considering this question we must keep in view all parts of the plan in connection 1st the special object of the school which is to teach only the technical branches & not even all these, perhaps, but yet all that are the most necessary or important to be taught to those who are to follow the profession of the Civil Engineer or Architect— 2^d the high standard of attainment required for admission equalling, perhaps, in amount, although not in kind, that of a Dartmouth graduate & in view of this it may be assumed that the average age of candidates for admission to the school will not be much below that of College graduates—say 21 or over: now, it may safely be calculated, I think, that an amercible youth of 23 or 24, unless he be an exceptional one, would like to be out of school. 3^d I am fully persuaded & I think Prof Mahan will concur, that as complete a course of civil Engineering can be taught at one school within the time proposed to be assigned to it as that at the Ponts et Chaussees the first Institution of the kind in [the] world. Nevertheless, I adopt your suggestion to "insert before *two years* the little words *at least*" but I may, or may not recommend that the Course may not be extended beyond two Summer & three Winter Terms

✂ SMITH TO THAYER: *July 3, 1867*

MY DEAR GENERAL THAYER, I write, though it is scarce necessary, to say that I appreciate & approve every word of your last letter.

And the broad view it takes gives me fresh occasion for gratitude that your life is spared, & strength given you to draw the outline of the new Institution. My suggestion that the little phrase "at least" be inserted, was simply to meet more exactly the views you had previously expressed.

I have written to Prof. Mahan, telling him how much we lean upon his judgment in this matter, & asking him to be on the lookout for *the man*. I think there is somewhere, a "*coming man*" for us. The Providence which has turned your thoughts in this direction, & given you the means of gratifying your heart's desire, will, I feel confident, smile upon the undertaking to its consummation.

As you approved of the name of Professor Hubbard in connection with the Board of Overseers, I spoke of the matter to him, the other day, & found him ready to enter most cordially into your views. He will act as one of the Overseers, & will make a good one. So we have two—Professor Mahan consenting. You will have no difficulty in making up a good Board.

I have a slight misgiving as to the matter of *salary*. We may find it difficult to secure a man for the moderate sum—\$1500—given to our Professors. Possibly, if we draw him from some other good position, we may have to give more. [. . .]

¶ THAYER TO SMITH: *July 4, 1867*

MY DEAR SIR, You will receive herewith a paper containing a proposition to found a School of Architecture & Civil Engineering in connection with Dartmouth College which I desire you to lay before the Trustees for their approval. It is a literal copy of the form with which you favored me, excepting several sentences I have added or altered for the purpose of expressing my views & wishes more fully than the original seemed to do, in *two* or *three* particulars. You will think, I fear, that the paper has not been improved thereby I would have submitted the changes for your correction had time permitted. *South* before "*Braintree*" is omitted, it being used to distinguish the place from other parts of the Town where there are villages & Post Offices. The provision submitting the appointment of the professor & teachers by the Overseers to the approval of the

Trustees I adopt only in deference to your better judgment, & in the hope that the choice of the Overseers will not be overruled on *political*, or *sectarian* grounds & that the power of disapproval conferred on the Trustees will be regarded as a mere form. I would have added a clause making the Senior Professor a member of the Board of Overseers *ad hoc* whenever but only when a question or matter relating to the Programmes is before the Board for discussion & action, had I felt sure of your approval. I am sorry that my hand writing is not better. I [t] has deteriorated with increase of age & besides my *pen holders* have been stiffened of late by manual labor with the *rake & hoe*.

The papers to be appended viz the programmes *A* & *B* are in course of preparation & will be forwarded as soon as finished. They will be voluminous. *A* alone, which is near completion, will fill ten sheets of letter paper. *B* will be less *bulky* as it will contain only an *outline* of the studies, the minute specification of them being left to be made out & inserted by the Overseers, with the aid of the Professor

As soon as *the act of acceptance* is received I shall wish to pay over twenty thousand dollars of the fund & give two bonds for the remainder in such form as shall be binding on my Executors in the event of my decease viz a bond for ten thousand dollars payable on or before the 1st March 1868 & a bond for the same amount payable whenever, & as soon as, the School shall be opened for the admission of pupils

✂ SMITH TO THAYER: *July 5, 1867*

MY DEAR GENERAL THAYER, Your Communication reached me to-day. The paper, as you have prepared it, is *just right*. I heartily approve of all the changes you have made, & have a fresh sense of the great work you are so generou [s]ly doing. I shall lay the document before our Trustees, at their meeting on the 17th of the present month.

If programmes (A) & (B) should be in readiness by the latter part of next week—so that I could have them on Monday the 15th—I should be pleased to present them with the principal paper.

Prof. Mahan writes me, this week: "I hope still that, among our

Braintree Mass^{ts} July 4th 1867

To the Honorable and Reverend Trustees
of Dartmouth College

Moved by a regard for my Alma Mater and by a consideration of the large demands which the unfolding material interests of the Country are sure to make upon our educational Institutions, I have a proposition to present which I hope will meet the approval of your honorable body.

I propose to give to the Trustees of Dartmouth College, in the form either of cash or of good securities, as I may elect, the sum of forty thousand dollars, to be held by them in trust, for the purpose of establishing and sustaining, in connection with that Institution, a School or Department of Architecture and Civil Engineering, on the following plan.

1. The requisites for admission to the School shall be of a high order, embracing such studies, at least, as are specified in the appended paper (Programme A) bearing my signature.

2. The course of study shall extend through, at least, two years, each year to be

Divided into a Winter and a Summer Term, and the duration of the Course may be further extended so as to include three winter Terms, should three or more members of the Board of Overseers, created by the fifth article of this Instrument, judge, after a fair trial of the two year course, such further extension to be expedient. Each winter Term shall extend, continuously, from the first of November to the first of May; the summer Term shall embrace largely the outdoor practical instruction of the course. The studies of the course shall be those specified in the appended paper (Programme B) bearing my signature. no new study or subject of instruction shall be introduced, not having a direct bearing on a study or subject specified in the Programme; in aid of the practical studies of the School temporary employment in Civil Engineering may be permitted.

3. A proper Degree or Diploma shall be given to the students who pass satisfactory examinations in all the studies of the course

4. The Committee of Examinations,

both for admission, and at the close of each year, shall consist of, The President of Dartmouth College, the Professor of Mathematics, the Professor of Natural Philosophy and the Professor of Chemistry in the said Institution, together with the Senior Professor in the School of Architecture and Civil Engineering.

5. The management of this Department shall be vested in a Board of Overseers, to consist of The President of Dartmouth College for the time being, who shall act as its President, and four other persons to be selected at first by myself, or in case of my absence, by The President of Dartmouth College; and the Board afterwards to fill its own vacancies by the vote of a majority of what number soever shall remain. It shall be the duty of this Board to fix the requisites for admission, and to draw out, in detail, the course of studies, all in strict accordance with the Programmes hereto appended; and at the close of each year, with the assistance of the said Senior Professor, will carefully revise the same with a view to their improvement, making such changes therein, and only such, as experience shall have shown to be expedient. The Board shall make any and all necessary rules respecting the teachers and students, it being understood

That, in relation to Department, the Students shall be subject to the laws of Dartmouth College; The Overseers shall also elect all the teachers, after the appointment of the first Professor; it being understood that their action in this regard shall be subject to the approval of the Trustees of Dartmouth College; and that any teacher shall be removed whenever a majority of the Board of Overseers, or three fourths of the Trustees shall decide, that the interests of the Department require it. The first Professor shall be appointed by myself; or, in case of my absence, by the Overseers; They shall also determine the salaries of the Professor and Teachers and the rate of tuition. The Overseers shall receive no salary; but all their necessary expenses in the discharge of their official duties shall be paid out of the funds of the Department.

6. The Faculty of Government shall consist of the President of Dartmouth College, acting as its President, and the Professor or the Professors of this Department.

7. The funds of this Department, whether contributed by myself, or added by others, shall be kept safely invested, and the income thereof shall be disbursed by the Treasurer.

only on the order of the President of Dartmouth College, given in accordance with the directions of the Board of Overseers. A report of the financial affairs of the Department shall be made by the Treasurer annually, both to the Trustees and to the Board of Overseers; and it is my wish that the disbursements each year shall be, at least, two hundred dollars less than the income, until a sum not less than ten thousand dollars be accumulated over and above the principal fund of forty thousand dollars, as a guarantee fund to supply any deficiency which may exist in the principal fund, or its income.

I desire that this paper be entered in the records of Dartmouth College with a formal recognition of the obligations revolving on the Trustees to carry out, in good faith, my wishes as herein stated.

Sylvanus Thayer

Colonel in U.S. Corp of Engineers

B. Brig. General in the U.S. Army

younger Engineer officers of talent & energy, I may find one who is suited for & will accept the Chair."

The provision in regard to the approval of the Trustees, in case of the election of a Professor, while it will meet a point of some delicacy, will, I am confident, operate in perfect harmony with your views.

Under ante-Commencement pressures, I write necessarily in haste. Our Examination begins on Monday.

✍ THAYER TO SMITH: *July 8, 1867*

MY DEAR SIR, I was not only exceedingly gratified but also comforted by your favor of the 3^d for I could not feel sure of being right 'till I knew that you approved. I shall feel doubly happy in case my paper dated on the 4th & forwarded on the 5th shall also meet with your approbation but am not without fear lest it may not, as to the phraseology in the few changes I made. I will write it anew if you think best.

In a letter from Prof. Mahan I am led to expect a visit from him shortly & he adds "what say you to a little trip to Hanover when we get together"? I shall try to persuade him to go regretting my inability to go with him. Gen^l Cullum has in press the 2^d edition of his Register of the Officers & Graduates of the Mil^y Academy¹ & sends me the proof sheets among which I find one containing the official life of Professor Mahan I send it herewith You will see the different positions he has occupied since he first entered the service as a Cadet in 1820. May I not hope that Dartmouth will confer upon him the degree of LL.D as two other colleges of high standing have already done²

P.S. You need have no "misgivings" as to the "salary". If the right [man] be found & he willing to accept we must have him. Should the Trustees accept my proposition I would be thankful for a copy of "the paper" I retained no copy & would wish Prof. Mahan to see it

1. George W. Cullum's *Biographical Register . . .* covering officers and graduates of West Point from 1802 to 1866--1867 was published in two volumes at

New York in 1868. It succeeded Cul-
lum's one-volume *Register* of 1850 and
was followed in 1879 by a revised edition
in three volumes, which was also subse-
quently revised and extended by several
supplements.

2. Just two weeks later President Smith

added within a postscript to his letter of
July 23, 1867, to General Thayer: "Your
wish in regard to Professor Mahan was
regarded. I had the pleasure of announc-
ing, at Commencement, the bestowal on
him of the degree of L.L.D. Dartmouth
honored herself by doing it."

¶ SMITH TO THAYER: *July 23, 1867*

MY DEAR SIR, I seize the first leisure I have found since Commence-
ment, to announce to you the cordial and grateful acceptance by
our Trustees of your munificent proposal. The document you sent
was entered in full on their records, that the conditions of the gift
might be patent & prominent to all their successors; & the follow-
ing Resolution unanimously adopted:

"*Resolved* — That we gratefully accept the munificent donation
of Gen. Sylvanus Thayer, upon the terms and conditions expressed
in his Communication; and that the President appropriately com-
municate to Gen. Thayer this acceptance, with the earnest thanks
of the Board."

This resolution was drawn up by Judge Bonney, of New York,
and was regarded by Judge Nesmith, of our Supreme Court, and by
all the members of the Board, as binding them & their successors to
the fulfilment of your wishes.¹ No words of mine could adequately
express the deep and appreciative sensibility with which your Com-
munication was received. Not the slightest objection was made to
any of the conditions. Indeed, I think the Trustees were all im-
pressed with the wisdom & forecast of your plan.

If by the grave men of the Board the matter was received with so
much feeling, you may faintly imagine the enthusiasm it awakened
at the Commencement Dinner. The public mention of it, I reserved
for that occasion. It was an entire surprise to nearly all present, &
my announcement was responded to with hearty & protracted ap-
plause. Your liberality will do good beyond the accomplishment of
your specific and immediate purpose. It will incite others of the
Alumni to care for their Alma Mater.

A place is reserved in the Records for the two papers which are
to be appended to your Communication. When they are ready, I am

to have them duly entered. If it is convenient to send them this week, I will put them into the hands of some proper person for transcription. Make no haste about it, however. I expect to be in Boston the latter part of next week, & I will then give myself the pleasure of calling on you.

There are *post*, as well as *ante*-Commencement pressures, which it takes some time to dispose of. Else you would have heard from me several days ago. [. . .]

1. Benjamin W. Bonney (Dartmouth 1820), a Trustee of the College 1858-1824), a Trustee 1865-1868, had been a member of the New York Supreme Court, while George W. Nesmith (Dartmouth 1890, was for over a decade a judge of the Supreme Court of New Hampshire.

✍ THAYER TO SMITH: *July 26, 1867*

MY DEAR SIR, Your most welcome letter of July 23^d (postmarked 24th) came to hand last evening. The high fa_vor & *éclat* with which, it seems, my proposition was received at Dartmouth can only be ascribed to your skilful engineering, calling for my most grateful acknowledgements The donation having been accepted "upon the terms & conditions expressed" in the Instrument I would wish to turn over \$20,000 as soon as it may be convenient for the Treasurer to rece_ive it giving my Notes or bonds for the remainder in the manner indicated in a former letter, The Notes or bonds to be drawn by M^r Blaisdel in such form as shall make them binding on my Executors in case of my death. In reference to the programmes & other matters about which I have something to say I reserve them for the visit with which you are to favor me next week. [. . .]

✍ THAYER TO SMITH: *September 5, 1867*

MY DEAR SIR, You will find enclosed herewith my Note for ten thousand dollars payable to the Trustees of Dartmouth College on or before the expiration of two years from the first of March next. I also [enclose] my Note for \$10,000 payable on or before the 1st of March 1868. A duplicate of this Note has been placed among the

papers which, in the event of my death before the Note is paid will pass into the hands of my Ex [e] cutors with directions to them to affix the proper stamps & pay the Note without unn [e] cessary delay. Please inform whether this arrangement is satisfactory to you. If not I will make any changes you may suggest. My intention is to pay the professors salary & all other necessary expenses accruing up to March 1870 so that the income may meanwhile be accumulating. You must be very busy just now but as you find leasure for it I shall expect to hear from you in relation to the object of your visit to West Point

✂ SMITH TO THAYER: *September 12, 1867*

MY DEAR GENERAL THAYER, Yours of Sept 5th was duly received, with your two notes. I owe you an apology for so long delaying my reply. That apology must be, absorbing engagements connected with the opening of the year. We have had, I might almost say, an *avalanche* of new students—nearly 120 in all; the largest number ever received here at the beginning of a year, with possibly a single exception. Our Freshman Class in the Academical Department will be not far from 80; & goodly additions have been made to other Classes. I do not doubt, my dear Sir, that the interest you have shown in us, has contributed to draw the public attention afresh to this ancient and honored seat of learning.

I have read your last, as I do all your letters, with very deep interest. The perpetual manifestation of forecast & comprehensive wisdom in your plans for the new Department, deepens continually my desire that your life may be prolonged till you see ripe clusters of fruit on the tree you are planting. I will not repress the hope that you may find yourself able to visit us. And yet I would have you spare yourself, for the sake of others, all undue fatigue or exposure.

We have not the least disposition to modify any plans you are pleased to adopt as to the financial basis of the new Institution. We should be quite Content to leave the whole thing to your own good judgment & unaided care, not doubting that your wishes would all be carried out. Yet as you have wished to have me consult our Treasurer & financial adviser, Hon. D. Blaisdell, I have submitted your

letter & the notes to him, asking him for any suggestions which, in a legal view, he saw reason to make.

Of the note payable in 1870, with stamps affixed, he has nothing to suggest, except that recent particular instructions require that the stamps should be cancelled by you, or by your authority. If you will authorize me to do it, it will be sufficient. Probably it did not occur to you to make the usual pen-marks upon the stamps before you enclosed the note in your letter.

As to the other note, that payable in March 1868, he says that doubtless every thing will be done, in any event, according to your wishes; but that if you desire, as I have supposed you did, to put every thing in legal form, so as to preclude all possibility of failure, a little change would be necessary. No direction, he says, which does not form part & parcel of your Will—but is, instead, separate from it—would be binding upon your Executors. Nor would any note which had not passed, in due form, into the hands of the College, or their agent, give them any legal claim. If you wish to give the matter, as I understand him, an exact and unquestionable legal form, so as to guard against all contingencies, it might be done by your sending us another note exactly like that payable in '70, only with the time of payment March 1, '68. This, with stamps duly cancelled, would put the whole thing in a legal shape; & I suppose there need be no reference to it in your Will. In case of death before the payment of any note, it holds the estate as a matter of course

I would not have said thus much, had you not so particularly enjoined my making any suggestion that might subserve your purpose of making every thing pertaining to your benevolent designs perfectly secure.

I note with gratification & thankfulness your expressed purpose "to pay the Professor's salary, & all other necessary expenses accruing up to March 1870." It will be a great advantage, in so great a matter, to have a reserve fund to fall back upon. Especially as we may be troubled to get a Professor on any very moderate salary.

Now as to a Professor. I laid all my plans so as to visit West Point in vacation. But, unhappily, I found neither Prof. Mahan, nor Prof. Kendrick at home. I saw, however, both Col. Michie & Mr. Adams.¹ My impressions of them corresponded very well with Prof. Mahan's. Col. Michie, I think, would make a good Professor. But he seems

fixed in his determination not to leave the service. Mr. Adams interested me. I doubt if he has the enthusiasm of Col. Michie; and he is, perhaps, hardly as mature in years as might be desired for so important a work. Yet he is evidently a man of character and ability; and if he should develop well as a teacher, the next twelvemonth, we may deem him the man. I have some question, however, about his accepting. Indeed there is apt to be a difficulty with men accustomed to military habitudes, about so quiet a place as that we contemplate. If we could find a man who, like yourself, had laid his foundation in College, & had added to it the other necessary Culture, there would be an advantage in it. Ah, I think vainly, as I write, is there no fountain of youth? If *you*, in the fullness of your strength, could take charge of the new Department, how would all our solitudes vanish. But you have not two lives to give to your Country. I shall write again soon to Prof. Mahan, & I hope that, as you can, you will make further inquiries. Possibly some friend of yours in Boston or Cambridge might suggest a name. At Cambridge, however, I see in the department of Engineering, only Professor Eustis of the Lawrence Scientific School.² I think we shall find the man—even if Mr. Adams be not he. But we must use means & have patience. [. . .]

1. Henry M. Adams (U.S.M.A. 1866) was just beginning his appointment as Assistant Professor of Engineering at the Academy.

2. The Lawrence Scientific School existed as a part of Harvard University

from 1847 to 1906. Henry L. Eustis (Harvard 1838 and U.S.M.A. 1842) was its Professor of Engineering and had formerly held an assistant professorship in that subject at West Point.

✂ THAYER TO SMITH: *September 16, 1867*

MY DEAR SIR, Your favor of the 12th is at hand. I rejoice in the growing prosperity & bright prospects of our Alma Mater & doubt not the Institution will continue to prosper more & more under your able & wise administration

My omission to cancel the stamps on my Note payable March 1st 1870 was an oversight & I hereby empower & request you to cancel them—

Now as to the other Note, the short time intervening between its

date & its maturity seemed to me not to require stamps, especially as I felt sure that my Executors, in the event of my death would pay it promptly even without any legal claim or process on the part of the Trustees—Two of the three executors are learned in the Law. I shall take council with them & if I find that there is a legal bar in the way under the present arrangement, or a *particle* of doubt about the matter I will send you a new Note with the proper stamps, as requested. By a letter from Prof Mahan (who has been sick in bed ever since your visit to West Point) I learn that we are not to have Lieut. Adams—I fear more & more that no graduate of West Point possessing the requisite qualifications can be engaged on any reasonable salary & therefore desire & hope that you will be looking around elsewhere for the right man & not depend upon me for help. I am only a broken staff—Select from the graduates of Dartmouth or Harvard or Yale or other New England College some one [who] has given proof of talent especially Mathematical talent, & of all other requisite qualities, let him pass one term at least at West Point attending the Lectur[e]s & recitations in the Departments of Mathematics, Physics & Civil Engineering & then send him to the school of Civil Engineering (Ponts et Chaussées) at Paris to finish his education. If during this process the School can be put in operation advantageously under some temporary professor, so much the better. Consider this idea & better it, as I am sure you can & will—

[. . .]

✂ THAYER TO SMITH: *September 23, 1867*

MY DEAR SIR, Herewith you will receive a first portion of Programme A. viz that which pertains to pure Mathematics, which I desire you to submit to Professor Quimby¹ in the hope that he will favor me with such remarks & suggestions as may enable me to improve it. It was designed to include every proposition, problem & principle of any importance, but many such were, probably, excluded unintentionally; some of those in the programme, it may be deemed best to leave out, others are not probably enounced in the clearest & best phraseology & again some not arranged in proper order. These & all other defects whether in substance, or form I

desire to have pointed out & amended unsparingly— The sharper the criticisms, the better I shall like them, promising not to reply as a certain prelate did to Gil Blas by wishing the critic “a little more taste” I am truly sorry that I cannot send a fair copy instead of the original rough manuscript all defaced by erasures & interlineations For me to make a copy is out of the question & must beg you to get some one to do it under the supervision of Prof. Quimby with the understanding (of course) that the copyist will be properly compensated Some member of the junior or senior class, perhaps, who has studied the subjects & who may stand in need of the compensation— It will, I trust, be understood that I undertook to do this work, not from choice, but from absolute necessity, from not knowing of any competent person who would be likely to take it upon himself not, surely, because I deemed myself competent. No one indeed who has not had much experience in teaching the subjects can be capable of drawing up a good program in detail, especially not one whose faculties intellectual as well as physical have (as he [is] fully conscious) become impaired by age—

1. Elihu T. Quimby (Dartmouth 1851) was Professor of Mathematics and Civil Engineering at the College 1864–1878.

✂ SMITH TO THAYER: *October 29, 1867*

MY DEAR SIR, Yours of yesterday has just reached me. I hasten to acknowledge it, as also your favor of the 18th inst. My delay to answer the last named resulted from two causes. First, I have been of late very much pressed with my official duties. I take charge now of the metaphysical department, & the Senior Class has just passed into my hands. With many other cares, you can easily understand that I have little leisure. Indeed, I have been worked to the last particle of my strength. But, in the second place, I have been looking for a spare hour in which I could do more than merely acknowledge your letter & its contents. There were several matters of which I wished to speak somewhat at large. I make this particular explanation, because I would not even seem to be neglectful.

Before I pass to business, let me say how much surprised I was not to recognize your well known hand, & how sorry to learn that

you had met with so painful an accident.¹ You do not say what finger you have lost. I hope when the wound is healed, you will be able to write again.

I am greatly gratified by the indications I meet with that the "Thayer School" will not lack pupils. There are several fine young men in College who think of entering it, if it should be in operation when they graduate.

I am sorry that I have not yet received from the printer the copies I ordered of your *Instrument of Gift*. He has been so driven with the Catalogue,—which must be out before the close of the Medical Term,—that he has been obliged to postpone the printing of it. I hope to have it soon in readiness for your use.

Professor Quimby has examined your programme of requisitions, &c, in their general scope & character, gives them his hearty approval. All he has suggested to me in the way of change is mainly verbal—a few alterations, perhaps, of nomenclature in conformation with some new usages.

He has talked with me about some adaptation of our College Course to the new department, so that, by options at least, our graduates may be prepared to enter it. This, especially in Mathematics. In order, however, to judge definitely what this should be, he would like to confer with you. And I have thought it might be best for him, & perhaps, also, Professor Young, of the Chair of Natural Philosophy,² to visit you at the close of the term—that is, after Thanksgiving, & confer with you on the subject. If this would be agreeable to you, I think one or both of them will do so. It would be difficult to go over the matter by letter. Possibly, if I am not called elsewhere, I may go with them.

I send, herewith, our new Catalogue. It indicates prosperity, you will see. I thought it well to make a general statement, on page 49, of the *Thayer School*.

With the liveliest sympathy with you in your recent affliction, & the hope that it will have all possible mitigations, I am [. . .]

1. On October eighteenth the General had informed Smith that he had suffered an accident which had resulted in the amputation of a finger of his right hand. During a period of over a year and a half, from October 18, 1867, through July 12,

1869, Thayer's letters in carrying on his correspondence with President Smith were dictated, the writing being done by the General's niece, Miss Livia A. Wild, or by the Rev. George A. Thayer of Boston.

2. Charles A. Young (Dartmouth Philosophy and Professor of Astronomy
1853), Appleton Professor of Natural 1866-1877.

✂ THAYER TO SMITH: *November 5, 1867*

MY DEAR SIR, The receipt of your very kind letter is gratefully acknowledged. [. . .]

I have had to endure a second amputation of the little finger of my right hand eighteen days after the first, having in the meantime suffered great pain. My hand is now apparently doing well but it must be many weeks before I shall be able to write with it.

I have also to say, further, that I shall regard it as a great favor to receive any visit from yourself and Profs. Quimby and Young at a convenient time during the Winter vacation

✂ SMITH TO THAYER: *November 19, 1867*

MY DEAR GENERAL THAYER, I thought, at first, I would, to-day, write to Mr. G. A. Thayer only, in reply to his letter received yesterday. But fearing that he may be away from South Braintree, & so delay ensue, I have concluded to send all the papers directly to you. Their contents all concern you.¹

I need not add to what I have said to Mr. G. A. Thayer. I have touched, you will see, on all the points on which you wished him to write.

I will only add, that I am grieved to hear of your continued suffering. I hope and pray that it may be soon relieved. I shall be anxious to hear again soon.

1. President Smith had written the Rev. Mr. Thayer as follows:

"It pained me to learn from your letter by yesterday's mail, that my excellent and venerable friend, Gen. Thayer, is still suffering from the surgical operations to which he has been compelled to subject himself. I had hoped to hear that he was relieved, and I still cherish such a hope.

"His life-long habitudes show them-

selves in his thoughtfulness & forecast touching the School he founds here; & it will be my care to further his wishes in all respects. As to the kind of bonds for investment, our Treasurer and myself concur in referring the whole matter to Gen. Thayer. The bonds of any New England State,—as may be most convenient for him, will be entirely satisfactory. If he wishes to remit, in cash & securities, the amount of his note payable

in 1868, I would suggest that he do it *by express*. He may send to me, and I will obtain his note of our Treasurer & return it to him. Or I will take any other course that he may prefer.

"I send herewith a form of appointment which can be filled up & put in legal order, & then returned to me as the representative of the Trustees. So far as they are concerned, this will be all that will be necessary.

"On receipt of this document, I will, if Gen. Thayer desires, inform the four gentlemen, officially & formally, of their appointment,* sending them a copy of the *Instrument of Gift*. This, I am sorry to say, through an annoying delay of the printer, is not out of press. But I shall

have it within a day or two. I will send copies of it to Gen. Thayer. Perhaps, if he is able, he will himself correspond with the persons concerned. He need not, however, be burdened in the matter.

"I have not inserted the Christian names of Messrs Andrews & Palfrey, not knowing them. You can fill the blanks.

"I have only to add, that I shall be anxious to know the state of Gen. Thayer's health, & will be obliged to you for a line of information. Our Professor of Mathematics has thought of calling on him, within the next ten days, for conference in regard to the 'Terms of Admission,' &c.; but, of course, this must depend on his health.[. . .]"

*The President's reference is to the naming of the four persons to serve with him on the Board of Overseers of the Thayer School.

¶ THAYER TO SMITH: *November 30, 1867*

DEAR SIR, I enclose the paper containing the names of the persons appointed as overseers of the School.¹ If you think it defective in any respect, please notify me after consultation with Mr Blaisdell, and I will make it all right. Will you please notify each of the persons appointed and request an answer signifying his acceptance or declination, sending him at the same time a copy of my instrument of gift.

I look forward with pleasure to a visit from Professors Quimby and Young, and only regret that the state of my health will not permit me to profit by the interviews as much as I should under more favorable circumstances.

I am still suffering from my finger, and sit up only to have my bed made.

I have an idea that I should sign some paper authorizing the board of overseers to finish the programmes to be attached to my instrument of gift. Do you concur?

1. The document, dated November 29, 1867 (and, due to his recent surgery, signed by General Thayer with an X), formally names as Overseers to serve "in

connection with the President of Dartmouth College" Professors Mahan and Hubbard and Generals Andrews and Palfrey.

✂ SMITH TO THAYER: *December 3, 1867*

MY DEAR SIR, Yours of the 30th ult. met me yesterday, on my return from a short absence. It relieved me, in a measure; for I had begun to feel anxious about you. Yet I am pained to know, that you still suffer. I trust you will soon be restored.

The Instrument appointing the Overseers is all right. I will at once communicate with them.

Professor Quimby leaves to-day for Boston, &, while there, will visit you. It is doubtful whether Professor Young will be able to accompany him. This will perhaps be the less a loss from the fact, that only the Mathematical Programme is as yet made out. You will find Prof. Quimby quite up to your standard of thoroughness. He abhors, as nature does a vacuum, all superficial work.

As to the completion of the Programmes, I concur in your view. You ought not, in your present state, to subject yourself to much care or labor. Perhaps you may be able, through an amanuensis, to note the main points—the merest outline—& then leave the filling up to the Board of Overseers. In that case, it would probably be committed largely to your friend, Prof. Mahan, in whose good judgment you have the fullest confidence. I have drawn up & enclose a paper in accordance with this view, which, if you see fit to sign & return to me, will make the matter secure in any event. It is so shaped that if you should be able you could do the work yourself—if not the Overseers would be fully empowered.

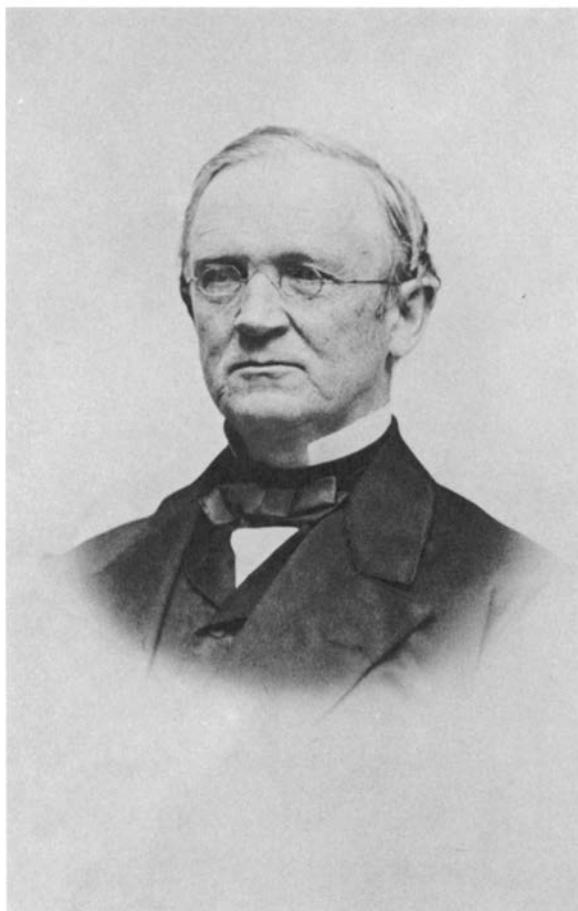
If you should prefer at once to turn it over to them, without giving yourself further labor, the paper could be adapted to that view by simply substituting, in the 9th & 10th lines, *am unable* for "*may be unable*," and omitting the clause beginning at the 11th line, "*in case of such disability on my part*."

Perhaps the latter would be the better course, in view of your feebleness, & the danger of overtasking you. I would avoid that, though I desire the fullest benefit of your wisdom in the case. Prof. Mahan, especially, is so well acquainted with your views, and so

fully in sympathy with them, that he would be to you a sort of second self. I need not tell you how fully I should confide in him. If you please to return the paper to me, shaped as seems best, I will hold it in reserve, & do with it what the case requires. I simply desire to have every thing so arranged that, in whatever contingency, your plans may be faithfully carried out. [. . .]

• II •

*"... the main point seems to be, the selection
of a Professor."*



ASA DODGE SMITH
From a Dartmouth Class Album of 1868
Dartmouth College Archives



Dartmouth College,
Hanover, N. H. Jan. 31, 1868.

Gen. Sylvanus Thayer,
My Dear Sir,

I was exceedingly glad to learn, from Professor Quimby, that you seemed to be convalescing when he saw you. As I have heard nothing to the contrary, I have comforted myself with the hope that you are still improving. I have been desiring to write you for some time, on one or two subjects connected with the "Thayer School"; & I trust you are now so well that matters of business will not annoy you. I have been in constant fear of imposing any thing upon you, that would at all retard your recovery.

I may say, first, that as the Overseers have all cheerfully accepted their office, & as the programmes are now in a desirable state of forwardness, the main point seems to be, the selection of a Professor. *Hoc opus*. I have as yet fallen upon no available name, entirely satisfactory. It would be pleasant to have a man of some reputation. Yet reputation is only the *shadow*. If we have the *substance*, character & capacity, all will be well. There would be no serious objection to a youngish man of ability & the right spirit, especially with your plan of sending him abroad. I am about to make further inquiries, & only trouble you with this subject, to let you know how it stands, & to say that if you think of any quarter where inquiries may be hopefully made—beside those you have suggested already—I will thank you to name it to me.

Another subject. Professor Quimby suggested to me, the other day, a difficulty which may arise in regard to the requisitions for admission to the School. The programme, he thinks, will require some six months more of study—particularly in Mathematics—than is now required in our Colleges generally. Indeed, he expressed a doubt whether most College Professors could pass an examination upon it. It would be some what difficult to arrange *our* college course, so as to give candidates for the School opportunity to master it all. But if *we* could do it, the graduates of other Colleges would

be excluded, without more additional study than most of them would know how to accomplish. The question has arisen, whether it may not be well to give the Overseers permission, for the present at least, to include in the curriculum one or two things that are now among the pre-requisites. Say, for example, *Descriptive Geometry*, including Shades & Shadows—perhaps, also, *Spherical Projections*. Something of the requirements for entrance might be taken at the outset of the course, leaving still considerable ground to be provided for, by study additional to the usual College Course. It might be understood that this is to be done only so long as the Overseers judge it expedient—leaving the way open to push the whole thing up higher.

We all concur heartily in your desire to have the standard high. We would not accommodate unduly. Yet, as the course is to be *post-graduate*, it is desirable to arrange things so that students can go to it directly from College. Please think of this, and if you deem it wise to make any change, Professor Quimby will correspond with you about it. He & Prof. Young enter heartily into your general views.

Yours most truly,
Asa D. Smith.

P.S. As the printer has the programmes in hand, it would be desirable to settle the point I raise *soon*.

✂ THAYER TO SMITH: *February 11, 1868*

MY DEAR SIR, The proposition submitted in your letter of Jan. 31st to wit, to transfer certain branches of study from Programme A to that of Programme B is accepted with a slight change in form only but none in substance. I accept it the more readily for having all along had the same idea in mind, intending in due time to submit it for your consideration, and I thank you for anticipating me. Supposing the requisites for admission to remain as heretofore fixed, the pupils in the school would as a necessary consequence, be very few during the first years, leaving the Professor little to do unless extra work were cut out for him, and what better work could he

have, than to give instruction to a class of candidates in the more difficult portions of Programme A, enough to make out an annual course: This, if I am not mistaken, is identical with your proposition, *substantially* differing only in not requiring any change in the requisites for admission: This arrangement to be either temporary, continuing only, until the number of regular students shall reach a certain figure, or during such time as should be fixed by the Board of Overseers, for the time being, or if the Board thinks best, the arrangement to continue for an indefinite time, or even to be made a permanent feature of the establishment, in case the tuition fees paid by the candidate class, together with an additional sum if necessary, from other sources shall be sufficient to pay the Salary, for at least one assistant Professor, whose duty it shall be to teach the class.

Now as to the difficulties suggested in your letter. You think that "it would be somewhat difficult to arrange the College Course, so as to give candidates opportunity to master" my Programme, which Professor Quimby says, "will require some six months more of study, particularly in Mathematics, than is now required in our Colleges generally."

This must be so of course, since you and he so think who know best. Yet pardon me for saying, that I am unable to understand why it should be difficult to so arrange a special course, as would enable college candidates to master the Programme, whether it should require for that six months, or double that time. As to how the arrangement might be best made, as to which of the studies of the curriculum should be excluded, wholly or in part, and at what stage of the College Course it should be entered upon, whether at the beginning of the second year, or later, I will not presume to express an opinion.

Should Dartmouth make trial of such a course, and it proves to be successful, other Colleges might sooner or later follow the example, if not so much the worse for them, and so much the better for Dartmouth.

I can scarcely persuade myself, that if any bright and diligent student at Dartmouth, or at any other College, who is desirous of entering the school, is not prepared to enter it on graduation, it will not be the fault of the College, instead of that of the Programme.

Professor Quimby doubts "whether most College Professors

could pass an examination upon the Programme." There is good reason for the doubt, beyond question, although we know it will not apply to the Professors at Dartmouth; And it may be hoped, that it will not long apply to the Professors in most other Colleges, if the Mathematical and Physical sciences shall continue to advance as rapidly as they have done in the past; A demand for Professors capable of teaching the higher branches, whether in or without the Colleges, will be sure I think to bring speedily the necessary supply.

Please talk over these matters again with the Professors, and give me the conclusions to which you may arrive.

¶ THAYER TO SMITH: *February 14, 1868*

MY DEAR SIR, Of the \$40,000 which I engaged to give for founding the School of Civil Engineering, I have paid \$30,000 as follows. By ten Maine bonds which, if sold now will bring not less than par deducting broker's commission, amounting to \$10,000; interest on same from Feb. 15th to March 1st, \$12.50; five Vermont bonds, \$5000, interest on same from Dec. 1st to March 1st, \$75.00: four Rhode Island bonds, \$4000; two New Hampshire bonds, \$2000; cash paid August 3^d 1867, \$3000; interest on same \$105.00; check on bank, \$6000.

In case of my decease before my unpaid note becomes due, it is possible that there may be difficulty or delay in procuring payment from my executors. In view of this I propose to pay the note, as soon as I am able to make a sale of bonds sufficient for that purpose, on condition that the Treasurer of the College shall invest the money so as to credit me with the interest thereon at six per cent, to March 1st 1869, when the note falls due.

Please consult with the Treasurer and inform me whether my proposition is acceptable.

¶ SMITH TO THAYER: *February 22, 1868*

MY DEAR SIR, Yours of the 14th, expressing your desire to pay your note due March 1, 1869, "on condition that the Treasurer of the

College shall invest the money so as to credit" you "with the interest thereon, at 6 per cent," to the abovenamed date, is before me. I have conferred with the Treasurer, & am prepared to say, that he will be most happy to comply with your wishes. We both appreciate, in the fullest manner, your benevolent forecast.

I have also consulted Professor Quimby in respect to the Programmes. We both accord with the view you take. Indeed, we have always accorded with your aim at a high standard. When I spoke of *a difficulty*, I did not mean that it was insuperable. I thought a temporary arrangement, like that I suggested, might not hinder but possibly help something higher. But I like your plan. The Professor can doubtless teach, as you propose; & so the programmes be held intact. In our Scientific Department, where Latin & Greek are omitted, & mathematical study is carried farther than in the Academical Department—(the omission of the Classics giving time for it)—there will, I think, be no difficulty. We have, simply, in the case of Classical students, to have additional study of Mathematics in the Senior Year.

I have, as yet, with all my inquiries, reached no satisfactory conclusion as to a candidate for the Professorship. One name has been mentioned, that could probably be secured; but I have, at present, doubts on some points of qualification. I had a letter from Prof. Mahan, the other day, in which he said he could think of no one among the West Point Graduates, & suggested our looking,—as I have been doing,—in other quarters. Has any name occurred to you? [. . .]

✂ SMITH TO THAYER: *June 20, 1868*

MY DEAR GENERAL THAYER, As I promised in my recent note, I seize an early opportunity to write you further touching the "Thayer School." Business accumulated during my recent illness, so that I have been much pressed since my recovery. I was ordered away for a week or two by my physician, and was greatly benefitted by the rest; yet I deem it prudent to exercise a little care under the heats of summer & its special duties.

The great point now, is to secure a Professor. Professor Peck¹

has a very high opinion, I see from his letter, of Capt. Boynton.² And surely the Captain's military record (No. 1283, Vol II. Cul- lum's Register) is a very creditable one. I propose to write to Prof. Mahan about him, & I should like to know your views. Having friends in this region would make it more likely that he would accept an appointment. In some respects, a man of his maturity and ascertained character would be better *for a beginning*, than a young man. In view of Prof Peck's testimony, & all else that you know, would you wish, if Prof Mahan thinks well of it, that I should sound Capt. Boynton, or take measures to have him sounded? As early as may be convenient, please give me your views.

I have supposed that we should hardly get all our arrangements made in season to open the School next Fall. But I think we ought to plan for opening it the Fall of 1869, & that we should be prepared to give the name of a Professor in the Catalogue issued next Fall, & also other particulars in regard to the School. To open it in 1869, would exactly meet certain indications of interest in it which I see with pleasure. A number of our students who are to graduate next year, are thinking of entering it—some of them fine Scholars. If we can be prepared to make our announcements next autumn, I shall look for a Class in the Fall of 1869, quite large enough for a beginning. [. . .]

1. William G. Peck (U.S.M.A. 1844) was at this period Professor of Mathematics, Mechanics, and Astronomy at Columbia.

2. Edward C. Boynton (U.S.M.A. 1846), then serving as Adjutant to the Military Academy, was the author of a *History of West Point* published in 1863.

✂ THAYER TO SMITH: *June 26, 1868*

MY DEAR SIR, I am happy to learn that you have recovered from your recent illness, occasioned I suppose by the severe duties you imposed upon yourself; take care my dear Sir, not to bring on a relapse from the same cause.

I am expecting to receive soon a visit from Prof. Mahan, and shall of course consult him in relation to Capt. Boynton; he may be more free to express his opinions verbally, than in writing. From the fact that he has not proposed Capt. B. I infer either that he did

not deem him qualified, or had ascertained that he would not accept the place if offered to him.¹ Were I to form an opinion from the Captain's History of West Point, I should have serious doubts of his fitness, the Book I regard as a miserable failure.

1. Professor Mahan wrote to General Thayer on June thirtieth, and again on July ninth, urging the appointment of Boynton, whom he believed to be the best-qualified candidate then available.

In their conversations at South Brainerd on July fifteenth, Thayer authorized the Professor to inform Boynton that he

was being considered for the new Dartmouth post and to suggest that he might think of making a trip to Hanover and, if he were favorably inclined toward the prospect following such a visit, of conferring with the General himself as early as convenient.

✂ SMITH TO THAYER: *August 10, 1868*

MY DEAR GENERAL THAYER, Your favor, enclosing Prof. Mahan's letter, was duly received.¹ So, we must give up Capt. Boynton. Perhaps it is well—I am the more inclined to think so when I remember your doubts. [. . .]

Is it not best to take some young man who has the stuff in him, & send him to Europe for a year. Prof. Peck intimated that he could name such a man. The men more advanced in years are hard to get. If they are worth any thing, it has been found out, & they are fixed. A youngish man would have a pride in making at once the School & his own reputation. A year in Europe—as people judge, &, indeed, in a right judgment—would be a considerable compensation for some deficiency in years. The qualifications we want are, 1. A good moral tone, 2. Common Sense 3. Good original ability, 4. An interest in the proposed line of study, 5. Good attainments in it. 6. A disposition to increase them. 7 Organizing power, 8 Aptness to teach. 9. A gentlemanly bearing. If we can find a young man who has these qualifications in good degree, with a year abroad I think he would serve our purpose. Please think of this, & confer with Prof. Mahan about it.

We shall open our Agricultural Department this Fall.² I will send you soon a programme. In that we adapt ourselves to the wants of the State, & the limited Fund. But I think we shall organize a useful Department. I want to see the Thayer School launched, with its high standard & elevated course. [. . .]

1. Professor Mahan had written from Bar Harbor, Maine, on July twenty-ninth, reporting the receipt of a letter from Captain Boynton declining the proposal that had been raised with respect to the Thayer School opening.

2. The New Hampshire College of Agriculture and the Mechanic Arts was located in Hanover as a separate institution (but one closely associated and interconnected with Dartmouth) until 1893, when it was moved to Durham and there developed into the University of New Hampshire.

✂ THAYER TO SMITH: *August 13, 1868*

DEAR SIR, Your favor of Aug. 10th is before me; You cannot desire more ardently than I do the opening of the school next year, or as soon as the right man can be found.

If Prof. Peck can name such an one, invite him to do so by all means.

I agree with you that "it is best to take some *young* man who has the *stuff* in him"; When found you will then consider what is best to be done, in order that he may be fitted and prepared for work.

[. . .]

✂ SMITH TO THAYER: *September 12, 1868*

MY DEAR SIR, I lack words to express my sense of the continued thoughtfulness & generosity in relation to our new Department, evinced in your Communication of the 7th inst.¹ I am the more affected by the Communication, from the impression I have had, of late, that in order to command the best talent, & otherwise make the best provision for the "Thayer School," we might need even more than the income of \$40,000. But I see you anticipate all my thinking, forecasting better than I can the opening future.

I have been delayed a little in my consultation with Mr. Blaisdell, our Treasurer & legal adviser, in respect to your communication. I am now prepared to say, that he pronounces the Instrument of Gift which you have drawn up *just the thing*. You have only to sign it, & return it to me—it need not be sealed.² I will file it among the archives of the College, & it will, by its legal force, control the use of the additional \$10,000. I say \$10,000—for I believe, with you, the bonds will prove worth that. There is no need of any immediate

action of the Board of Trustees. I will give the order, as you direct, for the bonds; the Treasurer will take charge of them; & when the Trustees meet, the whole transaction will be reported, & duly noticed in their records. I return the Instrument of Gift herewith, that you may sign it & send it back to me.

I hoped to visit you before this time; but the pressure of matters here has prevented. We have had a great influx of students—over 100. About 80 in the Freshman Class; 5 or 6 in upper Classes; some 20 in the Scientific Department, & an opening Class of 8 young men—with more expected—in our new Agricultural Department. So I have been very busy. [. . .]

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| 1. The General's letter of September seventh had forwarded to the President the draft of an instrument of gift covering a supplementary donation of \$10,000 | for the Thayer School. |
| | 2. The formal document was sent by General Thayer a week later, on September nineteenth. |

✂ SMITH TO THAYER: *November 4, 1868*

MY DEAR SIR, Providence seems to be favoring us in regard to the Professorship in the Thayer School. Col. Parsons called on me, a few days since, with your note of introduction, & I had an extended conference with him.¹ I was much pleased with him—not only in respect to his personal qualities, but in regard, also, to his views of the work suggested to him. He looks at it not in a mercenary way, but in the true professional spirit. His thought is not of money-making, but of high achievement in the field to be occupied—of building up a useful and noble Institution. Only that spirit will meet the case.

Professors Mahan & Church, I see, speak in commendatory terms of Col. Parsons.² I do not know Prof Church, but Professor Mahan's opinion has great weight with me. If you concur in it, it seems to me the way is clear. To you it belongs, of course, to settle the matter.

Col. Parsons ought to know soon our decision, that he may shape his studies accordingly. He hinted that a conditional appointment would suffice; or—(as I suppose he meant)—an assurance that he would be appointed if his acquirements should be found sufficient. He modestly intimated, at the same time, his confidence that he

would not be found wanting. There is a little difficulty, however, about a *conditional* appointment. There is much inquiry about the Thayer School; & we should be obliged either to keep the selection secret, or cast a doubt upon it by saying that it was only tentative. If we can be pretty sure that he has the stuff in him, would it not be better to say that he is appointed, & is to enter into our service at the close of this year's engagement at West Point? Please think of this.

If we appoint him, I suppose you would wish to have him go to Europe in the autumn. That would delay the opening of the School another year—a thing on some accounts undesirable. Yet we may not be able to do better. In the Catalogue for 1868–9—which I will send you soon—it is stated that we expect to open the school next Autumn.

Please give me your views & wishes. I will do whatever you desire & direct. I should have written you a few days sooner but for indisposition. But for that, indeed—with other special hindrances—I should have seen you before now. [. . .]

1. Charles C. Parsons (U.S.M.A. 1861) was Principal Assistant Professor of Geography, History, and Ethics at West Point. Consideration of him for the Thayer School post was first suggested by Professor Mahan in a letter to Thayer dated October twelfth. On October twenty-first Mahan wrote again, saying that he had talked with the Colonel and found him willing to accept the position at Dartmouth.

2. On October thirtieth Professor Mahan reported that, despite objections raised by General Thayer as to Parsons'

qualifications, he believed him to be worthy of consideration. He said, further, that he had advised the Colonel that if, after pursuing a course of special preparations, he found himself not equal to the work in view he would owe it to Thayer and to himself to withdraw.

Albert E. Church (U.S.M.A. 1828) was Professor of Mathematics at the Academy. Professor Mahan had mentioned in writing General Thayer on both October twenty-first and thirtieth that Church's views substantiated his own with respect to the qualifications of Parsons.

✂ THAYER TO SMITH: *February 23, 1869*

MY DEAR SIR, I am anxious to learn as soon as may be, through your mediation, whether Senator Patterson before leaving Washington will take the step recommended by Prof. Mahan.¹

If the desired understanding with the Secretary of War shall be effected, then, and in that case only, Col. Parsons will, at the proper time, make a formal application for a furlough, for the term of one

year, to take effect from the first of next September with permission to be absent from the United States during the same time; the special object of the furlough, being, to enable him to qualify himself and prepare for taking charge of the School of Civil Engineering at Dartmouth, on the expiration of the furlough if he then so elect; but whether he returns to duty in the army, or resigns to accept the situation at Dartmouth, the knowledge he will have acquired while abroad, would, it is hoped, be available to the public service either directly, or through his pupils for an indefinite period.

The success of the application would be facilitated probably, if the Secretary were enabled to understand what the School at Dartmouth was designed to be, and to do; that the School, if the design be carried out, will be of a higher grade, and will impart higher and more complete instruction in Civil Engineering, than can be given at any existing Institution of the same kind in the United States, and that every effort will be made, to raise it to the level of the School of the Ponts et Chaussées at Paris, after which our school will be modeled, thereby supplying, as is believed, a great national want.

The boon asked for should not, therefore, be regarded as a personal favor, nor even for the special benefit of Dartmouth, but rather for the good of the nation, generally, *pro bono publico*.

1. On February nineteenth Professor Mahan had written General Thayer, "With respect to the leave of absence, for a year, that you propose Col. Parsons should obtain, you are doubtless aware, that, under existing laws, such leaves carry with them a stoppage of one half of the pay proper during their continuance. I should be in favor of leaving the matter entirely in the hands of Senator Patterson, who, when Gen. Grant comes in, might go directly to him in person, and get his sanction for the application, which could then go through the regular

channel, the proper papers being left in his hands for transmission."

James W. Patterson (Dartmouth 1848) had been a member of the Dartmouth faculty from 1852 to 1865. He served two terms in the U. S. House of Representatives before entering the Senate in 1867. Mahan's suggestion was that his aid and influence be brought to bear in the College's interests, following the change of federal administrations which was to take place less than two weeks hence when Ulysses S. Grant would succeed Andrew Johnson as President.

✂ THAYER TO SMITH: *March 26, 1869*

MY DEAR SIR, Professor Mahan's letter herewith enclosed shews that he has not given up in despair.¹ I have endeavored to remove

from his mind the idea that the "salary" can be a "great difficulty"; I do not think that the right man will ever be found among the class who are looking about for a high salary, and making *that* the sole, or primary consideration; a person of that class would not be likely to remain long if the place were given to him.

Turtle's record at West Point was a good one, standing second in Mathematics, Natural Philosophy and Chemistry, and fair in the other branches; and if you can be satisfied through Prof. Mahan that he has the requisite general culture, good morals, and all other necessary, or desirable qualifications, then, in that case, let the situation be tendered to him, *if you please*.

1. In a letter to General Thayer dated March eighth Mahan had reported, "Col. Parsons called to see me on Saturday to say that, for family reasons, he was obliged to give up his prospects of taking the chair of your endowment. As he said he should write and make the same announcement to you by today's mail, I need not repeat the substance of conversation with me[. . .]."

Two weeks later, however, on March twenty-second, the Professor wrote again, this time to propose the name of Thomas

Turtle (U.S.M.A. 1867), who in the period 1867-1870 was assigned to service with an Engineer battalion at Willet's Point, New York.

The last paragraph of Mahan's letter observed, with respect to finding good candidates within the Army, "The one great difficulty is the salary. The expense of living has become so great, that men are not willing to relinquish their army commissions for the prospect held out to them in this case."

✂ THAYER TO SMITH: *May 3, 1869*

MY DEAR SIR, If you approve I will have Lt. Davis invited to visit Hanover with a letter of introduction to you from Prof. Mahan.¹

On his way back to West Point, he would stop to give me an interview with him. Should you think favorably of him, I see no reason why the situation should not be tendered to him on *certain conditions*. [. . .]

1. Lieutenant Turtle promptly removed himself from consideration for the professorship. Mahan advised General Thayer on April tenth that Turtle had come to see him and, "though feeling highly the compliment that would have been paid him, he stated that his predilections were so strong in favor of his profession, that he should not feel con-

tented in any other sphere."

On April thirtieth the Professor wrote once more, in a letter which began, "Colonel Parsons called on me on Wednesday, to say that Lieut. Charles E. L. B. Davis [U.S.M.A. 1866], Corps of Engineers, was desirous of becoming an applicant for the Thayer Professorship at Dartmouth[. . .]."

✂ SMITH TO THAYER: *May 5, 1869*

MY DEAR SIR, I was right glad to get your letter. I had been quite troubled about the Thayer School—we had been so baffled in our effort to secure a Professor. I had even written to Col. Parsons, asking him if there were no possibility of the obstacles in his way being removed. Your letter sheds new light on the matter. I shall be happy to see Lieut. Davis. His record in the "Register," is good. He was the 3d in his Class, has been a graduate about 3 years, and has had improving employment since. His College training would be in his favor. He may be just the man for us. The point of "vivacity," of which Prof. Mahan speaks, would be of less moment in the Thayer School, than in Institutions for younger & less mature students, who would need more of incitement.

If Lt. Davis concludes to visit Hanover, I would be obliged to Prof. Mahan *to inform me beforehand of his purpose*, that I may let him know when I shall be at home. I say this because it is likely I may be absent for a week within a short time, & I Should be sorry to have him come when I am away. [. . .]

✂ SMITH TO THAYER: *May 20, 1869*

MY DEAR GENERAL, I am sorry to find that we have failed again.¹ I fear we shall not succeed in our effort to secure a West Point man. Yet I will mention one other name for your consideration—that of Major William J. L. Nicodemus.² His record is on page 477 of Cul-lum's Register.

He wrote me some time since, expressing a desire to be detailed to act as Professor of Military Science at Dartmouth College, under the Act of 1866. We have not decided to ask for such an appointment—so I have delayed my reply. It has occurred to me, however, that possibly he might be the man for the Thayer School.

His rank in his Class was not high—the 23d. Yet he has seen a good deal of service, & seems to have acquitted himself well. He does not seem to have been engaged in teaching. Perhaps you will think it best to send this note to Prof. Mahan, that you may get his judgment of him. He doubtless knows him well. So, also, Prof. Church. [. . .]

1. General Thayer had doubtless forwarded to President Smith a note from Professor Mahan, sent on May seventh, announcing that, "Immediately on the receipt of your letter of May 3^d, I sent for Lieut. Davis and placed it in his hands. He informed me that his own mind was not fully made up to leave the service; that he had written to his father to ask his views. [. . .] Lieut. Davis called again last evening, and informed me that he had seen his father on the same day [. . .], and that after a consideration of the matter between them, he had come to the conclusion not to leave the service."

2. Major Nicodemus (West Point 1858) was Professor of Military Science

at the Western University of Pennsylvania (subsequently renamed the University of Pittsburgh).

Thayer responded to Smith on May twenty-fifth, expressing his willingness to consider the Major and saying he had turned once again to Professor Mahan for counsel. Mahan's judgment was immediately conveyed, in a letter also dated the twentieth-fifth:

"The Gentleman mentioned [. . .] I should say, from his record here, is out of the question. [. . .]

"I share in President Smith's anxiety to have the chair filled, but better wait for the right man than to saddle it with an incompetent one. [. . .]"

✠ SMITH TO THAYER: *July 6, 1869*

MY DEAR GENERAL, Perhaps you have learned that Judge Fletcher¹ has left us a residuary bequest, which, as the Executor judges, will amount to \$100,000. The income of it is to be used at the discretion of the Trustees.

For this I feel that we are greatly indebted to you—to your example, if not to your more direct influence. The will is dated Sept. 28, 1867, some time after the announcement of your munificent gift. That gift had doubtless its influence with the Judge. "So shines a good deed in a naughty world." Many thanks to you for this new relation of your liberality.

Thanks, also, for your purpose, mentioned to me by Professor Quimby, of establishing a fund for *Mathematical Prizes*.² It will do great good, & will have a happy bearing on the Thayer School.

I am overwhelmed with engagements; & have time for but one thing more. *Is it not possible for you to be here at the Centennial?* I know not that I ought to ask the question—but I cannot help it; so many hearts would rejoice in your presence.³ [. . .]

1. Richard Fletcher (Dartmouth 1806), lawyer, Member of Congress 1837–1839, judge of the Supreme Court of Massachusetts 1848–1853, and Trustee of the College 1848–1857.

2. In July, 1869, General Thayer presented one thousand dollars "to constitute a perpetual prize fund for superior proficiency in the higher branches of Mathematics." The original terms of the

gift were slightly altered in 1871.

3. Exercises celebrating the centennial of the College's founding were held during Commencement week of 1869, on Wednesday, July twenty-first, with Salmon P. Chase (Dartmouth 1826), then the Chief Justice of the United States, participating in the programme as Presi-

dent of the Alumni Association.

General Thayer did not attend. On July twelfth he had responded to Smith, saying, "[...] I can only answer *non possum*, inexorable old age forbids: nothing less imperative would prevent me from testifying by my presence, the warm affection I feel for our dear Alma Mater."

🍷 THAYER TO SMITH: *August 21, 1869*

MY DEAR SIR, I have had a second interview with Prof. Cleveland resulting as follows¹ he is to apply himself zealously to the study of French until next spring & if he can then be assured of the situation at Dartmouth he would resign the situation he now fills after reasonable notice to the Authorities of the Cornell University to enable them to supply his place. his salary to commence at Dartmouth when it ceases at the Cornell He understands that he cant be appointed unless you are satisfied that he is the right man & shall recommend him Meanwhile we are left free to accept any other candidate whom we might prefer He is evidently very desirous of the place and in a letter to my relative says that he would prefer it with a salary of 2500 to any professorship elsewhere with a salary of \$3500. Get all the information about him you can [...]

P S. Mr Blaisdell favored me with a visit yesterday. I was most favorably impressed by him. Long may the College have him as its treasurer & financial agent²

1. During the summer of 1869 yet another candidate, William C. Cleveland (Lawrence Scientific School 1862), Professor of Civil Engineering at Cornell, came under consideration for the Thayer professorship.

2. After forty years as Dartmouth's Treasurer, Daniel Blaisdell died in the summer of 1875, whereupon an examina-

tion of his accounts, which were found to be in a state of complete confusion, revealed that substantial defalcation had taken place. Protracted scrutiny of the college's books ultimately yielded evidence of shortages conservatively estimated to total roughly forty thousand dollars.

🍷 SMITH TO THAYER: *September 24, 1869*

MY DEAR SIR, Your favor of the 22d reached me yesterday, with two Virginia Bonds enclosed, one of \$3000, the other of \$600. By

express, also, came, from the Treasurer of the State of Connecticut, by order of Messrs. Tho's. J. Lee and Hill, ten \$500 Connecticut Registered Bonds, amounting to \$5000—the combined remittance being \$8,600. This, with your proposed supplement of \$1400, will make your whole gift for the founding of the Thayer School, \$60,000.¹ I need not say—indeed, I could hardly say adequately—how fully and gratefully I appreciate your munificence.

I return, herewith, your draft of an Instrument of Gift. I have no corrections or additions to suggest. I do not see how it could be improved. When it is copied & signed, I will deposit it in the appropriate place. [. . .]

You will recollect that I spoke to you of a misapprehension which has been somewhat current, in regard to the meaning of the term "Architecture" in the designation of the Thayer School. It is often understood as meaning Architecture in a broad sense, or as a fine art. This, I know, is not your meaning, but only Architecture as connected with Engineering. The question has occurred to me whether it would not be well to make a slight change in the name of the School. How would the *Thayer School of Civil Engineering* answer? Would not that be sufficiently comprehensive? I inquire now, as we shall soon issue our Catalogue for 1869–70. I submit the matter to your judgment & pleasure. Please say, in a word, what you would prefer. It is desirable to avoid ambiguities, & every thing inappropriate. The change could easily be made in the Catalogue; and then, if it should be thought necessary, a Codicil to your Instrument of Gift could be made. I doubt, however, whether that would be needful.

1. The President's acknowledgment relates to a second supplementary gift totalling \$10,000 which was made by General Thayer at this period for the further enlargement of the Thayer School fund. The original endowment, present-

ed in 1867, had amounted to \$40,000, while the additional donations in September, 1868, and September, 1869, were each valued at \$10,000, bringing the total sum in 1869 to \$60,000.

✂ THAYER TO SMITH: *September 25, 1869*

MY DEAR SIR, The Instrument of Gift sent herewith is in the hand writing of Lieut. Frederic Mahan of the Corps of Engineers who

passed an hour with me to day. The object of his visit you will understand from his fathers letter which will go in a separate envelope with two other letters.¹ Please return all three Wishing to send this by the mail now closing I will only add that I adopt your view as to the title of the school. So let it be called the "Thayer School of Civil Engineering" [. . .]

1. In one of the letters referred to, that dated September 24, 1869, Professor Mahan raises the possibility of his son's being considered for the Thayer School post. Lt. Frederick A. Mahan (U.S.M.A. 1867) was then serving as

Assistant Engineer of the Survey of the West Shore Railroad through West Point and about to be assigned (as was done on October fifth) to the Academy faculty as Assistant Professor of Engineering.

¶ THAYER TO SMITH: *September 27, 1869*

MY DEAR SIR, I do not see that the opening of the School would be advanced at all, or that any thing would be gained by appointing a professor before next year, say next March in as much as the appointee could not be admitted to receive instruction at the "ecole des Ponts et Chausseés before the Term commencing 1st Nov 1870; while, on the other hand, by keeping the door open 'till then, there may be other candidates &, of course, a wider field for selection; If the appointment were made now, there could be no selection as Cleveland cannot enter the lists before next Spring. You & I, & Mahan also, I am sure, desire to have the Chair filled by [the] fittest man we can get, & he the "right man" "coute qui coute" in time or money; speaking for myself I would not accept any other even if none such could be found during my lifetime; It may turn out that on consulting together & weighing the qualifications of the different candidates young Mahan may be judged to be the best, & also, the "right man"; if so, I shall rejoice exceedingly, but he & his father know that he cannot have the place until after a successful competition & in consideration of superior merit & entire fitness. Lieut Frederic Mahan of the Corps of Eng^{rs} is about 22 years of age graduated in 1867 in a class of 63 he being the 11th on the merit roll. Had he not been under the average age & the son of a professor of the Academy he would, probably, have attained a higher rank. You know that a commission in the Corps of Engineers is given only to

those who stand at or near the head of a Class & is regarded as a prize for superior scholarship & merit. As to his personal qualities, & outward aspect you will soon be able to judge for yourself as he will soon present himself to you with a letter from his father. I saw him for the first time last Saturday when he spent only an hour with me. Judging from that short interview & the evidences of merit to which I have alluded I would deem him capable of qualifying himself to fill the chair with credit to himself & the College.

✂ SMITH TO THAYER: *December 27, 1869*

MY DEAR GEN. THAYER, I have been so unwell and so busy in getting ready to go away that I have been unable to accomplish all the Correspondence I intended,¹ I have however written to Senator Patterson, informing him of your intended application for leave of absence to Lieut. Mahan. I have asked him when you apprise him of your having made the application to second it with his influence, I doubt not he will do it. Please let him know when the application is made. I fear I shall not be able to write Gen. Sherman,² and Professor Mahan. You however can do this, just as effectually My worn brain, calls so imperatively for easement that I must hasten away

I have sent a copy of your instrument of gift to Senator Patterson.

1. On November nineteenth Thayer had written Smith expressing concern over references to the latter's health, which he had seen in a Boston newspaper. To this the President had responded a week later, on the twenty-sixth, saying in part:

"It is true that my health has been impaired by six years of almost unintermitted care & labor—especially by the labors of the last year. My Physician has ordered me away for a few months, and

our Trustees have earnestly seconded the injunction. I think of going South within a month, & remaining till about the 1st of April. I may go to one of the West India Islands."

2. Famous for his achievements in the Civil War, William Tecumseh Sherman had been promoted to the rank of full general early in 1869, commanding the Armies of the United States. Dartmouth had bestowed its LL.D. upon him in 1866.

III

*" . . . if you are satisfied, I think it would
be well to appoint him."*



ROBERT FLETCHER
From the West Point Class Book of 1870
U. S. Military Academy Archives



DURING the early part of 1870, while President Smith was out of the country, the question of Lieut. Frederick Mahan's candidacy and preparation, and the securing for him of a leave of absence from active duty, continued to be under consideration. On June twentieth, however, Professor Mahan wrote from West Point to General Thayer the following:

My Dear Friend.

Fred has come to the conclusion to give up his prospects of going to Dartmouth; a conclusion at which he has deliberately arrived after a very careful examination of his fitness for the place. Although I have very carefully watched his course here since he entered upon his present duties, I have refrained from saying a single word to him which might influence him either one way or the other; but I have, for some time, been doubtful, in looking upon the incessant mental work that would devolve upon him, whether it would be wise for one, who has so much physical energy to work off, who is so fond of society and has lived so much in it as Fred has, to enter upon a career which would bring about so great a change as the one in question necessarily would. In these views, his brother Alfred, who has lately reached home, and Colonel Michie, the only person else to whom I have mentioned the subject, fully concur with me.

As due to your kindness Fred will take this on and make his own statements.

So soon as Fred made known his determination to me, which was on Sunday (yesterday), I sent at once for Lieut Payson, of whom you may remember I had thought, and simply put the question to him, whether a professorship of civil engineering in one of our civil colleges was one that he would feel disposed to accept. He replied very promptly and decidedly, that he could not for a moment entertain a proposition of the kind. I then sent for Lieut Robert Fletcher, a member of his class, who has been on duty here during the last year, under Professor Church, and put the same question to him. Fletcher replied, that not only would such a career suit him, but that, in coming on duty here, he had looked forward to qualifying himself for some such place. To this I only replied that, receiving, as I do quite frequently, letters asking me to recommend

graduates suitable for such places, it had occurred to me to learn his wishes on the subject.

Lieut. Fletcher bears the best of characters here on all points. I placed him, as you will see by his record, *fourth in Engineering*, and regarded him as one of the best informed, industrious and reliable men in his class, which was quite a superior one. He is a pious and pure man, one who would harmonize, on all points, with the society at Dartmouth, and spends his time here mostly in close study, going but very little into the society of the place. He is a graduate of the New York Free College, and was selected from there to fill a vacancy here that occurred in his Congressional District.

In a short conversation respecting him with Prof. Church to day, he spoke of him in the highest terms as a very promising and thoroughly reliable man.

After an examination of his record, which you have in the Cadet Registers of 1868 and the three preceding years, [if] he should strike you favorably enough to desire to see him I will give him a letter of introduction to you. This you know I would not do unless his acquirements, in my opinion, would fully fit him for the place. He is a pleasing, gentlemanly man, and besides his scientific attainments has received a fair classical education.

Very Faithfully
D: H: Mahan

Born at New York City on August 23, 1847, Robert Fletcher had attended New York Free Academy (which later became the College of the City of New York) for three years before entering the Military Academy where he was graduated in 1868, standing twelfth in a class of fifty-four. Upon receiving his commission, Lieutenant Fletcher served on frontier duty as an artillery officer at Brownsville, Texas, and had been assigned to garrison at Fort Trumbull, Connecticut, prior to being made Assistant Professor of Mathematics at West Point in August, 1869.

South Braintree
June 24th 1870

Rev^d Asa D. Smith DD &c.

My very dear sir,

You will, probably, be surprised, as I was, on reading the letters herewith enclosed. They will speak for themselves Young Mahan, & his father too, must now see that I did well in not gratifying them with a [. . .] hasty appointment

Lieut Fletcher will go to see you sometime soon, probably next week, or not later than the week following unless you inform me by return of mail that he might not find you at home or he will come at any other time you may indicate. Sound him well & then tell me whether you think it best to appoint him. If you say yes, so it shall be. He has a good record & there can be no question as to his moral habits & character

You would not doubt, even if I did not say, how sincerely I rejoiced & thanked God when I learned that your health had been perfectly restored May I not hope for the great pleasure of a visit from you soon after Commencement or the first time you visit Boston thereafter? I would meet you in the city if you cannot conveniently come here. A consultation is desirable

Most respectfully
& ever yours
S. Thayer

✂ SMITH TO THAYER: *June 25, 1870*

MY DEAR & VENERATED FRIEND, Your favor by to-day's mail was very welcome. I returned from the West Indies just before the opening of the Summer term. My health had very much improved; but I was earnestly cautioned by my physician to beware of overwork the present busy term—in some respects the busiest of the year. [. . .]

I had learned that Mr. Mahan had given up the idea of coming here, & was feeling a little anxious about the matter. Not that I am greatly disappointed. I have, in general, a very favorable opinion of him. But, on the whole, I incline to think the judgment of his father & himself wise.

I am glad to hear of Lieut Fletcher, & shall be happy to see him. I shall be here, for aught I know, *all next week*; but the week after, that is, *the week beginning July 3d*, I shall be absent Monday, Tuesday & Wednesday—possibly, till 2 o'clock, P.M. on Thursday. Any time *next week*, or any time *after 2 o'clock on Thursday of the week after*, I shall be gratified to have a conference with Lieutenant

Fletcher. I write promptly, though in haste, that he may not come in my absence.

✂ FLETCHER TO THAYER

124 West 54th St.
New York July 4th/70

Gen. Sylvanus Thayer, U.S.A.,

Dear Sir:—

Prof. Mahan informs me that he has proposed my name to you in connection with a certain matter upon which I conferred with him last week. Should nothing prevent, I think of calling upon President Smith of Dartmouth College on Friday morning the 8th inst., I will do myself the honor to call upon you, if convenient to yourself, early on the Saturday following. I have the honor to be, General,

Very Respectfully,
Your ob'd't. servant,
Robert Fletcher,
2^d Lieut., 1st Art'y.

✂ SMITH TO THAYER: *July 7, 1870*

MY DEAR GENERAL THAYER, Lieut Fletcher has called on me, & he goes to-day to see you.¹ I have also received a letter, highly commendatory of him, from Prof. Mahan.

He is young—but if that be a fault, time will surely correct it. His presence is not very imposing—but as good Dr. Watts said, “The mind’s the standard of the man.” I think there will be no intellectual deficiency. His manners, besides, though simple & unassuming, are easy & gentlemanly. His moral tone and status are excellent, and his enthusiastic interest in the department of Engineering is greatly in his favor. A man, to do well, must *magnify his office*. It weighs a little with me that he is of *a good stock*. Judge Richard Fletcher was his great uncle. As to his capacity & success as a teacher, the commendation of Prof. Church is strong—he represents him as “giving excellent promise” in that line.

On the whole, if you are satisfied, I think it would be well to appoint him. A young man of such stock, with such Classical & Professional advantages, of such moral tone, such reputation as a teacher, & such interest in the particular department proposed to him, can hardly fail, I think, of success.

I suppose, if he is appointed, you will wish to have him give himself at once to any further preparation for his position which he may need, & in the autumn go to Europe. Meanwhile, we can make arrangements for a Preparatory Course, the next College Year. I will confer with you about it when I see you, which, I trust, will be soon after Commencement.

1. Lieutenant Fletcher's private journal, preserved within the College Archives, contains the following entries for his July visit to Hanover:

"*Thursday 7th* Left the city at 8.00 A.M. by the New Haven R.R. for Dartmouth College to call on Presd^t Smith. Had a pleasant journey up the Conn. River. Arrived at White River Junction, Vt., about 8.30 P.M. Put up at the 'Junction House.'

"*Friday 8th* Rainy morning; rain followed me up the river yesterday.—Rode up to Norwich (4 miles from the Junction) on the 6.30 A.M. freight train. Walked over to Hanover N. H. (½ mile

from Norwich). Had an interview, from 8.30 to 9.30 A.M., with Pres^t Smith. He informed me more fully in regard to the position there offered me.—It is a professorship of civil engineering and architecture, endowed by Gen. Thayer. The President took me around the buildings of the college. Called on Prof. Young at his house. About 11½ A.M. walked back to Norwich on the Vt. side of the Conn and took the 11.50 train. Went on to Boston from White Riv. Junction, via Concord, Manchester, Nashua and Lowell. Had a pleasant trip. Arrived in Boston about 6.20 P.M. and put up at the Parker House.[. . .]"

✂ THAYER TO FLETCHER: *July 13, 1870*

DEAR SIR, Profes^r Mahan & myself after consulting together yesterday, came to the conclusion that your application for a furlough should be for one year from the 1st of Sept next instead of six months. The application will, I suppose go through the hands of the Superintendent & the Inspector of the Academy. Where it will go next & to whom it should be addressed, whether it be the Adjutant General or General Sherman or Secretary of War I am unable to say, but you can learn by enquiry at Head Quarters New York—Prof. Mahan will write in support of the application to Gen^l Schriver¹ & to the Sec^y of War & I may perhaps write to Gen^l

Townsend.² You can say in your letter, if you think best that the place of Professor in the school of Civil Engineering established in connection with Dartmouth College has been tendered to you & that you ask the furlough to enable to make a trial of the situation before deciding to accept it & to resign your commission State this in your own & better language than I can here dictate. The application should be forwarded about the 1st of next month, but send me a copy before that [. . .] time & as soon as you can conveniently write it. Prof Mahan mentioned several cases of furloughs for one year granted recently to officers to enable them to perform the duties of professors in colleges & feels confident that the furlough you ask for will be readily granted [. . .]

1. Edmund Schriver (U.S.M.A. 1833), Brevet Major-General, was at this period assigned to special duty in the office of the Secretary of War, William W. Belknap, serving as Inspector of the Military

Academy during the years 1866-1871.

2. Edward D. Townsend (U.S.M.A. 1837) was Adjutant General of the United States 1869-1880.

✂ THAYER TO SMITH: *July 14, 1870*

MY DEAR PRESIDENT Your letter by Lieut Fletcher expressing your favorable impressions of him and recommending his appointment gave me much pleasure¹ We must take him for better or for worse, at least so as to give him a fair trial; right glad shall I be if he prove to be the right man. I cannot advise him to give up his commission until he shall have had such trial & to that end he will make application for a Leave of absence for one year commencing on the first of next September. Let us give it all the help we can. Professor Mahan who was with me last Tuesday will write to Gen¹ Schriver the Inspector of the Academy through whom the application will be forwarded and also to Gen¹ Belknap Secretary of War. I propose to write to Adjutant General Townsend & what I deem most important of all, is a letter from you to General Sherman & another to Senator Paterson to get him to exert whatever influence he may have with the President or Secretary of War in favor of the object. If the Leave of absence is obtain^d Lieut Fletcher will be prepared to enter upon duty at Hanover by the first of September. This is all I

need say in this connection until your promised visit a few days hence to which I look forward with the greatest pleasure. [. . .]

1. Lieutenant Fletcher's journal entry for his July ninth visit to General Thayer reads:

"*Saturday 9th* Pleasant but warm. Left Boston at 8 A.M. for So. Braintree, where I arrived after a short ride. Called on Gen. Thayer about 9½ A.M. Had a long and very interesting interview with him.— He is a man of the past generation, being in his 86th year. He gave me a short sketch of his life. Son of a Massachusetts farmer and wheelwright. Learned the rudiments of knowledge in a district school in N. H. in the winters. Tended a store for an uncle in Washington N. H. Went to Dartmouth college where he maintained himself frequently by teaching. During his last winter there taught at the Academy in Windsor Vt. Graduating at Dartmouth he went to West Point. He had rec'd the appointment some time before this but was allowed to continue at the college. At West Point Mil. Academy one year, and graduated in 1808. Went to Europe in 1815 &c—His history from that time is contained in 'Cullum's Register.' He recalled many interesting reminiscences of the past. Talked much about the Military Academy at West Point and strongly condemned many features of its management at present. He explained clearly that business upon which I came to see him.—He proposes to start and

found at Dartmouth College a school of Civil Engineering and Architecture, for which he has made an endowment of over \$60,000. This he wishes me to take charge of until it shall appear whether or not I am competent to go on with it and assume permanent control. I am to apply for a leave of absence for six months from Sept. 1st and go to Dartmouth and commence a course of preparatory studies to the curriculum of the course proper. In other words to teach the higher mathematics there until next spring, while studying up my engineering myself. Next summer it is proposed that I go to Paris and study at the School of Ponts et Chaussées for one term. Then by the summer of 1872 it is presumed I shall be able to enter upon the duties of this Thayer professorship with qualifications to teach it. He went at length into his plans and hopes and all the preparations and provisions he has made for the success of the undertaking. I accepted his offer conditionally on the approbation of all concerned.— Had much talk on educational systems in general and the benefits of an 'elective-study' system for our colleges in particular. He took me all over his place which is a very pretty and well-kept farm.

Left the General at 4.30 P.M. Took the 4.50 train for Newport[. . .]."

❧ THAYER TO FLETCHER: *July 19, 1870*

DEAR SIR, I have your [s] of yesterday's date enclosing a copy of your proposed application for a leave of absence. The letter is in perfect form What you have done & propose to do in the matter meets my entire approbation. When you rece[i]ve an answer from Prof Mahan, drop me a line informing me to whom he has written in support of your application

✂ FLETCHER TO THAYER: *July 27, 1870*

VERY DEAR SIR:— Since my last to you, enclosing the remainder of the pamphlet and my continuation of the synopsis through the analytical geometry,¹ I have written to Gen. Pitcher informing him that I should forward, in a few days, my application for a leave of absence &c, stating to him briefly the circumstances. To-day I have received a reply through Maj. Boynton, the Adjutant, stating that the General cannot approve my application until he has consulted Prof. Church, but thinks the matter can be easily adjusted after the latter's return. Now, as the Prof. will not be back, according to Mrs. Church, until about the third week in August, this will cause much delay. I might even be obliged to return to West Point, Sept. 1st, and take my place for a week or two, until my successor shall be appointed. If the matter is put off until the last of next month, I think it hardly possible to arrange it, and secure my leave of absence, previous to Sept. 1st. I do not know whether or not you are particular that I should commence at Dartmouth promptly with the Fall term, Sept. 2^d.

I shall write at once to Maj. Boynton, and, if necessary, go to West Point and see the Sup't.

I have not yet heard from Prof. Mahan, but learned, through his son, that he has been away from home and would not return until to-day or to-morrow. [. . .]

1. The reference is to work by Fletcher on the contents of Programme A.

✂ THAYER TO FLETCHER: *July 30, 1870*

DEAR SIR, Yours of the 20th, 22^d & 27th are at hand. I shall examine your Notes as soon as time & strength will permit I d'ont see why Gen^l Pitcher should refuse to forward your application or to permit you to forward it at once. Prof. Church has virtually consented to your being relieved by recommending you for another position. However, it is not absolutely necessary for you to commence at Hanover early in Sept. I wrote to the Adj^t General on the 25th on the subject of your Leave.

P.S. I also wrote to Prof. Mahan who is at East Eden Mount Desert,

Maine requesting him to write without delay as he proposed, to General Schrⁱver, Gen^l Townsend & to the Sec^y of War.

¶ FLETCHER TO THAYER: *August 1, 1870*

DEAR SIR: On Saturday last I visited West Point and saw Gen. Pitcher and Prof. Mahan, both of whom had just returned, that afternoon, after an absence from the place. The General said that he would forward my application approved, to take effect when my successor should be appointed. Prof. Mahan stated that he had already written to the Sec'y of War and requested him to mention the case to Gen. Schriver. I shall therefore forward the application to West Point to-day. [. . .]

¶ SMITH TO THAYER: *August 1, 1870*

MY DEAR GENERAL, Circumstances which I need not detail, will keep me here a few days—perhaps till Wednesday or Thursday. Meanwhile, I have advised Prof. Quimby to visit you with reference to the requisites for admission to the Thayer School. It is important that we should have some brief statement printed *at once*, as many inquiries are made; and those who think of taking a preparatory course here, wish to know before [they] decide about what is required.

I have written to Gen. Sherman about Lieut Fletcher's leave of absence, & the General replies, very cordially, that he thinks he can secure it.

¶ FLETCHER TO THAYER: *August 3, 1870*

DEAR SIR. I forward to you, by the same mail with this note, the manuscript of my synopsis of the calculus. I am not acquainted with any mathematical teacher or professor in this city to whom I could hand it for inspection. The paper is merely a careful recapitulation

of almost all of Church's Calculus and if you are fully satisfied as to the excellence of that work, it only remains for you to assure yourself of the accuracy of this paper.

I must apologize for not having written it in a larger and more legible hand, but as it is the first draft I wrote it rather hastily.

I am now reviewing the calculus as a matter of study

✂ FLETCHER TO THAYER: *August 8, 1870*

DEAR SIR. I have just received my application, returned to me disapproved. On the accompanying slip of paper are literal copies of the several endorsements upon it.¹

In this emergency it is difficult for me to decide how to act. I do not wish to sever my connection with the army altogether, in order to make a trial of your offer, for it is not certain that, at the end of a few months, we should be mutually satisfied. Moreover there is a possibility that my resignation would not be accepted. I do not either, by any means, desire to reject your offer unconditionally. At the same time I know that it is your wish to have this matter settled, and to get your school started without delay.

Even if the application had been granted, it is probable, as I stated before, that I should have been obliged to teach at West Point in Sept., until my successor should have reported there for duty. I dare say that, even now, if the proper influence is brought to bear upon the Sec'y of War as soon as possible, the matter can be arranged, in the course of a few weeks, as you desire.

I hoped that the letters of Prof. Mahan and Pres^t Smith would have been sufficient. It appears, I should think, as though neither President Grant nor Gen. Sherman saw the application at all.

I should be very glad to have your advice in this business. If you think it necessary I will come and have a talk with you. It might and it might not do any good for me to see Gen. Townsend and the Sec'y of War. Of course it would be much better if some person of influence could see them for me.

1. The endorsements appear to be on a sheet marked "Copy" in the Dartmouth Archives. They read as follows:

"U. S. Military Academy
West Point, N. Y.,
August 2^d 1870

Respectfully forwarded—

Lieut. Fletcher is an excellent teacher in mathematics, and will be a loss to the Institution, as well as the service.

Not wishing, however, to stand in the way of his advancement I reluctantly approve this application, to take effect as soon as his successor has been selected and detailed for duty

The Professor of mathematics being absent from the Academy, a suitable officer to succeed him cannot be named until the Professor returns.

(signed) T. G. Pitcher
Colonel U.S.A.—
Sup't. Mil. Acad'y

Respectfully submitted to

the Sec^y of War, Aug. 5 '70

(signed) Ed. Schriver

Insp^r

Disapproved by the Sec^y of War

Aug. 5 1870

(signed) Ed. Schriver

In. Gl.

Respectfully forwarded to

Lieutenant Fletcher

signed T. G. Pitcher

U.S.M.A. Col. U.S.A.—

Aug. 6. 1870 Supt. M. Acad'y"

❧ THAYER TO FLETCHER: *August 10, 1870*

DEAR SIR, From yours of the 8th I learn with much sorrow that the leave of absence for which you applied has been refused. I cannot advise you to resign before being sure, after a fair trial, that the situation in question will suit you nor would I wish you to abandon the prospect of filling the place, at least not until after the efforts that will hereafter be made to procure the desired Leave of absence shall have failed These efforts if found necessary will be repeated & continued until the next session of Congress, if no longer. Meanwhile no other candidate for the place will be in our thoughts. Come to have a talk with me on the matter, if such be your wi[s]h.

❧ THAYER TO SMITH: *August 10, 1870*

MY DEAR PRESIDENT The refusal to grant the desired Leave of absence is the more surprising from the circumstance that Leaves of absence for a year have, as I am assured, been granted to other officers within the last twelve months to enable them to act as professors in Colleges. I for one shall not "give up the ship" yet, nor until I hear that General Shermans & Senator Patterson's best efforts have failed. The Sec^y of War & perhaps the President will need to have explained to them how the school of Engineer[in]g at Dartmouth College will be able to supply an important National want

✂ SMITH TO THAYER: *August 12, 1870*

MY DEAR GENERAL, I agree with you in *not giving up the ship*. I have written to the Secretary of War, & Senator Patterson will enclose my letter in one of his own. I have also written to Gen. Sherman again, & have apprized Lieut. Fletcher of what I have done.

Perhaps you will write to some one or more who will help on the matter. I must go away on Monday or Tuesday next, to get some rest—I have had next to none yet since the Vacation began. It has been full of annoyances like this veto of the Secretary of War.

We must not give up Lieut Fletcher till the last gun is fired.

✂ THAYER TO FLETCHER: *August 22, 1870*

DEAR SIR, Yours of the 20th is at hand. On Saturday last (20th) I sent you under cover to Prof. Mahan copies of two letters, one from Gen^l Townsend & the other from Gen^l Sherman, showing that a reconsideration of your former application is out of the question, but that Gen^l Sherman thinks you might get a Leave of absence to the time the Army is to be reorganized next January¹ I recommend that you apply for this limited leave in the hope that, before it expires, it may be further extended. May write again soon.

P.S. If you conclude to apply anew inform me of the time when you propose to forward the application

1. In July, 1870, Congress had passed legislation to reduce the size of the army, which necessitated also a redistribution of troops.

✂ FLETCHER TO THAYER: *August 31, 1870*

DEAR SIR:—Your favor of the 29th inst.—came to hand yesterday.—

Last evening I had a conversation with Prof. Mahan in which he stated what he had last written to you in regard to what he thinks my best course just now Under the present circumstances, when the reorganization of the army is gradually taking place, there appears a reason for refusing such an application as mine, unless it be very strongly pressed. I am told that the War Department is un-

willing even to accept resignations of 2^d lieutenants as they have not enough officers of that grade, and that a resignation tendered by one of the graduates of this year was refused.

Now either I can delay the matter, as Prof. Mahan thinks best, in hopes that in course of two or three months circumstances will be such as to warrant hopes of a more favorable consideration of the original application; or (since you wish as little delay as possible) some person of influence must write to Gen Schriver, making a full statement of the case, and ask him whether or not an application for a "leave" until Dec. 15th would be approved.—I will do as you think best

If events should be such, either in this or in any other case, as to lead me to think of resigning within six months of the present time, for an experimental position, I should of course prefer to do so before Jan. 1, 1871, in order to avail myself of the one year's pay and allowances. But if I can secure a leave of absence for a year or six months to make a trial of your offer, such a consideration I would not entertain at all.

✿ THAYER TO FLETCHER: *September 2, 1870*

DEAR SIR, I have yours of August 31st. It seems to me best that you pursue the course recommended by Prof Mahan at least *pro. tem.*, improving your French & teaching a section of the 3^d class in Mathematics. Whether it is advisable for any one to write to Gen^l Schr [i] - ver for the object you mention I am unable to express an opinion, pro. or con. Should you not obtain "a Leave" before Dec^r 15th & then conclude to resign & take a years pay in advance & if on trial shall find the place at Hanover to suit you I shall truly rejoice not doubting that you will fill it with honor to yourself & to the Institution

✿ THAYER TO FLETCHER: *September 26, 1870*

DEAR SIR, It was not until several days ago that I found leisure to take up your continuation of programme A from the 56th page;

having gone over it hastily I return it with some notes submitted for your consideration & severe scrutiny, trusting that you will correct all blunders committed & improve the phraseology so that all shall be in the best form & dress in which you can put it & when you shall have made a fair copy enclose in brackets such portions as are not given to the first Section of the third Class; If you are in doubt on any point, you will of course consult Professor Church; I see that I did not fully explain to you the plan of the programme. It should be in the most minute detail possible, containing every proposition & principle in Church's text books, at least, all that can be properly expressed or indicated without introducing the algebraic formulae; I have not yet looked over your calculus but may do so soon

✂ FLETCHER TO THAYER: *September 28, 1870*

DEAR SIR:— Your letter of the 26th accompanying your corrections and amendments of my continuation of programme "A," was received yesterday. I will at once proceed to make another draft of the portion under consideration in full accordance with your ideas and expressed wishes.

I have now but 50 pages of the calculus to review, which I expect to finish soon. Meanwhile I have commenced simultaneously a careful review of Mechanics. In course of a few weeks I hope to be able to take up the "Cours de Mécanique Appliquée, par M. Bresse," which Prof. Mahan has advised me to read.

I have just learned that I can probably make arrangements, with a person here who is thoroughly acquainted with French, to have readings two or three times a week.¹ My object would be to have the matter read and pronounced to me for the purpose of training my ear so as to understand the spoken language.

1. Fletcher entered in his journal on October fifth, "Played chess with Prof. Agnel in the evening and arranged with him to receive lessons in French four times a week at a dollar a lesson. This in contemplation of what may be in store for me at Dartmouth." Five days later,

on October tenth, he recorded, "Commenced my French lessons with Prof. — Agnel.—"

Hyacinth R. Agnel taught French at West Point for a period that spanned over three decades.

§ SMITH TO THAYER: *September 30, 1870*

MY DEAR GENERAL THAYER, I have delayed writing you longer than I at first intended, for several reasons. One has been the pressure of cares connected with the opening of the College Year. I have really been in doubt, besides, exactly what to say. I have been waiting to see what would become of *poor Paris*.¹ It almost seems doubtful whether there will be any Paris for Lieut Fletcher to go to. I have made, however, a few points, which I will state:

1. It seems to me very desirable to open the regular curriculum next Fall. Our enforced delay has been so long, that I should be sorry to have it continue beyond the present College Year. Many inquiries are made of me about the Course; & I think we shall have a fair number to begin with, if we open next Fall.

2. If leave of absence cannot be obtained for Lieut. Fletcher before the 1st of January, I incline to the opinion that it may be well for him to resign, with a full appointment to a Professorship in the Thayer School. I suppose there would be no point of etiquette in the way of his resignation being accepted. And it seems to me there would be no serious risk in your fully appointing him. A man of his character and attainments, with the reputation he has as a teacher at West Point, would hardly fail, I think here. What would you think of this course, provided he cannot get leave of absence before the 1st of January? I rely greatly on your wisdom in the matter. If he is to resign, it would be best, I have understood, that he should do so before the close of the year. If he should be at liberty at the opening of 1871, & there should be any thing left of Paris—as I hope there will be—he could go there. Or if the way should not be open for that, he could prosecute his studies here, taking charge, meanwhile, of the Preparatory Class.

3. I need not say that if Lieut Fletcher should be reduced to the necessity of resigning, he should be careful not to do it as if in a pet at not getting leave of absence; but rather as desirous to obviate a difficulty really & properly felt by the War Department. You will know how to counsel him in this regard.

We have a small Preparatory Class, which will probably be enlarged. Professors Quimby & Young are attending to it. I think it desirable that the full Requisites for Admission should be in readi-

ness as soon as may be, that we may be able to send it to those who are making inquiries.

It occurs to me to say another thing, which you will duly appreciate. Professor Quimby has spent a pretty large amount of time upon the Requisites for Admission, in drawing them up, bringing in your corrections, & variously preparing the matter for the press, as well as in that rather difficult business, the correction of the Proof-Sheets. At some time, of course, he should be remunerated for this extra labor—I need say nothing on that point. I wish merely to mention what you are probably not aware of. He has lately met with a severe loss, by the burning of some property in Vermont in which he had an interest. His loss may amount to \$3000,—a bagatelle to a rich man, but a some what serious thing to a poor Professor, with a family on his hands, & no very large salary. I happen to know that any thing that could properly come to him, would, just at this time, be very acceptable & helpful. I refer, of course, only to the work he has already done; & I know you will excuse the suggestion, in view of the peculiar circumstances.

You will be pleased to know, that our year has opened very pleasantly, with about 120 new students, nearly 90 of them in the Academical Department.

1. The capitulation of the French army at Sedan in the Franco-German War was accompanied by the fall of the Second Empire of Napoleon III and the creation

of the Third Republic, early in September, 1870. On September nineteenth the Germans had begun their bitter, four-months' siege of Paris.

✂ FLETCHER TO THAYER: *September 30, 1870*

DEAR SIR: Prof. Mahan has informed me that you desire to know whether or not I am willing to resign unconditionally so as to accept your offer and commence at Dartmouth on the 5th of Jan'y. next; and that a speedy decision is asked, in order that (should an arrangement be made) the faculty of the College may announce the matter to the public in due season.

Before meeting the question fully with a definite answer, I take the liberty to make the following inquiries in order to be certain that I clearly understand what your proposition is. 1st Do you

wish me to engage to resign with the understanding that no further effort shall be made to obtain my leave of absence; or, while endeavors are still put forth for that object, to promise to leave the service whether they succeed or not. 2^d In case I do resign would you ask me to do so much before Dec. 1st or 15th?— In reference to this point I trust it will not be improper for me to remark that there seem to be good reasons why I should remain here about two months longer. Since my duties require comparatively but a small portion of my time, I have leisure and peculiar facilities for reviewing my mathematics and mechanics, for self-improvement in teaching and for acquiring French; while I might perhaps attend to many matters in the interest of your school, here as well as elsewhere. 3^d I would like some general idea of what would be expected from me during the spring term at Hanover. In other words, would you still carry out the general plan, which you communicated to me last summer, of a preparatory course at first, in accordance with programme "A." 4th Would your proposition in regard to the salary be the same as before.

As there is now no encouragement to remain in the army, where there is so little chance for rapid improvement and no hope of speedy advancement, I feel disposed to accept your offer if you choose to make a trial of me. In regard to the above inquiries I wish to pursue the course which in your judgment may appear best. As soon as I shall be favored with a reply from you I will give you my decision. [. . .]

❧ THAYER TO FLETCHER: *October 3, 1870*

DEAR SIR, I have received your very gratifying letter of September 1st. To your several enquiries I reply as follows. 1st I do not "wish you to resign with the understanding that no further effort shall be made to obtain a leave of absence" &c on the contrary, it is my earnest wish that you may obtain the desired leave, but the wish is stronger than the hopes; 2^d I do not wish you "to resign while endeavors are still put forth for that object"; but I do wish, if possible, to know now or soon whether in case you do not succeed in getting the leave you will resign your army commission and accept the place at Dartmouth tendered to you. As to which of these two

things will be best for you I proffer no advice & express no opinion it being a question you will choose to decide for yourself after mature consideration. If you decide in favor of Dartmouth I would be glad to have you enter upon the duties of your new position early in January & be on the ground a fortnight before then if you can so arrange it, coming this way & stopping with me several days. I concur in your idea that it is best for you to stay at West Point until some time in Dec^r. 3^d In regard to your salary it will, of course, be the sum I named viz twenty five hundred dollars commencing, say on the first of January 1871; this supposes that your resignation would be accepted to take effect about that time. I made some enquiries of President Smith & Professor Quimby as to where you would find suitable quarters & board at Hanover near the College & the probable charge. Both named the Hotel among others It has had many of the professors among its boarders & still has one or two. The charge has never been over five dollars per week At this rate, if you are a good economist & remain single, which I trust you will not many years, you would be able to lay by two thousand dollars per an. of your salary

4th In regard to branches of studies you would be required to teach the first year & perhaps longer, they will be confined, probably, to those comprised in programme A. I doubt whether, within that time, there will be any candidates prepared to enter upon the *curriculum course*, i.e. programme B. Hoping that you will find these answers satisfactory [. . .]

P.S. I send herewith for your perusal a portion of a letter (all of it that concerns yourself) just rec^d from President Smith bearing the same date as your letter. You will see that my previous action had anticipated his wishes

✂ FLETCHER TO THAYER: *October 5, 1870*

DEAR SIR: I mail to-day, with this letter, the latter part of programme "A," fully written out, according to your corrections and suggestions. I find that I failed to realize the full scope of your plan for the programme, in regard to fullness of detail, and yet, with the printed pamphlet before me, I ought certainly to have obtained a

more correct idea of your intention. I was in fault, in not comparing, more carefully than I did, my synopsis with the printed portion, so as to see whether it was in fact a continuation on the same plan.

In regard to this more complete paper, I have carefully compared all your notes and suggestions with the text of Prof. Church, both before and during the time that I was transcribing them. In but few places was it necessary to make alterations, either for correctness or for phraseology. Wherever it did seem necessary or proper to make any considerable changes, I have written the alterations among your notes, so that you may find where they are embodied in the manuscript. After completing the copy I read it over carefully to discover any errors of writing. Finally, I again compared it throughout with the text of Prof. Church's book. It is, therefore, as nearly correct as I can make it. [. . .]

It is more than likely that I failed also to carry out your plan in my synopsis of the calculus. If you will spare yourself the labor of making the same kind of elaborate notes that you made for the other subject, and will return the manuscript to me, I think I can now meet your views fully, and write out a satisfactory programme.

Your favor of the 3^d inst. was rec'd. this morning. It is entirely satisfactory. Both your own and President Smith's communications I perused with care. The latter is returned herewith.

I am willing, and do now agree to resign my army commission, as you suggest, (such resignation to take effect at any time in Dec. of this year, that you think proper that I apply for) in case the application for a leave of absence does not succeed. I will then hold myself in readiness to begin duty at Dartmouth whenever you desire. It shall be my endeavor, meanwhile, to pursue the course of study I have indicated to you, with as much diligence as possible and to prepare myself, by every means, for future work.

As I have before intimated, I regret that I can bring no influence of any weight to bear towards obtaining the "leave," but must depend wholly on Prof. Mahan, President Smith and yourself. My own impression is that there is very small probability of success. Still, the right kind of effort at the proper time might accomplish the desired end.

Prof. Church may be unwilling to change instructors just previ-

ous to the Jan'y. examination, and my application, either for a "leave" or for resignation, may encounter a little opposition in that quarter. But that can be arranged at the proper time.

✠ THAYER TO FLETCHER: *October 7, 1870*

DEAR SIR, Yours of Oct 5th was rec^d yesterday. The Analytical Geom. by this days Mail. Agreeably to your request I return the Calculus for such additions as you may deem necessary to carry out the plan of the programme Why the plan was so framed I can better explain verbally than by letter; As to the time you should ask to have your resignation take effect, fix it as you think best. If left to me I might name the last day of December unless you have special reasons for preferring an earlier day; Prof. Mahan writes me that he has recommended you to visit certain schools of civil Eng^s before commencing your duties at Dartmouth & I concur. Keep an account of your expenses for *transportation* up to the time of your arrival at Hanover with a view to your remuneration. [. . .]

✠ THAYER TO SMITH: *October 7, 1870*

MY DEAR PRESIDENT, You have herewith the last portion of a letter from Lieut Fletcher which please return. I am anxious as ever to obtain a leave of absence for him to go abroad next May or June but whether I shall deem it expedient to renew the effort to effect that object will depend on the disposition of others, especially your own & that of Senator Patterson You know the Senator, have communicated with him on the subject & can probably tell me or give a pretty good *guess* whether his best efforts to aid may be relied upon. Without them I would not have a particle of hope, with them, if they were sincere & earnest, I would feel encouraged to try again

✠ SMITH TO THAYER: *October 15, 1870*

MY DEAR GENERAL, Absence for a few days has delayed my answer to your recent favors. I have not been forgetful, however, of their subject matter.

As to a leave of absence for Lieut Fletcher, I have doubt of our

being able to obtain it. So has Senator Patterson. I enclose a letter from Gen. Townsend, which will show you how our application was regarded. Senator Patterson says, however, that if we desire it, he will try again, on his return to Washington. Yet I think he will do it without much faith.

If the fort is impregnable, it may be a question whether it is best to waste powder and ball upon it. As a military man, you will consider this. Would a repeated & fruitless application imperil the resignation which may be our last resort? You can judge better than I. I suppose the acceptance of a resignation, in a case like this, is optional. I would not have the War Department think we are persecuting them, & so put themselves on the defensive. I only throw out these suggestions for your consideration. Perhaps it may be well for Senator Patterson to make a reconnoissance at the opening of Congress, & report results. That may be in season for a resignation.

My prevailing impression is, that we shall come to that. And my good opinion of Lieut Fletcher has been so confirmed, that I think we shall risk little. I think he will prove the man for us. And let me say here, that I have been struck with Prof. Mahan's suggestion that, before commencing his duties here, he should "visit some of the Engineering Schools, say those at Troy, at Philadelphia, at Yale, at Harvard, & the one at Boston,¹ & spend a day or two at each to see their apparatus and other means of instruction, & obtain programmes of their course of instruction." These Schools may be "lesser lights," but Paris may not be accessible for some time, & we welcome light from whatever source. All he would have to do here would be the instruction of the Preparatory Class, & that could be carried on for a time by others.

I return, herewith, several letters that belong to you. After reading Gen. Townsend's letter, please give me your views about another effort to secure a leave of absence.

As the chills of autumn come on, I hope you will take special care of your health. We want a great deal more of your thoughtfulness & wisdom in regard to our matters; & our prayer is that you may have continuance not only of life but of strength to impart it.

1. The institutions referred to are Rensselaer Polytechnic Institute, Polytechnic College of Pennsylvania, the Sheffield and Lawrence Scientific Schools at Yale and Harvard, and Massachusetts Institute of Technology.

✠ SMITH TO THAYER: *November 9, 1870*

MY DEAR GENERAL, I have read your letter, just received, with no little pain.¹ I am pained that any thing has occurred in the least degree unpleasant to you. It has been our aim & care, from the first, to carry out your wishes with scrupulous exactness, so far as we understood them; and if there has been any failure on the part of any one, in this case, you may be sure it was unintentional.

The matter may be summed up thus. It became apparent, some time since, that your requisites for admission to the "Thayer School," were, in some points, beyond the Curriculum, not only of Dartmouth College, but of any other College in New England. By some means this deficiency must be supplied, & the question arose, how? How, especially, in the case of our own College students? The Seniors could command, by certain possible omissions of other things, considerable time. But how should they be taught? It was your suggestion, I think, that if a Professor should be secured in the Thayer School, he, for a while at least, would have time to instruct any whose preparation was not fully made. My understanding was that you would approve of his doing so. But a Professor has not been secured, or is not yet here, while a fine class—(a very fine Class, as a whole, I am assured)—are anxious to complete the required studies. The only way open, was for Professors Quimby & Young—very competent men—to take charge of them. They, however, were under no obligation to do this, under their commission & salary as of the Academical Faculty. They were already overworked—doing, in my judgment—about twice what they ought. It was with great difficulty they could secure time for this additional work. Yet being interested in the objects of the "Thayer School," they were willing even to overtask themselves for what seemed to be its advantage. But, of course, they could not be expected to work gratuitously. Their charge was the usual one here—in case of extra service—\$2 a recitation. I knew not how many recitations would be necessary; but I have the utmost confidence in their honor, & feel sure that they have done no more, & charged for no more, than was fitting. Prof. Quimby says he has no recollection of your saying, in so many words, that their services would be remunerated out of the Thayer Fund; but as he understood you to approve of the Prepara-

tory arrangement—a notice of which he sent you—he presumed it would be so. My own impression in that direction was due partly to your idea of employing the Thayer Professor, when here, to do the work. If a Professor sustained by your fund might do the work, it seemed not a strained inference, that you would approve of paying men, working temporarily in his place, from the same fund. Professor Quimby understood that poor young men were not to be charged tuition, & the members of the Preparatory Class—though mostly of fine scholarship—are all “*as poor as crows.*”

When the bills were made out, it occurred to me, that you had said something about paying some expenses yourself,—independently of the fund,—so as to keep it accumulating. Hence, desirous of heeding your every wish, I laid the matter before you.

I think the formation of the Preparatory Class will have a good effect. It is *a beginning*, which we have been promising, without performing, since 1868. It will furnish a good Class for 1871–2, when we hope to open the regular Curriculum. If it is not your pleasure that the expense of it should devolve on the Thayer Fund, some other way must be devised. Probably the Trustees of Dartmouth College would meet it—though their means are straitened.

I have listened with interest to your suggestions about a modification of our College Course, in the elective line, so as to give our students opportunity to prepare, if they please, for the Thayer School. The difficulty in the way of this—if all others were removed—would be *the insufficiency of our teaching force*. With our great body of undergraduates,—now nearly 400,—we have not more than half teachers enough. Especially with such a division of Classes, for thorough drill, as seems to me desirable. Our Professors, as I have said, are sadly overburdened—intent as they are on doing their work thoroughly.

I have written thus fully, that I might put you in possession of the whole case, & assure you of our earnest aim to meet your views in all things. If we have erred in this respect, it has been undesigned. Your wish, clearly understood, will be our law.

1. The letter here mentioned is not now present within the Dartmouth Archives.

❧ FLETCHER TO THAYER: *December 10, 1870*

DEAR SIR:—[. . .] I wish now to ask your advice and learn your wishes in regard to my next course of proceeding, viz: the taking of the necessary steps towards leaving West Point, for it seems to me to be about time for action. Are you in favor of my forwarding, without delay, an application for a leave of absence for six months or a year, or do you think it better that I tender my resignation at once, to take effect January 5th 1871? In regard to the application made last summer, I think Gen. Pitcher's endorsement was the principal thing that killed it. Circumstances are now different, as Prof Church is here and has already provided for the contingency of my leaving, and the Sup't. perhaps would now make an endorsement more likely to insure success. I think there is reason to suppose that the bare application, favorably endorsed, might, in the present state of army affairs, be granted.

Col. Michie, who has just returned from his tour in Europe as a member of the Gov't. commission,¹ handed me recently a printed pamphlet, showing the course of theoretical and practical training which the engineer officers of the English army receive at the school of instruction at Chatham. On consultation with Prof. Mahan he (the Prof.) thought it very advisable to have a copy made and furnished you for future reference. I am, therefore, having this done at a small expense and will bring it with me when I come to see you, or will send it to you when finished, if you so desire.

1. Michie had been a member of the Commission, June–November, 1870, sent to Europe to collect information on the fabrication of iron for defensive purposes in coastal fortifications.

❧ THAYER TO FLETCHER: *December 13, 1870*

DEAR SIR, Yours of Dec^r 10th just now rec^d. In reply to your question I can only say that I see no objection to your making the application suggested but I refer you to Prof Mahan for advice if you need advice in the matter Get ready to leave W. P. for Braintree as soon as your pupils are examined, stopping on the way only to see the school at New Haven, in case you shall previously ascertain that you would find the school in operation.

Bring with you the copy you will have made of the Course of Instruction at Chatham. You have anticipated my wishes in that respect.

❧ FLETCHER TO THAYER: *December 15, 1870*

DEAR SIR: Your favor of the 13th inst. was received yesterday.

Prof. Mahan thinks it advisable to send on an application for a leave of absence first. He thought it would be well, before doing so, to write to President Smith asking his opinion. I wrote to him yesterday afternoon.

Meanwhile I submit to you a form of the application to know if it meets your approbation:—

.....
.....

I have the honor to apply for a leave of absence for six months, to date from January 1st 1871, in order to occupy a position in the Thayer School of Civil Engineering and Architecture, lately established in connection with Dartmouth College.

.....
.....
.....

❧ THAYER TO FLETCHER: *December 16, 1870*

DEAR SIR Your proposed application seems to me all right Regretting that I can only tender my best wishes for its success

❧ IV ❧

*“ I have made a beginning of business here
in the proposed direction. . . . ”*



ROBERT FLETCHER
As he appeared in his early years at Dartmouth
Courtesy of Miss Mary A. Fletcher



West Point, N. Y.—

Dec. 31st 1870

Gen. S. Thayer, U.S.A.,

Dear Sir :

You have doubtless received both of the orders in regard to my leave of absence, the first granting it and the second revoking it.

Previous to learning whether or not any action had been taken on my application, and, becoming tired of the delay, I started for Washington on Wednesday and obtained an interview with the President on Thursday morning. He gave his unqualified approval, stating that he was very glad to grant a "leave" under such circumstances, and wrote his consent on a card, for me to give to the Adj't. Gen'l. At the office of the latter official I learned what had already been done and then asked for and obtained an interview with the Sec'y of War. He gave me his reasons for disapproval, but stated that he would see the President again in regard to the matter. Yesterday he telegraphed a reply still in the negative and I immediately telegraphed my resignation, having received his verbal permission to do so. I will give more particulars when I see you.¹ [. . .]

I will adhere to your instructions, leaving here as soon as possible, (probably about the 5th or 6th) and going at once to S. Brain-tree, stopping at Yale, should I first ascertain that the school is in operation

I have the honor to be

Your ob'd't. servant,

Robert Fletcher

2^d Lieut., 1st Art'y.—

1. Lieutenant Fletcher's journal entry for his Washington visit on December twenty-ninth reads, in part:

"Quite cold and clear.— After a tedious and almost sleepless night, arrived in Washington about 6.30 A.M. After obtaining a breakfast at a restaurant, went to the war office and made enquiries for

Gen. Dent.* Having rec'd directions, went to the White House, but was too early.—(8.30 A.M.).—Walked all through the treasury building after which returned to the White House and waited until about 11.30 A.M. for Gen. Dent. He, upon his arrival, obtained for me an interview with the President, to whom I had a

letter of introduction from his son *Fred.* in the Corps of Cadets. I stated to him briefly my desire to obtain a leave of absence for six months to accept a position in the Thayer School of Engineering and Architecture established in connection with Dartmouth College.—He spoke at some length in favor of my request and wrote the following words on a card for me to give to the Adj't. Gen'l., viz: 'There is no objection to giving Lieut. Fletcher a leave of absence for six months to accept a professorship.' (signed) 'U. S. Grant' 'Washington D. C. Dec. 29th —/70'— After some conversation with Gen. Dent, went over to the War Office and presented the card to Gen. E. D. Townsend, Adj't. Gen'l. He said my 'leave' had been granted and then revoked by the Sec'y. of War.—I then asked

for and obtained an interview with Gen. Belknap, Sec'y. of War, who explained at some length, saying that he had refused the same application made by three or four officers of higher rank, and must refuse me. On seeing the card from the President he said the President probably did not understand the matter, and that he would talk it over with him and telegraph to me the answer, yes or no. Should it be *no*, I might telegraph my resignation. Seeing that nothing could be gained I left. [. . .]

*Frederick T. Dent (U.S.M.A. 1843) was a West Point classmate, intimate friend, and brother-in-law of Ulysses S. Grant. During Grant's years in the Presidency, General Dent served him as aide and military secretary.

✂ FLETCHER TO THAYER: [*January 5, 1871*]

DEAR SIR. My resignation has been accepted to take effect Dec 31st 1870.¹ I received the official acceptance yesterday. My duties will be entirely finished here to-morrow and I shall leave as soon as possible. I have not yet heard from Prof. Norton at Yale but do not think it strange as they have been having vacation. I shall have letters of introduction from Prof Mahan to Prof Norton and Prof Eustis, and from Prof Church to Profs Norton and Trowbridge.² Since the term commences at Yale Jan. 5th I think there is no doubt but that the Sheffield School will be in operation by Monday the 9th. On consultation with Prof. Mahan, we thought that as Sunday is so near at hand and I would be more likely to accomplish the object of my visit to Yale early next week, the delay of one more day would not be objected to by you. I will therefore start from New York Sunday night or as early Monday morning as possible and shall probably reach Braintree late on Tuesday or early on Wednesday, depending on the time required at New Haven. I am very sorry that there has been so much delay for I know that you are anxious for work to begin [. . .]

1. Although Fletcher's draft of this letter to General Thayer is dated "Dec. 5th 1871," this is evidently an error for January 5, 1871. In his journal he recorded on January fourth:

"*Wednesday 4th*. Cold but clear.— Finished the examination of my sections. Began to pack for leaving.— Attended the cadet prayer-meeting, probably for the last time. Made some farewell re-

marks.[. . .]

"Received the official acceptance of my resignation just after examination, and doffed 'the army blue.'"

2. The individuals mentioned and not previously identified are William A. Norton, Professor Civil Engineering in Yale's Sheffield Scientific School, and William P. Trowbridge, Yale's Professor of Dynamical Engineering.

❧ THAYER TO SMITH: *January 17, 1871*

MY DEAR PRESIDENT Professor Fletcher left here last evening, expecting to be at Hanover early this morning¹ He has passed three entire days & most of two other days with me during which I have sounded him on all points to the best of my ability, resulting in the conviction that he will prove himself to be "the right man in the right place". His disposition, morals, principles, & intellectual powers seem to me all we could wish. He has, however, one serious defect which I need not point out as you will have remarked it as soon as you [have] heard him speak but I trust it will be only temporary as he has promised me to use his best efforts to correct it. For your advice in that matter he will be duly thankful I am sure.

1. On his trip from New York to South Braintree and Hanover, Fletcher stopped at New Haven to visit Sheffield Scientific School on January ninth and tenth, was with General Thayer on the eleventh and twelfth, made a side trip to Harvard on the thirteenth and to M.I.T.

during part of the fourteenth, returning to South Braintree on the afternoon of the fourteenth and departing for Hanover on the afternoon of the sixteenth. (See the Robert Fletcher journal, January 9-16, 1871.)

❧ FLETCHER TO THAYER: *January 23, 1871*

DEAR SIR:— I have made a beginning of business here in the proposed direction, but do not yet feel quite satisfied with the prospect. I will bring up in succession various matters which I have thus far attended to, so that you may understand the present situation.

1st About the printing:— I have had a talk with Mr. Whitcomb the printer. He says that the second set of corrections which were made on the programme, obliged him to take as much or more

trouble as would be required to set up each page anew. He reckons each page at 2000 *ms*, and says the most moderate charge he can make is 60 cents a thousand or \$1.20 per page for extra corrections. He estimates 72 pages,—64 which were finally printed, and 8 which were printed and then discarded. His account I presume is fair, unless it is in regard to the extra 8 pages. You know more about that than I, but I have the impression that the compensation would be sufficient, by considering only 64 pages, according to his rate of charge. He says the many delays put him to great inconvenienc[e] but he submits the bill to you. If it is not satisfactory he hopes some other arrangement will be suggested. The bill is as follows:—

72 pages (500 copies) at 2.00 per page	144.00
Extra corrections 144.000 <i>ms</i> @ .60 per 1000=	86.40
	<hr/> 230.40
Received cash	75.00
Balance due	<hr/> \$155.40

Wednesday eve^e — 25th

You are doubtless wondering why I have not written more promptly. I have been so engaged in getting settled and in getting the Preparatory Dep't. under way that I have not found opportunity.

2^d Pres^t Smith was absent during the remainder of the week after my arrival and yesterday afternoon was the first time I have had a talk with him. He seems to be nearly persuaded that it will be advisable to allow students to omit certain studies during the Junior and Senior college years, so as to devote their time to Mathematics in the Thayer Preparatory Dep't. Indeed a point was gained at the last faculty meeting, after a stormy discussion. Two students of the Senior class (Hazen and Porter)¹ were allowed to drop German so as to devote more time to mathematics in the Thayer Prep^y Dep't. He thinks that by next Sept. they can assign at least two rooms to the Thayer School, either in the new building or in portions of the other building which will be vacated.² However the full consideration of that is reserved for the future. Had not time for a very general conversation with the Pres^t on that occasion.—

3^d As to present accommodations. I am temporarily using Prof. Quimby's recitation room The only room that I can have entirely to

myself is a small room adjoining his room, where the math¹ instruments are kept. In this I can have drawing stands put, and can easily have slates put up. The cost of slate for blackboards is 45 cts. per square foot. For this room I should need 14 feet of blackboard in length. The slates come $3\frac{1}{2}$ ft in height, when set up. The number of sq. ft. I require therefore is 49. The cost for this will be \$22.05, to which add about \$3.00 for freight, and we have \$25.00. The slates are obtained at quarries not a great distance from here. The advantages of having them are: 1st imperishability; 2^d they can be easily removed and put up again where ever more convenient accommodations shall be assigned to us. *The drawing stands* I can have made by the college carpenter far more reasonably than by any other person. I have not yet been able to ascertain the probable cost. I have designed a stand of useful and simple construction and do not think a half a dozen will cost more than 30 or 35 dollars. I also need chalk and blackboard pointers. Strange to say, Prof. Quimby does not have pointers used in his room. May I have authority to procure the slates, stands, chalk and pointers? The cost will probably be, for the whole, about 60 or 65 dollars. As soon as I can obtain these I shall have a room for my exclusive use during the next five months. There will be a small item of expense for stationery during the next 5 months.

4th:— In regard to the students already secured.— I have formed a first section in the preparatory Dep't. consisting of Hazen, Porter and Greenlay.³ All three seem to have good mathematical minds. To facilitate their rapid advancement I have two recitations daily for them. Between 9 and 10 A.M. they recite in Calculus. Although Hazen and Greenlay went over Analytical Geometry last fall with Prof. Quimby, I am now giving them a sort of examination review for the afternoon recitations, at the rate of from 30 to 50 pages daily. They recite between 3 & 4 P.M.— Porter is behind in this and is working to make it up by himself, reciting to me daily. Hazen & Porter have now but one recitation daily in the academical dep't. After the Analytical Geometry I shall take up Analytical Mechanics with them for the afternoon recitation. After the Calculus, I shall take up Descriptive Geometry for morning recitation. After finishing mechanics this will also come in the afternoon. Then will finish by a review of mechanics *including* the few parts of Peck's course

which require the aid of the Calculus. Will send you a weekly report of progress and a report of each monthly examination. These three, I expect will be prepared to enter on the curriculum next Sept. I have not examined them in algebra, geometry and trigonometry, as they are not now prepared for a rigid examination. I think they have a fair knowledge of them already. They understand that they are to make up deficiencies in those subjects as they proceed and also during vacation, and that they must pass the severe examination on the whole course for admission next Sept. The other (not math^l) subjects they are taking up or have taken up in the academical or scientific departments.

This accommodating course, this departure from the strict plan, seems absolutely necessary just now in the preparatory Dep't. in order to make a start. Strict conformity to the plan both in the Preparatory and School Dep'ts must be reached as soon as possible.

Sanders⁴ will go on with the 1st section in Analytical Mechanics. He is a fine scholar and well posted on the other subjects, I am told. He will be away next year and expects to return Sept 1872 to undergo the examination for admission to the Thayer School.

I have not arranged with Hazen, Porter and Greenlay about the tuition fee. I am told that all three are probably unable to pay in the preparatory Dep't. I shall have a talk with each separately on the subject very soon.

I have a fourth section in the Preparatory Dep't. One young man Spear⁵ I examined rigidly in arithmetic algebra and geometry. He was very proficient in arithmetic, in algebra to equations of the first degree, and on the first six books of geometry. Outside of these limits he was beyond his depth. He has a good mind for math^{cs} and I have undertaken to fit him for the Thayer School by Sept. 1872. He has attended with the Agricultural Dept. in chemistry, physics &c during last fall, and rec'd instruction in geometry from Prof Quimby. To hasten his progress I hear him half an hour daily in Algebra and half an hour in geometry. This year I hope to take him through the remainder of the algebra and geometry and through all of trigonometry and mensuration. He pays the tuition fee, and will be prepared to pay the am't over to the treasurer in a few weeks. I only require him to pay the fee for half a year. He wishes to be absent after Apr. 20th until next Sept.

At present therefore I am occupied two hours in the forenoon and an hour and a half in the afternoon with recitations. To prepare myself on the various subjects I need from two to three hours daily. We have no recitations on Saturday afternoon.

5th In regard to the library. I probably shall not be able to look it over and verify the list in my possession before two or three weeks, as my time just now is fully taken up.—

6th In regard to programme A. As soon as I get fairly settled and my time all arranged systematically I will go to work by regular detail on the programme and finish it as soon as possible. Until this is off my hands I shall have no time for outside study on the curriculum.

7th:— I have drawn up a form of the circular which it was proposed to print. It meets Pres^t Smith's views. — I enclose it for your consideration.— I think it is in accordance with your instructions.

[. . .]

I am now somewhat settled and am getting acquainted with the professors and their families. Begin to feel somewhat at home. Have very nice rooms and a nice boarding place.— Now that I begin to see what my daily duties will be I shall arrange my hours for a regular daily routine.

This letter is badly written, but I had so much to say that I did not take pains. Please excuse haste. [. . .]

1. Henry A. Hazen and Albert H. Porter, both Dartmouth 1871.

2. The reference is undoubtedly to Chandler and Culver Halls. The latter building was under construction at this period and upon completion was occupied by the New Hampshire College of Agriculture and the Mechanic Arts, which had formerly occupied quarters in

Chandler.

3. Thomas S. Greenlay, who in 1873, with Albert H. Porter, made up the Thayer School's first graduating class.

4. Charles H. Sanders was a member of the senior class of the College of Agriculture and the Mechanic Arts.

5. Victor I. Spear (Dartmouth 1874).

¶ THAYER TO FLETCHER: *January 30, 1871*

DEAR SIR, Yours of Jan^y 18th & 23^d were received, they need no apologies. Your former letters from New York & West Point were models of neatness, chirography & style, such as would stand the test of the severest criticism, but you have no time now for such

polish.¹ In reference to the printers bill I have to remark 1st that a set of 2^d proofs became necessary and that the printer was put to inconvenience or expense by having to wait was certainly not my fault but as it was not his fault, as far as I know, he might rightfully claim a reasonable compensation therefor had he informed me of his intention to make such a claim, or charge & in that case only 2^d Whether the calculation of the number of *ms* per page is correct, or whether \$1.20 per page for printing 2^d proofs is a reasonable charge men of the trade only can judge. comparing it with the price—\$2 dollars per page for 500 copies including paper & labor, it seems to me rather large. 3^d I am under the impression that there were no second proofs of some of the sheets satisfy yourself as to that. 4th You say “he” (the printer) “estimates 72 pages—64 which were finally printed & 8 which were printed & then discarded” probably correct but I would like to know what pages they were. You must not infer from these remarks that it is not my intention to pay the entire bill if demanded whether I deem it just or not. You tell me only one room & that a small one now occupied by the instrument_[ts] can be assigned for your exclusive use; please give me its dimensions & say how many drawing stands it will conveniently accommodate. In my conversations with President Smith I rec^d the impression—not to say promise—that all the necessary rooms for the school might & would be furnished by the College, but for which I would not have taken measures for opening the School. As to the blackboards, drawing stands &c necessary for instruction I give you a *carte blanche* you have only to send me the bills & also if you please estimates of cost when of large amount

You say “he” (the President) seems to be nearly “persuaded to allow students to omit *certain* studies during the junior & Senior years so as to devote” &c. Get the President to name the “*certain*” studies” alluded to and then ascertain the time (that is the number of lessons & the hours the students of each class actually do, or should devote to each lesson whether for preparation or at recitation) and besides this, whenever you find the necessary leisure, draw up two tabular statements, the one exhibiting the employment of time, the other the distribution of the studies in the form I drew them up in 1817 & which have continued ever since without change. You will find them on pages 16 & 17 Regulations 1866.²

These tables taken together will show the hours given each day in every week month &c to each & every subject of study & instruction at Dartmouth College. With these tables in hand we shall be prepared to discuss the whole subject with the President & show him what must be done in order that a student of any College class may go on with his class & at the same time receive the necessary instructions in the School

I return the proposed Circular which I approve but wish you to consider whether the subject of mineralogy should not be omitted in Programme A. The examination of the books may be postponed until the more pressing matters are off your hands

I was very glad to learn that you had found agreeable quarters & board. Write me often & freely just as the thoughts arise without taking time to make corrections or to select the choicest words & phrases, following my example

1. A passage drawn from Robert Fletcher's journal entry for February ninth provides substantiation of General Thayer's belief that the Professor's time was undoubtedly well occupied during this period:

"My usual routine of daily duty is for the present, about as follows:—Breakfast at 7½. Morning prayers in the chapel at 8. Study from 8 to 9, and recitation in calculus from 9 to 10. Exercise from 10 to 11 by sawing wood, arranging rooms &c &c. 11 to 12½ study. Dinner at 12½, after which study until 2.—Private pupil

from 2 to 3. Hear recitations in Algebra and Geometry and in analytical geometry from 3 to 4. Hear recitation in analytical mechanics from 4 to 5. Study until 6.—Tea at 6 and study or calls in the evening, varied by writing &c."

2. *Regulations for the U. S. Military Academy, at West Point, New York* (New York, 1866) carries on pages sixteen and seventeen, respectively, "Table of the Employment of Time at the United States Military Academy" and "Programme of Course Studies [. . .]."

✂ THAYER TO FLETCHER: *February 10, 1871*

DEAR SIR, Yours of Feb. 8th is received. I return Mr Whitcombs Bill approved. As to the system of elective studies I would not advise you to press the subject upon the President, at least for the present. Give him time to ruminate upon it. But I see no objection to your discussing it with the Professors as it incidentally comes up in your conversations with them. The question should not be presented for their action until it is ascertained that a decided majority of them shall be in favor of it. When that time comes as I doubt

not it will within a very few years if not sooner the President will go for it, but not sooner, I think. When programme A is completed you may find time to take up the Tabular Statements for the distribution of studies & Time alluded to in a former letter There is a right time for every thing, d'ont hurry. You did right to join the Scientific Association, if for no other reason than the second one you assign. Cultivate the good will of the President & professors which is equally important to your own content usefulness. You may remit the fees to Hazen & Porter or only a portion of it as you think best. I would not wish any good & worthy student to be excluded on account of his inability to pay the fixed fee. In some future letter I may have a word to say in reference to some of the views expressed by the President in your interview with him as related in your letter

¶ THAYER TO SMITH: *March 1, 1871*

MY DEAR PRESIDENT Are you free to confide to me, without reserve, your opinions of Professor Fletcher? In your many interviews with him you have, doubtless, sounded him thoroughly, have taken his measure and found out the *stuff* he is made of, the more easily done as he is of a frank and artless nature & incapable of assuming a disguise; You have seen the manner in which he has taken hold of his work and have learned something of the impressions he has made on the minds of the professors, his associates. Judged from all these elements tell me whether you think he will prove himself to be "the right man" such as we hoped and had a right to expect he would be from the high testimonials given him by the West Point professors; If he have faults, or defects admitting of a remedy, a knowledge of them might enable me to give him useful advice without leading him to suspect that I had been making enquiries about him

In some former letter I alluded to a defect in his speech. Did it strike you as it did me? I talked to him freely about it & he promised to bear it constantly in mind & to use his utmost efforts to overcome it I was uncertain whether it was not in part owing to some peculiar natural formation of the organs of speech.

I long to see your hand writing once more, if only half a dozen lines

§ SMITH TO THAYER: *March 13, 1871*

MY DEAR GENERAL, I have been wishing, for some time, to write you at length; but have been much pressed by my various duties, & so it has been postponed. There are several subjects on which I desire to say something. To-day, however, I will confine myself to the one embraced in your last esteemed favor.

You wish to know our impressions of Prof. Fletcher. It is well, perhaps, that I have delayed a little my answer to your inquiries, as I can now reply more intelligently. It would not perhaps be quite in the style of a military report to say—what my feelings lead me to—that we are *delighted with him*. I think we have been directed, after several disappointments, to *the man for the place*.

The one defect you referred to, I saw at once. But, in my view, it is not a serious matter. It appears most in familiar conversation—very little in more formal speech. I heard him read, for example, in our Literary Club, the other evening; & I was pleased to see, that his enunciation was quite distinct, as well as pleasant in tone. So, when he has spoken in public on other occasions. You perceive that I understood you to refer to a certain closeness of utterance, a lack of fulness & clearness of tone. It is but slight; not enough, I think, to affect his teaching in any great degree, & it may be mainly overcome, if not entirely.

Our Professors are much pleased with him. His moral tone is excellent. He is affable, genial, gentlemanly. He gives himself to his work methodically, earnestly & faithfully. And I hear that his pupils—some of whom are keen fellows—think him an accurate & thorough teacher.

Such are my impressions thus far. And as he is, as you say, very open and transparent, I have little fear of being obliged unfavorably to modify them. I say this with great pleasure, knowing, from some experience, how difficult it is to secure just the right man for an important position.

I was concerned to hear, some time ago, that you had been quite unwell, & am glad to believe that you are better. I have another matter on my mind, on which I will write you soon.

✂ THAYER TO SMITH: *March 15, 1871*

MY DEAR PRESIDENT Your letter just now rec^d gives me more pleasure than I know how to express; For the satisfaction & encouragement of the young professor I will let him read it when he comes here unless you think I had best not; You say "there are several subjects on which" you "desire to say something"; so also there are topics upon which I desire to have a talk with you whenever you again afford me the happiness of a personal interview, as I pray that you will on occasion of your next visit to Boston

I am better but still very feeble, gaining strength slowly

✂ THAYER TO FLETCHER: *March 17, 1871*

DEAR SIR Your letter Feb^y 2^d says "The room which has been assigned to me *for the present* is 20'×13' with a small room opening into it about 12'×7' four drawing stands are all that can be conveniently here and are *all I shall need for the present*" that is, all you will need until you have more than *four* pupils, & *until then only* as every pupil must be provided with a stand for his own use, exclusively; Now it is important that I should know whether the College will be able to assign to you more room whenever you shall need it. Explain this matter to the President & then tell me what he thinks about it; As I wish to have a talk with you about various matters relating to the School, please leave Hanover for South Braintree on the 17th or 18th of April, or sooner if you think best only giving me a few days notice of the time. I shall not detain you here over one or two days at most. I need not add that the Presidents permission will be nec[essary]

✂ SMITH TO THAYER: *March 22, 1871*

MY DEAR GENERAL THAYER, I have been wishing, for some time, to write you, at length, on a subject of importance connected with the Thayer School, but have been hindered hitherto. I will, however delay no longer—especially as the subject has been referred to by you in recent correspondence with Professor Fletcher.

We have moved somewhat slowly in the matter of the Thayer School, but we have moved cautiously, &, I think, wisely. I have esteemed it a felicity that your health & strength have been so spared that we could avail ourselves of your good judgment and experience in all the initial arrangements. And how, I have said to myself, could that strong hand, familiar in other years with similar work—that hand which time has touched so gently, not disabled—be better employed than in laying the foundations of an Institution which shall bless generations yet unborn? Providence has thus far prospered us. We have secured, as we judge, an excellent man as the first Professor; we have already some students in process of preparation for the first Class; and the thoughts of others, not a few, are turned to the School. The outlook is all we could reasonably desire.

Just now, however, a matter presents itself which calls for careful consideration. It has already occupied your thoughts, as it has mine. I refer to the provision of Rooms for the School. This provision can be temporarily made in our new edifice, *Culver Hall*. This is under the control of the Trustees of the N. H. College of Agriculture & the Mechanic Arts—(see 4th page of the Catalogue)—of whom 4 are appointed by the Trustees of Dartmouth College. They would doubtless furnish rooms, on reasonable terms, as the number of their students is not likely to be so large, for some time, as to require the whole building. I incline to the opinion that, as a temporary arrangement, this would be the best. A suggestion of yours, however, made some time since, has led me to think of a permanent & comparatively independent arrangement; & the more I have thought of it, the more desirable it has seemed.

Institutions, like animals, want a *habitat*. Nomadic ways do not suit them. They want a *home*—not a mere *boarding-place*. They want it, not only for comfort & convenience, but for respectability. We felt this at the outset of the Agricultural Department. For the Class that first entered, we had only such rooms as we could “pick up,” so to speak, in College. The Department had no proper local habitation. We soon found the effect bad, & were driven to the conclusion that it must have a Building of its own. Hence the new *Culver Hall*, to be used in part by Dartmouth College, yet so belonging to the Agricultural Department as to give that Department a visi-

bility & prominence which it would not otherwise have had. We see already the good influence of this provision, & we shall see it more and more as the years pass on.

Now, for permanency, we want something of this sort for the *Thayer School*—not a whole building like Culver Hall, but a suitable & sufficient part of some appropriate & commanding edifice—a part which shall be just as distinctly and clearly known as the *Thayer School*, as the large room in Dartmouth Hall in which we worship daily, is known as *the Chapel*. And, as I have hinted, the idea of such a provision—nay, of the definite manner in which it might be secured—was suggested to me by some remarks which you made, some time since, to Prof. Quimby. These remarks had reference to an arrangement in connection with *a new Library Building*.

There is no building the College so much needs as *a Library*. Our present accommodations are meagre, inconvenient, perilous. They are, as you know, in Reed Hall, which is partly occupied by students' dormitories. This building is not fire-proof—it has taken fire once or twice, since I came here. This very winter, it had a narrow escape. It is a pity—I had almost said, a shame—to have our literary & scientific treasures so exposed. We are not only straitened as to our books, moreover, but as to our pictures & works of art. Our picture-room is full to unpleasant repletion. We know not where to put new pictures which we are frequently getting; & more would be given us if we had an inviting place for them. I am perpetually pained by this want, & feel that it ought not much longer to exist.

You will not be surprised, then, at the impression made on me by your remark to Professor Quimby. I understood it to be, that if a new Library Building could be erected, a portion of which should be devoted to the Thayer School, you would be willing to give at least \$10,000 toward it—perhaps more. I have been brooding over this thought ever since; and there has risen to my imagination just the edifice we want. I hope it will not prove a mere castle in the air.

I have conceived of a building of *three stories*, tastefully constructed, & of proportions ample enough for our purpose. The first story—or so much of it as would be desired—I would give to the *Thayer School*. It should embrace, at least, two recitation rooms, of good size; a large & convenient drawing-room; a library-room; a

room for instruments and models; and perhaps an office for the Chief Professor. I would have the story planned & finished with reference to the convenience of the School. Details I have not studied, but I would have it just what it should be, as to number, size & style of rooms. Probably most of the story would be required. The second floor, I would give to the *College Library*, with provision—perhaps in two wings—for the two *Society Libraries*—Social Friends' & Fraternity's. These are now large and valuable. The third floor, I would use—mainly if not entirely—as an *Art Gallery*—a room for pictures, busts, &c, including, perhaps, *memorial tablets* for those who have fallen in the service of the country. I know a gentleman who, I think, might be disposed to give liberally for such a Gallery. We have a fine lot on which such a building could be placed—in a position where it would show to excellent advantage, & also be very convenient of access. The connection of the Thayer School with the Library would seem to me very appropriate. While it would be a disadvantage in no respect, it would give the School a proper distinctness & visibility, and a deserved prominence. I should delight to see it thus housed and honored.

Do not understand me, in all this, to be soliciting money from you. Your generosity needs no solicitation—it is spontaneous. I write on the impulse of your own suggestion—a suggestion too weighty to be treated lightly. I would have that done which shall please you—& only that. There are reasons, however, why this matter should have due consideration now, & be acted on soon, if at all. If it should be your pleasure to have some such proposition as I have referred to, used in a proper way, I should have hope of its being effective. If you were to take the initiative, your name & example would have great influence. I could go to others & say, "Gen. Thayer has started this noble movement, will you help it on?" To erect such a building as I have sketched, would cost from \$50,000 to \$60,000—it would be well to calculate for the latter sum. It would cost an effort to get the money, but what a grand thing it would be for all the interests concerned!

Please, my dear Sir, take this matter into consideration, & let me know your views. If they should be favorable to an immediate movement, I should like to visit a gentleman, next week, of whose aid I have hope.

DEAR SIR. Your favor of the 22^d was rec'd. this morning.

Pres^t Smith read to me yesterday the letter which he wrote you in relation to the future accommodation of the Thayer School.

In regard to my visit to Braintree, according to your suggestion, I will arrange to leave here by the noon train, Tuesday, Apr. 18th, arriving at Boston about 6.20 P.M. At Boston I can take the 7.15 P.M. train for S. Braintree, arriving there before 8 o'clock. [. . .]

Although, as you remark, "the suspension of" my "instruction has no necessary connection with the college vacation," yet my students rather want the two weeks intermission. Now considering that they have been doing double work with me, and that the two weeks would be valuable to me, so that I might devote all my time to the programme, for a few days, it seems advisable to stop studies at least for a week or ten days, (say until May 1st) and give them a rest. If you have no objection to this arrangement, under these circumstances (one, of course, which would not be made again, being contrary to the proposed calendar for the School) I will have the studies cease and hold my review examinations on [. . .] Apr. 15th & 17th and allow an intermission until May 1st or 2^d.

Prof. Quimby invited me to come in last evening while he arranged the new college schedule, to go into effect next Sept. This will be submitted to the faculty at their next Meeting on Monday evening. Prof. Q. proposes to request the faculty to make Latin and Greek optional during the 2^d term Junior year (20 weeks) so as to allow those who wish it, to take up the Thayer Preparatory course. The students have not much to do Senior year as they then have all the afternoons to themselves for *reading*. Such an arrangement will give the Thayer School 200 afternoons (during 2^d term Junior and all of Senior year) for the preparatory instruction. I have estimated that this will be quite sufficient, and even a little margin will be left for extra work. Prof. Q is very decided in advocating this measure. He thinks the faculty may hold it in consideration for two or three weeks but hopes that they will ultimately agree to it. Now, they are probably about evenly divided on the question. If this plan does not fully meet your views it is certainly a step in that direction.

❧ THAYER TO SMITH: *March 27, 1871*

MY DEAR PRESIDENT In reply to your favor of March 22^d rec late on the 25th there is much I would wish to say but am unable at this time to write at length being still very feeble

Prof Fletcher on his return from the short visit he is to make me next month will be commissioned to acquaint you with my views on various matters relating to the School. In this communication I touch only one topic & that very briefly; meaning the offer I made verbally to Professor Quimby; I stand by it; The sum named was, as he says, ten thousand dollars but I do not remember to have used the words "at least", or "if not more"; however, I now say \$12,000 or one fifth of the cost of Library building. If built fireproof as it must be, it can scarcely cost less than your estimate viz \$60,000 It is understood of course that the College obligates itself to set apart for the exclusive use of the school the rooms indicated in your letter including, if deemed necessary by the Board of Overseers a suitable room for the Professors office It being uncertain when this building if erected will be ready for occupancy,¹ the question arises how shall the wants of the school for room meanwhile be provided for? And in considering this question it must be taken into account that no rent will be paid for rooms in Culver Hall, or elsewhere, *with my consent*; I stop as the mail is about to close.

1. The library building was not provided until over a decade later, when Wilson Hall was constructed in 1885.

❧ FLETCHER TO THAYER: *April 5, 1871*

DEAR SIR. Enclosed is my report for March. There has been a general improvement as compared with the report of last month, except in the subject of Mechanics. The cause of the poor progress in this is found in the small amount of time which the students have to devote to it. [. . .]

Four rooms have been selected for the use of the Thayer School for next year. Two of these may be used next term. I went around with Prof. Quimby and picked these out. I will give you the dimensions and location of the rooms when I see you. The arrangement, I think, is a good one.

The slates have arrived, but before paying for them I thought it best to send for nine feet additional of blackboard and put the whole into one of the rooms which has been assigned to me. I can, just as well as not, use one of the college recitation rooms for a few weeks longer, as my work during next term will not require much blackboard recitation, but will be principally drawing. I can have immediate possession of a fine drawing room as soon as I am ready.

I would like therefore to obtain your approval of the following items so that the bills may be met as soon as presented, which is especially desirable in case of the slates.

80½ sq. ft of slate (23' × 3½')	@ 45c = 36.23
Freight from Granville N.Y. about 6.	or 7.00
4 Drawing stands, chalk,	
and blackboard pointers about	17.00
	<hr/> \$60.23

The total may be less, and probably not more than this. I cannot now estimate exactly.—

¶ FLETCHER TO THAYER: *April 28, 1871*

DEAR SIR I hope that you have, long before this, been relieved of the pain which you suffered when I left you. [. . .]

Prof. Quimby has returned from Washington. Sup't. Pierce of the Coast Survey has given him entire charge of the survey of the state of New Hampshire to do in his own time. He has therefore vacation work for several years to come. Work on this survey will be just the thing for a part of the out-door work of the "School," affording real practical instruction in geodesic surveying.

Prof. Q. examined Wordeman's instruments, such as he makes for the Coast Survey. They are complete in every respect, with every modern improvement. They are probably as good as any we can obtain, certainly in this country. The "School" needs a plane table and level. His plane table has many new and valuable attachments, including a rule, on which is mounted a large telescope with a vertical circle. His level is very complete, having a horizontal graduated limb, a compass needle, a vertical arc for running grades and

many other parts. The two instruments, complete in all respects, will cost \$500.00. The Coast Survey Office said that they would see that we did not have to pay more than they do. These instruments can be had in July or Aug., if ordered now. Shall I order one or both for the "School"? If *one*, the plane table is most needed. It will cost \$300.00. I rely much on Prof. Quimby's judgment, as he has examined the instruments of many makers and knows the defects of most. He thinks the ones mentioned are by far the best of the kind.—

I send herewith my report for the month of April.

✂ FLETCHER TO THAYER: *June 2, 1871*

VERY DEAR SIR: I arrived here last evening at about 8 o'clock.¹

Have as yet received no information of the arrival of the books.— Will inform you as soon as they come.—

This morning I had a conversation with the President, chiefly in regard to the library building, mentioning the various points in relation thereto, which you discussed. The substance of the form for a codicil, which I prepared at your direction, met his views quite fully. He stated that he would confer with Mr. Blaisdell on the matter and write to you soon. I delivered the tickets. He thought he should try and visit you before long, giving you due notice previously. I expect to have further conversation with him to-morrow morning. He had become rather perplexed to account for my long absence and had dropped me a line to your care. It will be unnecessary for you to send it, if you have not done so. He inquired fully in regard to your health and expressed great pleasure on learning of your marked improvement.

I also saw Mr. Blaisdell and expressed to him how greatly you appreciated his consideration and sympathy while visiting you. Also mentioned the points in regard to his correspondence with Mr. Dexter,² and the adjustment of the business relating to the freight bill and the return of the amount of your check. Concerning the N. H. bonds he said the Legislature would now probably be unwilling to have them registered, as they will probably all be paid within three or four years. They are very "penurious," as he expressed it, and would not favor the expense and trouble. Mr. Hunt-

ington, the bank cashier, gave his opinion to the same effect. He (Mr. B) thought that the best plan will be to sell them or dispose of them at the first favorable opportunity, and purchase Conn. or Rhode Island bonds. He is of the opinion that securities other than *state* (especially mortgages) are equally safe and afford better return, but proposes to act in accordance with your preference. He said that the "endorsement" of the N. H. bonds does *not* secure them in case they are lost or stolen. It makes them payable only on some person's order, so that the money could not be obtained unless the name should be erased or counterfeited.

The State of Virginia, Mr. Blaisdell says, has not yet perfected its arrangements for the issue of new bonds. He had a letter recently on the subject. Although the Legislature has passed the necessary laws, the Governor and Treasurer are not yet prepared to act. The interest on the new bonds is to commence July 1st and the first is payable Jan 1st 1872

I shall have further conversation with him to-morrow.—

Mr. Blaisdell sends his kindest regards and expresses his great pleasure at your improvement. [. . .]

P.S. The books arrived this morning, as I have just ascertained by calling on the freight agent. He did not know the charge, as his book is at Norwich. They will be sent over here to-morrow morning. I will write again soon.—

1. General Thayer's health in the spring of 1871 was in a precarious state, to the point that his doctor offered no encouragement for his recovery. Thayer concluded to send for Professor Fletcher, which he did on May sixteenth, and in his journal Fletcher entered the following record of the visit which he made to South Braintree at the end of May:

"*Thursday 18th* Having received notice from Gen. T. left Hanover at noon for Braintree, where I arrived, via Boston, at 8 P.M. Found the General better and had an hour's conversation with him. Pleasant day.

"*Friday and Saturday* I spent in looking over, selecting, arranging and cataloguing some of the Gen's. books, under

his direction. Became acquainted with his aged sister, Mrs L. D. Wild, who is a great sufferer from rheumatism. She is over 80 years old. Also with Miss L. A. Wild, her daughter.

"*Sunday 21st* Attended morning service at the Baptist church in So. Braintree. Spent much of the day conversing with the Gen. and with his sister.

"*Week ending Saturday 27th* Spent the week partly in arranging cataloguing and packing some of the General's books, being constantly directed by him. Packed 12 boxes, 10 of which are to go to Hanover. Selected and arranged the remaining books and pamphlets, amounting to several hundred, some of which are to remain for a town library. The books cata-

logued and packed, numbered about 2000 volumes, besides many valuable atlases and large sets of plates. Also assisted the General in looking over his papers.

"His health has gradually improved. He has more appetite, gets more sleep, and was able to go down stairs and return, unassisted, during the last three days. All this after he had been given up by his physician.

"Have had many interesting conversations with the Gen. He stated to me the main features of his life's history and also many facts connected with the history of West Point. It is really a great privilege to have such an opportunity for intercourse with so celebrated a man of the past generation. He still retains his mental faculties with remarkable vigor. He can talk on most subjects with his characteristic clearness. Age however causes his thoughts to come slowly, and renders his articulation somewhat difficult; moreover he has hard work to remember names, although he recollects dates with facility. But, painful and sad as it is to think of, it seems to be a fact that he has no proper appreciation of the Gospel of Christ. Although he has said that he shall die as nearly as possible 'in the faith of the pilgrims,' he is, nevertheless, unitarian. He says he looks back on his past life without one regret, and hopes for the mercy of God in the other world. He does not read the Bible and has not done so for a number of years, so far as known. He avoids all religious conversation, and refuses to see ministers of the Gospel, when he thinks they come to converse on sacred topics. I have not felt that I could do more than pray for him, as his niece says that allusions to per-

sonal religious matters irritate him. He has been very mercifully and wonderfully spared, not only in this sickness, but on many other occasions, and we may hope that God has gracious purposes in regard to him. Prayers for him have been requested at the Fulton St. prayer-meeting in New York.

"Warm dry weather. Shower Monday night;—drought threatened all about here.

"*Sunday 28th* Attended morning service at the North Braintree Cong. Church and heard a good sermon. Spent much of the day in conversation with Mrs. Wild and the General.—

"*Monday and Tuesday.*—Assisted the Gen. in looking over his letters and private papers. Wrote letters on business connected with the school. Weather very warm.

"Tuesday was observed as 'decoration day' There was a decoration in Braintree, preceded by a procession.—The Gen. sat out-doors.

"*Wednesday 31st* Went into Boston about noon and attended to the shipping of the boxes to Hanover. Visited Rothermel's great painting of the battle of Gettysburg, and studied it about an hour. Called on Mr. Sewall, formerly uncle Richard's partner. Returned to So. Braintree in the afternoon.

"*June 1st 1871 Thursday.*—Very warm.—Assisted the Gen. in looking over his papers. Left Braintree at 10.55 A.M. and, passing through Boston reached Hanover about 8 P.M."

2. William S. Dexter (Harvard 1846), a Boston lawyer, who was at this time active in the management of General Thayer's financial interests and affairs.

✿ FLETCHER TO THAYER: *June 6, 1871*

DEAR SIR:— [. . .] The books arrived at Reid Hall safely on Saturday morning. The boxes were all in good condition and I presume

that their contents are also.— Of course I shall not open them until it is decided where to put them. The librarian¹ has two plans which I think good: 1st, To let me have a small room on the first floor of Reid Hall under the library. It is now used by Prof. Hitchcock wherein to stow minerals, but he will soon vacate it, I think. Its dimensions are about 18' × 12', and it is well lighted, and convenient for the purpose. Here all the books would be under my exclusive charge and there would be no danger of their being meddled with. Prof. Sanborn thinks that students do sometimes get into the college library, by picking the locks or otherwise, and handle over the books, if they do not actually take some away. 2^d. To clear out an alcove in the library proper and place all the books of the Thayer Donation together there, putting up glass doors with locks in front, so that no one can handle the books without my knowledge—The case will be submitted to the faculty this evening, and it is thought one or the other of these plans will be adopted. The freight charges are as follows:

Freight from Boston to Norwich	\$12.52	
Cartage, Norwich to Hanover	<u>1.00</u>	\$13.52

Adding to this \$3.00 express charge and the [. . .] amount of your check (\$20.95), the total amount which Mr. Blaisdell must draw from Mr. Dexter is \$37.47

On consultation with the President we thought it best that your wish to have the books, plates &c of the Thayer donation under the especial charge of the Thayer Professor, not to be perused or handled without his permission, should be signified in writing to the Board of Trustees of the College, at their annual meeting, so that it may be made a matter of record, and thus prevent any misunderstanding in the future. I will very soon draw up a statement to this effect in proper form, to be submitted to the President and yourself, and, being approved, it will be ready for the meeting of the Trustees.

The college faculty is re-arranging its schedule. They are inclining more to an elective system by proposing to allow students to choose, at the *beginning* of the Sophomore year, between a continuation of the classical course in all its rigor, and a more purely mathematical course.— The latter optional course will be as follows:— During Sophomore year, some Latin and Greek to be omitted and a

thorough training in Church's Anal. Geom. and Peck's Mechanics to be given. In the Junior year the students will be drilled in a part of Church's Desc. Geom. and all of Church's Calculus. By this arrangement *they* expect to fit their students to enter the Thayer School, and to have no connection with our Prep^y Dep't. I think their success is doubtful, with their present means of instruction. [. . .]

1. Edwin D. Sanborn (Dartmouth 1832), long-time member of the College faculty and at this period Evans Profes-	sor of Oratory and Belles-Lettres, also served as Dartmouth's Librarian 1866-1874.
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✿ SMITH TO THAYER: *June 22, 1871*

MY DEAR GENERAL, We have been delighted to hear of your improved health, & hope it may continue. This beautiful summer weather is certainly favorable to it.

You sent me a message by Prof. Fletcher in regard to "the Dartmouth," which I understood & appreciated. I was not surprised at the discontinuance of your subscription. Others have found fault. There is a pruriency & self-conceit about Young America in these days, which to well-balanced minds is unpleasant, but which it is not always easy to determine how to deal with. Modesty seems to be one of "the lost arts."

Moral influence, however, is always good. And, with this view, I will be obliged to you if you will express to me in writing, *briefly*, what you intimated to Prof. Fletcher. I would like your opinion, in other words, of the points in the Magazine which led you to drop it. I will endeavor to make no unwise use of what you write. I should be glad to have our Faculty, at least, know your views. And I hope you will not hesitate to express them fully & decidedly. I would be obliged to you for as early a reply as may be, without too great a tax upon you.

I write in haste, as with the shadow of Commencement upon me, and a visit of the Legislature at hand, I am over busy.

✿ THAYER TO SMITH: *June 24, 1871*

MY DEAR PRESIDENT, You must excuse my inability to comply fully with your request in regard to the "Dartmouth" The numbers I re-

ceived are scattered among old books & papers not intended to be preserved. Some of them, probably, could not be found, but to search for them & if found to point out the faulty articles would be a task to which my strength is not equal. If you had time to examine the magazine from the beginning you would have no difficulty, I think, in divining my reasons for discontinuing my subscription

P. I will soon send you a copy of the Codicil of my Will relating to the Library Building It is a verbatim copy of the one I dictated to Prof Fletcher with the addition you suggested. Should the contribution be needed before the expiration of the two years it shall be forthcoming

✂ FLETCHER TO THAYER: *July 12, 1871*

VERY DEAR SIR: Yours of the 6th inst. was received yesterday, on my return from surveying duty. I have been absent with Prof. Quimby reconnoitring in the central part of the State since the 4th, and returned yesterday to be present at the examination and to resume work.

The Coast Survey work will probably require much of my time during vacation. It is a good opportunity to become familiar with the details of this branch of the profession, and one which may not soon occur again. I go as aid, and have scarcely more than my expenses paid, but have every opportunity to do all the practical part, as much as the chief (Prof. Q.). The work on programme "A" shall be pushed on as rapidly as consistent with care and painstaking. Possibly I may complete it by the middle of August. From the tenor of your note I gathered that you do not desire to see me at Braintree until I have finished the programme, so that you may be able to consider it all at once. I will mail you what I have completed recently, so that you may look it over meanwhile, if your health will permit. For the "Arithmetic," I have followed "Davies' University"; for the Algebra, "Davies' Bourdon," as corrected by Prof. Church, during the time of my instruction at West Point; for the Physical Geography a small work of some 200 pages by Fitch, embodying such facts and principles as are essential to a good general knowledge of the subject, and which may be found in any good work; for the "Mete-

orology," Loomis' work seems to be excellent, and I have followed it strictly. [. . .]

I am desirous of spending a few days of my vacation at home, and I think the best time to do so is now, as I cannot go very well after commencement, on account of the business of the School, and the survey. I accordingly propose to leave for New York to-morrow and to return next week so as to be present at commencement. After that, can visit you at any time you may suggest. Should you wish to drop a line, to reach me before next Wednesday, please address to 124 West 54th St., New York city.

I have not been able to arrange the library as yet, for Prof. Hitchcock has not yet vacated the room which was assigned to me. He will probably do so after the college vacation begins.

I have attended three different examinations in the Chandler Scientific Department, and have not been favorably impressed.

In your note of June 16th you write: "The time you can give to those following the curriculum next year, and, indeed, until you have an assistant, will be very limited, for the preparatory classes must not be neglected."

Now in view of what you have thus expressed, and of the present condition of affairs, it has occurred to me, in thinking the matter over, whether it would not be well to defer altogether the opening of the curriculum course until Sept. 1872. The circular reads: "It is expected that the regular classes in this School will be formed in Sept. 1872." I should thus have the next year to give to thorough work with the preparatory classes. All time beyond that could be given to perfecting, with the advice of Prof. Mahan and other experienced persons, the arrangement of the subjects in programme "B," and the plan for the first year's instruction in the curriculum. I should then (in Sept. 1872) be far better prepared to undertake the curriculum instruction and meanwhile an assistant might be secured to come in about Sept. 1872 or Feb. 1873. It has seemed to me, after due reflection, that if I undertake, next year, to carry on the curriculum and Preparatory Dep't. together, that there is danger of undertaking too much, and of doing nothing with that thoroughness which is indispensable. I think more time is necessary to perfect the arrangement of the curriculum course. Another year would suffice to lay the foundations broadly and deeply. Programme

"A" would be printed; Programme "B" would be put into, shape; the library would be thoroughly arranged and catalogued; some models would be obtained and arrangements made for securing others when needed, and various other matters could be attended to more carefully, because there would be more time to consider them.

Meanwhile the students Hazen, Porter and Greenlay, who have been expecting to be examined in Sept. and go on as the 4th class of the curriculum course next fall, might find something to do for a year, which would be sufficiently remunerative and afford them time for further and more thorough preparation. Hazen and Greenlay think they would be benefitted to stay out a year, as both fear that they shall not be fully prepared for a rigorous examination in Sept. If they can find good employment they would prefer to wait until Sept. 1872. Porter is away just now, so that I cannot learn what he thinks about it. However that makes no difference. He takes his college degree this year and can do as he chooses.

I submit the subject for your consideration and decision.

My report for June I will bring with me when I visit Braintree

Shall attend more of the college examinations to-morrow morning.—

✂ FLETCHER TO THAYER: *July 25, 1871*

VERY DEAR SIR Your favor of the 19th inst., was duly received.

The copy of the "codicil" I handed to President Smith.

I attended some of the examinations of the College, and the exercises of Commencement day. On the average the students did not do remarkably well, although the examination might have been called good. They did themselves great credit on Commencement day.

I have received from Prof. Church the manuscript of the Analytical Geometry. He writes that he has carefully revised it and has found but few places where any change is necessary. He has made a small number of suggestions here and there

In the previous connection I might properly have mentioned, perhaps, that the honorary degree of Master of Arts, was conferred on me at Commencement, by the College.

The President is much opposed to postponing the opening of our curriculum course another year. He says that there has been already too much delay. It has been announced from year to year in the college catalogue, so that if a definite start is not made at an early day he thinks people will begin to doubt the statements so often made in regard to the School. He thinks it probable that I shall lose Porter and Hazen altogether, by letting them off for a year. Indeed I should not be surprised myself if he should prove a true prophet in regard to them. Moreover he refers to the probability that there will be no students next year for the Preparatory Dep't. It is a fact that none have presented themselves as yet. Of course there can be none from the College under the present arrangement. I have answered altogether about 30 letters of inquiry, but have heard nothing further from any of the inquirers. So it does seem that there may not be any students, or at best but one or two, in the Preparatory Dep't. next year. But there is no indication yet for even one student. The situation is somewhat perplexing certainly. Spear, the one student, whom I had in the Prep^y Dep't., has entered the Chandler Scientific Dep't. of the College. He probably thinks he can certainly go through that School, and was a little afraid of the severe application which I require. He was not a brilliant scholar, and probably would not have been able to keep on in the "School." Under these circumstances the President advises that the curriculum course be opened at once and pushed on, and that the Preparatory Dep't., be left until students present themselves for it.

Among the objections to this plan are: 1st the insufficient preparation of the three students. For, although they have done well, and made up as much as possible, still they have not obtained that proficiency in the requisites which is necessary. We should be obliged to make many allowances for their incomplete preparation; 2^d, We should have "the cart before the horse". My own time for two years would be, of necessity, mostly consumed in hard study and labor on the Curriculum course, and we should have foundation work to do, while perfecting the superstructure, for when the Prep'y. Students should present themselves, I should have both things on my hands, with no possibility of assistance; 3^d: If premature notice has been

given I do not see that that is any reason for running the risk of failure by commencing without thorough preparation

I hope it will not appear to you that I write with a view to my own personal gratification when I state that if it is intended that I shall go to Europe, it seems as though this is a good time. By devoting myself exclusively to the work, I can finish programme "A", have it reviewed, corrected and printed, the first thing, say within two months or a little more, besides arranging and classifying the library. Some of the programmes might then be circulated, and thus some definite statement of our course made known. Meantime during the year I should be prosecuting my studies, and purchasing such books, models and instruments as are immediately necessary, while arrangements are made to obtain others, when the state of the funds may warrant. By Sept. 1872, I should have accomplished as much of my study in France or Germany as possible and have made all arrangements for starting the School on a firm basis, with a carefully considered and judiciously arranged schedule of the entire course.

Thus nothing will be lost, apparently to the Preparatory Dep't., if there are to be no students therefor next year; and the three students which I have would probably be induced to resume in 1872, with the prospect of a thoroughly organized "School" to enter.

Please address me:

U.S. Coast Survey party
Crotchet Mountain
Franeestown
care of Elias Wilson N.H.

I shall not remain on this work longer than necessary to learn the practical details. As soon as I find that I have acquired all that is to be learned I shall leave and resume work for the "School," so as to finish the programme.—

In haste.—

P.S. The President spoke of visiting you before long. Most of the substance of this letter has occurred to me since my conversation with him.— I should be glad to hear from you as soon as convenient.

✂ FLETCHER TO THAYER: *August 18, 1871*

VERY DEAR SIR. Your favor of the 29th ult. I did not receive until the 6th inst., as I was away from the camp in charge of a party to put up signals. [. . .]

If there are to be no Preparatory students next year, I agree with President Smith that the best course is to go on with my three students in the curriculum course. As yet I have had no applicants to enter the Prep'y.—Dep't.

I have found it impossible to do as much on programme "A" as I hoped to do.— The work on the survey has kept me busy nearly all the time.— I have nearly finished the synopsis of astronomy since I sent you the parts on Physical Geography and Meteorology.—

I propose to leave the party on the 22^d or 23^d inst. and return to Hanover, as I have much to do in preparing for the examination of my students and for the work of next year.—

You see that I shall need more than another month to finish the programme, and, if you think best, I will visit you at Braintree before the term commences;—if, however, you do not deem it necessary I will wait until programme "A" is finished. This survey work keeps me more closely employed than I supposed it would and I cannot work steadily on the programme until I leave the party.—

My idea is that after we have once commenced the curriculum course, I cannot leave for study, or for any other purpose, until an assistant has been obtained, and has become familiar with the course. So any deliberation about the matter must be made before Sept. 1st. Hence my thought that perhaps you may wish to see and advise me before that time.

This letter should have been written sooner, but I have been so busy that I have not before found leisure for consideration of the question, and for writing.—

When you write next I shall, if nothing happens, be in Hanover, to receive the letter at once or soon after its arrival.—

✂ FLETCHER TO THAYER: *August 24, 1871*

VERY DEAR SIR,— I returned to this place on the 22^d inst. and have resumed work. I think I have derived much benefit during the four

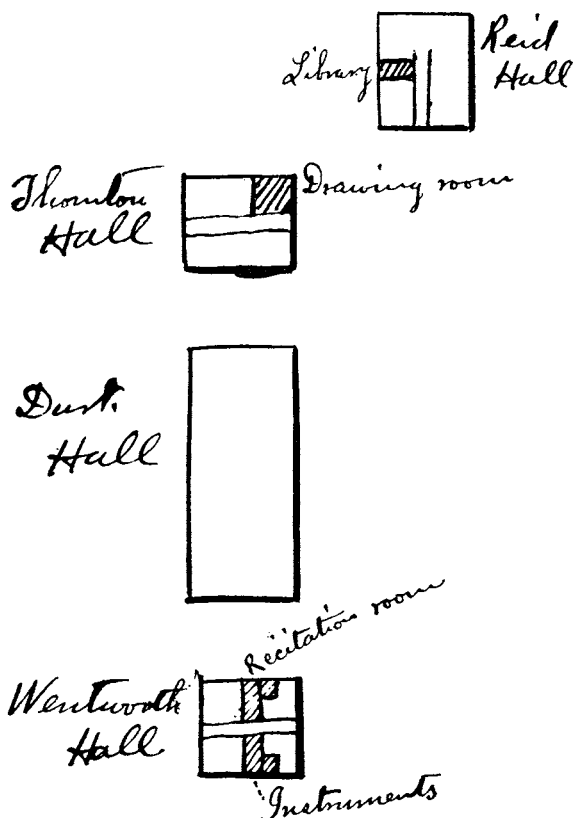
weeks spent with the Coast Survey party. Have become quite familiar with the practical operation of one of the best of the Coast Survey instruments for the measurement of horizontal and vertical angles, and have learned the details of the work connected with secondary and tertiary triangulation. My three students accompanied us, and had opportunity to use the instruments and learn the details of every part of the work.— I took with me the Blunt theodolite, belonging to the "School," and found my previous opinion of it fully verified. It is certainly a *very good* instrument; it may be more accurately adjusted than the Coast Survey theodolite used by Prof. Quimby.—

Yesterday I finished the synopsis of Astronomy, and will mail the same to you to-day.— Loomis' Astronomy and also his Meteorology are arranged in short paragraphs, each of which has an italicized heading which sets forth in brief the substance and bearing of the paragraph. I have therefore followed the text rather closely by incorporating these headings in the two synopses referred to, only making such changes as were necessary for our purpose.— I have carefully reviewed my work in both cases, and if it is satisfactory to you in regard to detail, it seems as though but few corrections will be necessary before putting it to press. [. . .]

I ask your opinion as to whether it will not be well to put the mathematical part of programme "A" to press as soon as possible.— You have the parts relating to Arithmetic and Algebra, and they doubtless need some correction. As soon as they are ready it seems as though we might have it printed while the portions not mathematical are being completed.— There remains now the part on Mechanics and Physics to re-arrange and partly re-write, also the portions on Chemistry and Geology to write out in full.—

The College carpenter will have the rooms which have been assigned to the "School" ready for use by Sept. 1st; —viz:—one drawing room, one recitation room where the slate boards are mounted, the room assigned us for the library, (not yet quite cleared out by Prof. Hitchcock), and the instrument room.— Although Prof. Q and I are to use our instruments conjointly, as you know, I shall keep all my instruments and models in a small room, 8 ft by 6 ft, which opens into the instrument room. I shall have a peculiar key for this, so that only Prof. Q and I can have access to

the room.— Most of the college rooms are opened by the same steel key and the students have obtained these, so that they frequently enter where they have no business. I propose to guard against this. The two other rooms assigned to us will not be needed during the coming year, but as one of them opens into the recitation room, I must find some use for it. We shall be situated as shown by the appended diagram.—



President Smith is away and will not return until the 29th; I am rather sorry about this as I wished to confer with him.—

Dr. Hubbard is now here lecturing in chemistry.— I have signified to him my wish to talk over the affairs of the "School." He tells me that he will have leisure for that purpose on Monday.—

The most advisable course now open, as far as I can judge under

present circumstances, is to push forward on the curriculum. As yet there are no students in the Preparatory Dep't. Therefore I can give my full attention to my three students, and perfect the arrangement of the Prep'y Dep't.-course.— The first business is the examination of the students for admission to the curriculum; and the preparation of the papers therefor claims my immediate attention and study. Although two of the students have passed, in the College, an examination in Geology, Chemistry and Physics, I shall examine them in all the specified subjects.— Shall endeavor to have Dr. Hubbard and others, with some of the College professors, present at the examinations:— besides the Committee provided for in your instrument of gift.—

The next matter for careful study and consideration is the course of study under programme "B." I have the skeleton draft made by Prof. Mahan, the *courses* pursued at Yale, Harvard, Boston and Troy by the Scientific Schools, and other documents, from which I can make a draft. I think I can, without great difficulty, arrange the studies for the first six months.— But such course of study must be revised and sanctioned by the Board of Overseers; hence the necessity for a meeting within two or three weeks. I will mature the plans and thoughts which have been in my mind and be prepared to submit to the "Board" a report of the past doings and my plans and suggestions for the future. The "Board" should frame the course for the first year at least; that for the 2^d year may be considered and matured hereafter.

Among the needs of the School, one of the first, in my opinion, is a letter copying press and letter book.— I think it important that the "School" should retain among its records copies of all business letters written by the senior Prof.—. Thus far I have had no time to make copies. The press and letter-book I can obtain at wholesale price: \$10. If you think it necessary I will order one.—

I find also, at some times, much need of an amanuensis. In making out my monthly reports, I find that it takes considerable time to keep the record and make the first draft, so that I ought not to spend more time in making the two copies which are required for yourself and the President. After I have made out the catalogue of the library, there must be a copy made for you and one for Prof. Sanborn the librarian. I presume that you will have no objection if

I get such necessary writing done by an amanuensis at a reasonable price, whenever the necessity arises.

Hoping that you are still in comfortable health, with regards to the members of your family, I am,—

✂ FLETCHER TO THAYER: *August 30, 1871*

VERY DEAR SIR. Since my letter to you last week (24th), I have prepared examination papers, and have been at work on programme "B" [. . .]

Yesterday afternoon I had a conversation with Prof. Hubbard.— He thinks there is no immediate necessity for a meeting of the Board of Overseers. Your instrument of gift directs that "Board" to draw up a proper programme of studies for the curriculum in strict accordance with programme "B." Inasmuch as programme "B" is not yet prepared he thinks that the Board has no jurisdiction in that direction.—

This afternoon I saw the President for the first time since my return.— He mentioned his interview with you, and referred to some of the points which you dwelt upon. We arranged in regard to the examination of the students for admission to the Thayer School.— Since the College professors have much on their hands during Friday and Saturday (Sept. 1 & 2), it was decided to hold our examination Monday and Tuesday (Sept. 4 & 5). The examining committee will meet at the Thayer School drawing room at 9 A.M. Monday morning. The examination will probably occupy part of two days (9 to 11 A.M. & 2 to 4 P.M.). The committee will be, according to provision,— the President, Prof. Young, Prof. Quimby, Prof.-Dimond¹ and myself.— I shall have the examination as thorough as possible. As I have before said, the students are not as well prepared as they should be, but they have heretofore done very well, considering the time they have had.— I have prepared blanks, so that each member of the committee may mark each student according to an affixed scale. I shall require a mark of at least 7/10 of the aggregate, to admit any applicant

The President agrees with Prof. Hubbard in thinking that there is no necessity for a meeting of the Board of Overseers at an early

day.— I stated to the President the plan of a course of study for next year's curriculum course which I have drawn up. He suggests that, after the examination is over, I go to visit you at Braintree, to show you the results of the examination, and to receive your suggestions in the drawing up of programme "B" and the next year's course of study.— I think that, after some consultation with you and correspondence with those who are good authority in the matter, programme "B" may be made ready for your signature within a very few weeks.—

But especially is it necessary that I have authority for my plan of study for the next six months.— Prof. Hubbard and the President approved my plan. Your sanction and approval are necessary for whatever course is pursued, and you would be far more able to judge in regard to the matter than almost any member of the "Board."— Therefore I write this evening to learn whether it meets your wishes and convenience that I should come to Braintree for a short interview. I can leave here Tuesday evening and see you on Wednesday morning by 9 or 10 o'clock.—

P.S. In case the students all fail at the examination, the necessity for an immediate interview will not exist.—

1. Ezekiel W. Dimond (Middlebury 1865), Instructor in Chemistry at Dartmouth 1868–1876.

✂ THAYER TO FLETCHER: *September 1, 1871*

MY DEAR SIR, I reply briefly to your letter of Aug^t 30. Report the result of the Examination & await an answer; If the candidates evince a thorough knowledge of all the branches in Programme A, they must be admitted of course, but if they fail so much the better for you & the School, as I think;

✂ FLETCHER TO THAYER: *September 7, 1871*

VERY DEAR SIR:— Your favors of the 30th ult. and 1st inst. were duly received.—

Enclosed is the report of the examination.— I am sorry that it

was not held last June.— Nothing has been gained by the delay, though I hoped otherwise.— Hereafter our Sept. examination must be so arranged that the members of the committee may be more constantly present.— The professors have so much to do that they can scarcely find time to attend the whole of an examination like ours during term time.— All those on our committee have four recitations, and two have five daily, but they were in at the examination more or less as they found opportunity. The President attended part of the time.

You will see by the marks how the applicants have acquitted themselves. Greenlay has done well, — the others not so in all things.— Greenlay is prepared to go on. There is no question in my mind as to the ability of the others to master the engineering course Greenlay had no collegiate studies to attend to last spring, hence his better preparation.— The deficiencies of the others are mainly in the branches of minor importance (if any can be said to have that rank), and in branches which must be more or less recapitulated as we take up their applications to engineering.— For instance, Prof. Mahan in his programme "B"— contemplates a "Recapitulation of the most important theorems of statics and dynamics which find their application in the various branches of the programme." The same as regards the principles of chemistry.

It seems to me now that the best interests of the School will be secured and promoted by taking this class of three into the curriculum course.— I have the matter of programme "B" almost altogether collected and arranged.— During the year we can test it and perhaps find some changes suggested by experience.— As the first part will embrace subjects somewhat familiar, I shall find the time, as I have before said, to finish programme "A" shortly.— Next year then we shall be prepared to examine students for the Preparatory Dept.—and insist on the proposed standard to the utmost. Moreover we shall be able to prepare an extended statement and prospectus for the catalogue which will be issued in a few weeks.— The students have good minds, (better than the average) and will do well.— I did not examine them in algebra and geometry as they have had constant application of those subjects in their course with me.— I submit the above views and reasons, with the report and recommendation of the committee for your consideration.

Besides arranging programme "B", (as far as possible, before further consultation with yourself and others), and consulting and selecting text books, I have commenced the synopsis of geology.— This will be ready to forward to you by to-morrow or next day.— As regards programme "B" I have arranged enough to furnish one year's work and have also the skeleton of the rest.

I should have stated in the proper connection that I delayed the examination one day, i.e. until Tuesday, because the students, (who were left by Prof. Q. to do some final observing) did not return until Saturday afternoon.— The report of the examination I shall copy in the record book which I have procured, wherein will be kept records of all examinations, the monthly and semi-annual reports of study, progress &c.—

I have purchased a few books and other items for the School, and these I will now enumerate. The text books are only such as I shall actually need for study and reference. All books and stationery I obtain at a discount of 25 percent on the retail prices.—

1871			
June 15	One large blank book 4 qrs. for records		1.60
" "	" memorandum " and pencils		.40
" 22	New Ed. Peck's Mechanics		1.50
" "	" " " Practical Calculus		1.39
	2.00	2.00	
Aug. 23	Loomis' Astronomy, & Loomis' Meteorology		4.00
" "	New Ed. Townes' Chemistry		2.50
" 24	Quarto blank book, 4 qrs.—(library catalogue)		1.00
	.25 .40 .45		
" 25	Ink eraser, "clip"; paper fasteners		1.10
Sept. 1	Gillespies' Higher Surveying		1.88
	One table with three drawers, for use in the drawing room.—		7.00
			\$22.37

The table is a necessity in the drawing room, as I expect to work there to some extent, while superintending the drawing. Besides the above are some items for which I have not paid, as I have not called for the bills.—

Weisback's Mechanics of Engineering and of the construction of machines, probably (a large 8 vo. of over 1000 pages) for reference	}	4.50
Henck's field Book for RR. engineers		1.65
Warren — Drafting Instruments &c		.75
" Elementary Projection drawing		.80
" " Linear Perspective		.95

I have also ordered three drawing boards, three small stools to stand on at the drawing stands & half doz pointers, all of which should cost between 6 and 7 dollars. The charge for the letter press and book will be about \$10.00. Besides this there may be a small charge for putting up slates and also remodelling the shelves in the Thayer library room.— All of these items will, in course of a month or two, make a total of between 50 and 60 dollars. I do not think there will be any more items of importance for some time to come. The college has furnished me a small table for my recitation room and I shall expect to have the use of one or two of its chairs.—

The question of heating the rooms will come up very soon.— I have not yet thought to mention it to the President.— If we heat the rooms at our own expense I shall need two stoves. They will not cost much however, for I can get good second-hand stoves very cheap.— What wood we shall use during the winter will probably cost between 20 and 30 dollars,— perhaps not much over 20.—

I have ordered from the extensive mill in Lebanon, where Sturtevant turns out material of many varieties of timber, *specimens* or *samples* of all the woods used either for construction or ornamentation, which he works up in his establishment. I shall also take occasion to obtain before long samples of the more important building stones, different kinds of brick, samples of lime, cements &c, for future instruction and illustration.— That little room off from the recitation room is just the place for samples of all kinds. I am [in] hopes during [. . .] this and the next year to make a collection of samples of building materials, both of wood, stone, brick and metal, which will be useful and valuable.— Under the subject of limes and cements we can perhaps make experiments, and find the application of chemistry.—

I hope that the attack you mentioned is not a serious one, and the more so since receiving your last note.—

Please excuse the bad appearance of this letter, as it is written rather hastily.—[. . .]

✂ THAYER TO FLETCHER: *September 11, 1871*

MY DEAR SIR, Yours of Sept 7th received. The purchases therein specified which you have made & propose to make are approved.

The Report of the examination of the candidates is satisfactory & the admission of Porter & Hazen for the reasons stated is approved; Go on with the work you have on hand & report progress from time to time; I shall wish you to come here probably about the beginning of October I am not yet in working *trim* altho mending.

Hanover N. H.—

Gen. S. Thayer.—

Sept. 20th -/71

Very Dear Sir.—

Your note of 11th inst was duly received.— I have the honor to report that the Thayer School of Civil Engineering has fairly opened.— I have commenced with a thorough but brief review of Surveying, as laid down in programme "A," with use of all the instruments in the field, and will extend the study to include the Higher Surveying. This, with the necessary out-door work will occupy the time into November.— I have also commenced a course of industrial drawing, following Mahan's text book to begin with.— For surveying, I use Gillespie.— Morning recitation 8 to 9 o'clock.— Drawing, 9-11 A.M.— Out-door work 2 to 4 or 5. P.M.—

I have the synopsis of the chemistry more than half finished.—

I have been very much shocked by the horrible news in regard to Prof. Mahan, which appeared in yesterday's paper.¹— It is hard to imagine a reason for such a dreadful step,—considering his position and prospects.— His contemplated retirement, it seems to me, would hardly present adequate cause, for he was said to be well off. I had written to him but two days previously and had sent a copy of the report of the examination.

After some consideration of the matter, it strikes me that the College is no more bound to furnish stoves and to heat our rooms

than it is to furnish slates or drawing stands.— I do not see that we can do otherwise than heat our rooms ourselves.— I have procured two second-hand stoves, formerly used by the Chandler Dep't. They are in good order and will last for years.— The cost for the two and for pipe will probably not be far from \$12. The necessary wood for the winter will cost about \$25.— (3½ cords). So the total expense for heating this winter will fall below \$40., I am confident. I have a stove in the drawing room and one in the recitation room, but probably we can use one room *only*, part of the time in cold weather.—

I am having the books labelled, in the style shown by the enclosed.— The other label I use for various purposes, to mark articles belonging to the School.—

Very Respectfully
Your ob'd't. servant
Robert Fletcher

1. Professor Mahan had drowned in the Hudson River near Stony Point, New York, on September 16, 1871, aged sixty-nine, apparently through suicide.

