I send the money for clark to Chelton for him to purchase the bill or the sovereigns

Princeton Nov 1st 1838

My dear Sir

I have been of late overwhelmed with letters and extraneous business — business as well as trouble seldom comes alone. I have been working very hard at my paper and have broken off by force to day to fulfil my duty to you in the way of preparing letters for Europe. I regret that you had not so arranged your affairs as to spend a day or two with me at Princeton previous to your departure since in conversation a thousand things could be suggested which the pen cannot call up. — I have given you a letter to Mr Sturgeon who you will find a very honest and hard working man who has raised himself to considerable standing from the lowest situation — He and Mr Faraday are not on good terms Mr Sturgeon is at the head of the second rate philosophers of London — I esteem him and think he may be of some advantage to you do not fail to give him my letter since it contains other matter than the introduction — you can put the letter into the post should you not see him and leave the package at the office of the Electrical Journal — I have Erik Clark optician Southampton arcade 12L 17s. 6d for some app[illegible] purchased for the college and [illegible]

Did Tom and Feather forward my parcels and — Send me address in London — With any wishes for your success and your safety return to relations and friends I seek you a sincere and affectionate adieu

Joseph Henry

enclose money to about that amount which you can deduct off when you purchase the gold coin for your pocket money — Please to pay him as soon as convenient after your arrival in London — Clark is a very good workman and will be very attentive to you. be cautious with him and while you treat him with apparent unreserve be somewhat guarded. he treated me very kindly indeed but still I did not put myself in his possession — If I have time I will write to Mathias Dr Torrey will probably give you a letter to him. you will find him a good fellow and I think very friendly to Dr Torrey and myself you must patronize him if you can in the way of his business — I will write to him in a few days in answer to a kind letter I received from him.

— I also send by you a letter and package to Mr Henshaw a cousin of the chemist. This person is an engineer he has sent me several volumes of the Rail way Journal — I do not know that he will be of any service to you I have however mentioned you in my letter — This letter you can drop into the office and leave the package at the rooms of the Royal Society in the care of the assistant Secretary Mr Robertson

I also gave you a letter to Nicol of Edinburgh who was very kind to me my letter is therefore one of acknowledgment as well as of introduction of you please send it by the post if you should not see him — I hope you take according to the promise of Dr Torrey some specimens of fossil wood for Nicol — do not forget [illegible] also gave you a

Mr Rae Reay will be sent to Chelton by the Pawsom of Princeton who stands on Cranbury Avenue

letter to Rush whom you will find a very ingenuous man and very willing to communicate to any person

I also give you a letter, to Dr Holland of London a gentleman to whom I believe I never was regularly introduced but who was always attentive to me when we met He appears to be a person of learning is much about the Royal Society and the Royal Institution and I believe is a man of the letter He is a great admirer of Mr Faraday and will probably be of service to you — The clock this moment strikes 11 and I start early tomorrow for Philadelphia I have not given as many letters as I intended you will however find no difficulty on that score too many letters would rather be a burden to you Should you meet with Dr Forney's young Quaker friend Mr Christian give him my best respects — I was obliged much against my inclination to name a day on which I would dine with him the time however was well spent and the company at his Father's house highly respectable and very agreeable — I have little to say in the way of advice you will probably find it difficult to preserve your equanimity and not find yourself falling into an unnatural state of feelings and actions or in otherwords assuming a character not entirely your own You will of course be a little watchful of yourself on this point and endeavour to carry yourself as modestly and unassumingly as is consistent with true dignity of character. England is to us a Fairy Land & when we find ourselves actually there and in the presence

Dr Holland is one President of the Royal Institution

of those whom we have long considered almost more than human and find them but mere superior perhaps in some respects to ourselves and treated by them with that attention which forms a part of their hospitality we find our at first a little unsettled ~~and~~ which placed in this unnatural condition. Give Old Pixie a blowing up about Shilton's apparatus which I purchased and paid for I am laying out of the use of my money all this while and cannot settle my accounts until the arrival of the articles — Tell him I will advise the

Dr Asa Gray
care of Dr Chilton
Broadway
New York

all americans from dealing with him unless he fulfills his engagement ~~his engagements~~ — I regret that I have not a lot of my papers to send with you I hope however that I will get the article published before you leave England — The investigations are the most important I have ever made. I have an agent in London Mr O Rich no 12 Red Lion Square I will write to him by the next Packet and thus introduce you. He will be of much service in the way of purchasing books

(Confidential)

Princeton Dec 12th 1846

My dear Dr

I have been so much overwhelmed with business since I last saw you that I have not found leisure to give a moment's attention to the article I promised.

The die is cast and I am sold for the present to Washington. I have accepted the appointment at the solicitation of some of the friends of science with the hope of saving the generous bequest of Smithson from utter waste. I have formed a plan which if I am permitted to carry out will I am sure render the Institution

of the highest importance to the science of our country and aid the labours of every true working man of science among us.

If I find that I cannot succeed in carrying my plans and that the money is to be squandered on brick and mortar at Washington I shall resign and leave to others the honor of the perversion of a noble bequest.

I shall endeavour to stay proceedings at Washington and get time to elaborate more definitely my plans by conversation with scientific Friends and otherwise

I must see Pierce & yourself

I regret that the Regents have published in advance of their plans because when once committed a politician can never change his course

I start for Washington this morning – Since my appointment I have been overwhelmed with business and feel rather over worked.

I have made up my mind to the most disagreeable notoriety of newspaper praise and abuse

I have endeavoured to be ignorant of what is said of me and shall continue to do so unless my honor is impeached

Your friend

Joseph Henry

Dr Gray

Princeton Nov 5th 1847

My dear Dr.

In consequence of repeated journeyings between this place, New-York, and Washington since my visit at the north, my unanswered letters have so accumulated that I have only been able to clear them off after several days of constant labor. Your letter, though not the least interesting of the lot, has accidentally been left among the last to receive attention.

I am much gratified with the appointment of so respectable and influential a committee and I am confident their opinion will have great weight with the members of the Smithsonian Board.

I have no suggestions of importance to make in addition to those we discussed when I was in Cambridge. Should the Natural history society of Boston see fit to give an expression of opinion on the same subject it might perhaps be well for them to state that though

they approve of the establishment of a national museum yet they think it highly improper to put the support of it on the Smithsonian bequest, the income of which can be much more efficiently applied in the way of advancing natural history by the publication of expensive original memoirs on this subject.

The next meeting of the Regents takes place on the 8th of December and it is highly important that I have the report of the acad. in my possession before that time.

I rejoice to learn that our friend Agassiz is producing an admirable effect in New-York which cannot but redound to the good of American science and the advantage of your new school at Cambridge.

Wilkes and myself shall return to Washington soon to make an attempt to get up an audience for him in that city. The project originated with Wilkes but I shall give it a cordial and industrious support.

It was my intention to propose to the Board to engage Agassiz to open the Smithsonian Institution with a course of lectures as soon as the first wing of the edifice is fit for occupation which will be in the course of next summer probably about May and should the present plan not succeed the other will be carried out as soon as the engagements of the Professor at Cambridge will permit him to deliver the course. I am sure he will be of much service to Baird and myself in carrying out our plans for rendering the Smithsonian Institution great to our country and the world.

Please give my kind regards to your fellow Professors particularly to Prof. Felton and Dr. Walker. I regret that I had not an opportunity of seeing more of these gentlemen as well as of the other members of your faculty.

I was highly gratified with my visit to Cambridge it forms a bright spot in the events of my life and will always be conspicuous in my memory. I hope to have an opportunity of discharging a part of the debt in which you have involved me by attention to you

and yours at some future time in Washington

I learn from Walker that Peirce is very busily engaged on the investigation of the mass of Neptune from the motion of his satellite. How much interest this subject continues to excite! and how much on this account has it added to the national and intellectual pleasures of the world!

I remain as ever
truly your friend
Joseph Henry

Dr A Gray
Professor &c

P.S.
Perhaps in the report of the committee it will not be advisable to give me the credit of the plan of the Smithsonian disclosed on the programme. It is indeed eclectic I have taken hints from all quarters and put them together.

J. H.

(Confidential)

Washington January 10th 1848

My dear Dr

I presume you have been expecting a letter from me for several weeks past, and I regret that I have not been able to give you any account of the prospects of the Institution before this time. Indeed I am still unable to say what a day may bring forth. The Board continued in daily session for three weeks and since their adjournment I have been much occupied in preparing the Report and proceedings for publication.

The Report from the Amer. Acad. came in good time and served a good purpose. I regret however that it gave me the whole credit of the programme since it contained all the suggestions, so far as I thought them valuable,

=ge the spirit of economy which now appears to actuate the measures of the Board and because I thought if Owen was one out of the Board the whole could afterwards be adjusted. There was however one stipulation which I made namely that Mr Choate should have an opportunity to be present and object to the Resolutions if he were so disposed. For this purpose I sent him two telegraphic messages and one to Mr Sewell. The latter gentleman came on and by means of another message induced Mr Choate to start for Washington. Mr Sewell was very anxious to be immediately engaged in the duties of his office though by the terms of his appointment he was not to begin his services until the Building was in a fit state to receive the Books. Mr Choate at first objected to the Resolutions and insisted that the business

of all the persons with whom I consulted on the subject; and because by giving me the credit for the whole of it I would be given were the article published. The programme was provisionally adopted in full with a few unimportant additions and corrections made by the committee of organization to whom the article had to be submitted and I was charged with carrying it into operation so far as the appropriation of funds for the purpose would permit.

When I came on to Washington I found Owen busily engaged in devising a plan to increase the income of the Institution so as to cover the odium of the expenditure on so large a building. For this purpose he proposed that the operations of the Institution should be limited to an expenditure of 15 thousand dollars annually instead of 30 thousand until the end of 4 years from next March or until the building shall be completed; the other 15 thousand with its interest to be added indirectly to the principal and thus to make the annual income ever after 40 thousand dollars instead of 30. I at first gave but little attention to this matter I was however surprised to find that Owen had brought every member of the Board in Washington to his scheme and when I found that it was the approbation of Bache I was induced to look upon it with more favour and at length to desire its adoption, at least in part, for I wished to secure:

to back me I think all things will go well during the present year. I hope to be able to receive Pierce's paper in the course of two months. The Ethnological memoir is not yet published - it could not be completed until after the meeting of the Board because I had but 1000 dollars to expend on the article. I start tomorrow for New-York to make the final arrangements for the printing of the Memoir of Squier and Davis. The wood-cuts and plates are nearly all finished.

The attention which Squier has received from some of the great men in Boston and New York has nearly turned his head and caused him to give me considerable trouble.

I will write to Pierce relative to his paper. What I have given you is confidential as even you found Dr. Gross

Name is a handsome one. He Hoover to look into the opinion of the committee by the appointment of a committee. This I think will keep

I walk Dunn

of books should be commenced immediately he known I think come to regard the proposition more favorably, and on condition that Mr. Jewett should be immediately employed in the way of preparing catalogues and making arrangements for the purchase of books at the proper time the Resolution passed. During the present year I shall have about 7000 dollars to expend in the way of memoirs, exchanges, affiliations, &c. and as I am not anxious to push the operations too rapidly, I am, for this year, content with this sum. If however all things go on well we shall require a larger sum the next year which must be drawn from the interest and the desired result (the increase of the fund) - produced by an extension of the time of putting

up the less essential parts of the building

I had no idea at first that Mr Owen could have any chance of getting into the Board after his time expired, Mr Rush has signified a desire to remain in Regent during his absence and there was therefore apparently no vacancy I was however surprised by the proposition from one of Owens friends that Mr. R. should be made an honorary member and Mr O elected in his place. Finding that Owen would probably get in I had a free conversation with him and insisted that he should resign his positions in the executive and organizing committees and confine his ~~whole~~ attention to the building. To this he agreed. The Board afterwards on motion of Gen. Hough recommended Mr O. as the successor of Mr Rush. This appointment however has not yet taken place. It will probably be nominated in the ~~House~~ Senate and the nomination sent to the House for concurrence. I know not what will be the result.

At the beginning of the session of the Board I presented my report which should have gone through the hands of the committee on organization in accordance with the resolution of the Board under which I acted I showed it to Bard - and Hilliard and then presented it to the Board it was well received and ordered to be entered at large on the minutes. A resolution was adopted directing the Secretary to report annually the condition and operations of the Institution so that in future I shall not be controlled by a committee

The executive committee now consists of Seaton, Bache and Pierce, and with the two latter

Washington May 23rd 1848

My dear Sir

I presume that you are still somewhat interested in the affairs of the Smithsonian and desire to know what we are doing. I should have written to you before this but I am so oppressed with correspondence that every letter costs me. I may, however write to you with less care than to others and consequently with less expense of time. All things relative to the Smithsonian Institution are now in a quiet state the attacks made upon it at the beginning of the present session of congress have ceased without any serious result and I think the knowledge of the stability, regularity and usefulness of the Institution is every day becoming more & more

P.S. For Smithsonian Reports to Congress still in the hands of the printer but will be forwarded in the course of a week or two

favourable. The Library committee of Congress to whom the nomination of the Owen was referred have come to the conclusion that there is no vacancy and that the absence of Mr Rush is not a sufficient ground for his leaving the Board. Mr Owen is in the city and apparently acquiesces in the decision of the committee.

I hope in due time to get control of the affairs of the Institution. The members who were in the Board at the time of my election are fast passing out and those which remain are either my best friends or take but little interest in the affair.

The memoir of Davis & Squier is still in the press but will be out in the course of a few weeks. I think it will make one of the most beautiful books ever published in this country. It has however given me much trouble printing in New-York while I am in Washington is a very inconvenient arrangement

I have however to establish a small printing office in connection with the Institution. In the publication of the memoir of Squier and Davis I made one false step which has caused me much trouble namely I allowed Squier to superintend the engravings and the printing and he has I say this in confidence proved wholly unworthy of the trust. I hope however to get through with the volume without further difficulty. The building is rapidly advancing and will be ready for use in one wing in the course of the present summer. I have concluded not to attempt to stop the erection but to endeavour to control the expenditure. I hope in due time congress will be made to see the injustice of putting the keeping of the national museum on the Smithsonian fund and not only keeping for its keeping but also in part refund a part of the expenditure on the building which has been erected to contain it.

Dr Hare offers under the condition that a suitable room be provided to give his apparatus to the Smithsonian Institution. The gift will not only be of importance

to the Institution in the way of research and illustration but also as aiming to establish a precedent which I hope may frequently bring us in other donations. It will also serve to increase the confidence of the public in the stability and character of the Institution. I have received several papers for the second volume of the contributions and shall commence the printing of it as soon as the first volume is through the press. This will be I hope in September.

I have been considering the the subject of Reports and wish to consult you particularly on this point. All our operations thus far have been of a scientific kind intended to increase rather than to diffuse knowledge. I have thought of getting prepared before the end of the year of possible Reports on the following subjects

1 On the present state of chemistry as applied to the agriculture with simple directions for the analyses of soils &c

2 On the economical and other uses of the forest trees of our country their mode of culture method of transplanting &c &c with a popular description of them &c. &c.

3 On our astronomy giving a sketch of the

their discoveries and particularly what has been done during the last few years as well in our country as abroad. The

Hour on the phenomena of lightning with directions for protection from the danger of meteors and

These reports should be prepared on the plan of the Smithsonian reports of Lubbock sufficiently popular to interest the many while it will also instruct the few. The first report will be prepared by Dr Lewis Beck the second by Dr A Gray of Cambridge the third by Professor Peirce or Professor Loomis and the fourth by Professor Henry. What say you to this arrangement? For report on astronomy I should prefer to have prepared by Professor Peirce were it not that an account of his own labours would be included. How would it answer to give the report of the discoveries made abroad to Peirce and those of our own country to Loomis?

As to the compensation for these reports I can say nothing very definitely the whole is as you know very much a matter of experiment. The price should not be put so high as to make it much of an object to prepare these reports and yet sufficient to reward properly the labour of preparation. The Board appropriated 500 dollars for a beginning of reports

during the present year but something may be derived from the sale of the articles. Suppose we should say ~~[illegible]~~ from one dollar to one dollar and fifty cents a page with an addition to be derived from the sale or the writer to receive a certain number of copies to dispose of on his own account. What is the amount per page given by the North American Review?

Besides the Report on the forest trees of our country much good might be done by giving a report on the foreign plants which may be advantageously introduced into our country the mode of culture to be adopted perhaps this might come in under the other report but I think the subject demands a separate article which I think would be made the basis of an action in Congress several members have spoken to me on the subject — This report might be prepared for the next year. I depend upon you to the charge of the botanical branch of the reports and if Dr Torrey should wish to join in some of them, do not attempt to direct the report on forest trees but give the subject your immediate attention. I would have written to you before on this subject but could not properly do so until I saw my way clearly. Write to me as soon as convenient and compare with Pierce on the contents of this letter.

Yours truly
Joseph Henry

Dr A Gray

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Washington
July 17th 1848

My dear Sir

On my return from the North I found your letter on my table and I have waited from day to day that I might be enabled to acknowledge the receipt of the book you mention; but owing to some unexplained delay, it has but just come to hand. I shall not fail to show it to Mr Pearce and to the other members of the Board of Regents now in Washington. I agree to your several propositions as to the Report. Funds can be advanced from time to time to defray the necessary expense during the progress of the work. I should like to have a programme of the plan to present in my next Report, and then the first number may appear in the Autumn of next year. I am pleased with the idea of illustrations from original sketches, and in all cases of illustration it will be well for us to procure original drawings and not to follow the ordinary custom of copying from stereotyped figures. With regard to compensation the method you propose will be adopted provided Congress should not see fit to print the work as a Public Document. In that case an equivalent

remuneration to the one proposed will be made you. Even should the work be adopted by Congress, we can strike off another edition on better paper for sale. As to The Genera of the Plants of the United States I cannot speak at this moment so decisively, tho I have little doubt that the assistance in amount you mention may readily be procured. The only question in my mind is the proper method of effecting it without interfering with our general plan and establishing an inconvenient precedent. Were the work in the form of a quarto volume such as we could attach as a part of our Contribution to Knowledge there would be no difficulty in the case. Perhaps the simple plan will be for us to subscribe for a certain number of volumes. Send me as early as convenient the testimonials you mention and I will confer with the Regents in Washington.

I have just received a letter from A. E. Desor the friend of Agassiz, asking to be employed in the preparation of a Report on Natural History. Inform me confidentially as soon as possible, if you consider him a proper person for this work.

I remain very truly yours &
Joseph Henry

Dr. A. Gray

Princeton Oct. 5th 1840.

My Dear Dr,

The first volume of the Smithsonian Contributions to Knowledge is now in the hands of the binder, & will soon be ready for distribution. Can you oblige me with a list of the foreign institutions to which you think it ought to be sent? To what institutions does the American Academy send its transactions?

I am about beginning the preparation of my report for the next meeting of the Regents, and hope you will not fail to send me the programme, you have promised me, of the report you are to furnish on the forest trees of the U. S.

I have advanced to Dr. Torrey $100, to be expended under your direction, for drawings to illustrate his paper on the new plants of Oregon.

The meeting in Philadelphia for the promotion of science, I think was entirely successful, & the association bids fair to exert an important influence on the progress of science in our country.

I remain, as ever,

Your friend

Joseph Henry

Dr. A. Gray,
Cambridge.

Washington Dec. 22nd 1848.

My Dear Doctor,

The Board of Regents is now in session, & all things relative to the Smithsonian are apparently in a harmonious & prosperous condition. The east wing of the building is finished, and will be ready for use as soon as the heating apparatus is arranged. Prof. Jewett will enter on his duties immediately, & will relieve me from much that is irksome & unprofitable to me. Mr. O. is no longer a regent, & by the loss of his election to the Senate, will probably not be able again to secure a place in the Board.

My Report will be given in to Congress about New Year, & if in the course of a few weeks you can furnish me with the promised programme of your Report on forest trees, I shall be much pleased. It may be printed as an appendix at any time during the session of Congress, though it would be best to have it prepared as soon as possible.

I am not yet quite clear as to the manner in which he can assist you in the continuation of the publication of your work on Botany. Agreeably to the financial arrangements adopted at the last meeting, one half of the income of the original bequest is to be devoted for the next three years, or until the

building is completed to the building fund. This arrangement was at first proposed with the idea that all operations relative to the collection of a library would be postponed until the building should be completed. The friends of the library however would not consent to this, & they insisted upon calling in the services of Mr. Jewett at the beginning of the present year. This was agreed to, & both parts of the general plan will hereafter be carried on jointly, the portion of the income remaining from the building being divided between them. Though I do not think that we shall adhere rigidly to this arrangement, since we shall require more money to develope the plans of the Institution, — yet much economy will be required in conducting our operations, & but little expenditure will be allowed for objects not immediately embraced in the programme. I think it however highly important that your work should be continued, & I regret that it was not at first presented as a Contribution to the Institution. Cannot parts of it still be presented in this form, so far as they are original, & afterwards be republished in your volumes? You might in this way save the expense of the plates. If you still think we could most effectually aid you by the purchase of — say a hundred copies, I will place the proposition before Mr. Marsh & those most interested in the library, in order that part of the purchase money, if not the whole, may come from the library appropriation. If our funds were entirely free at this time, I think there would be no difficulty in adopting the plan proposed, & if you can wait until three years from next March I doubt not that the required assistance can be rendered. I hope however that you intend to visit Washington during the present Session of Congress, & that we may have an opportunity of ascertaining definitely what can be done.

What is the state of the paper in preparation for the second volume of the Smithsonian Contributions, on which I have advanced $100 to Dr. Torrey?

We have just got into a new house, & shall be happy to furnish Mr. Gray & yourself with accomodation, when you next come to Washington, under our own roof.

If the east wing of the Smithsonian building is ready to be occupied before the close of the present Session of Congress, lectures will be commenced in it; & if so, cannot you oblige us by giving a short course? Our funds will not allow us to pay much at present, we might however give you enough to defray your expenses here & back, which might be an object if you are obliged to visit the city.

There is an attempt making here to ta-

vive the National Institute, & Bache & my self have been solicited to allow our names to be included in the list of officers. We have however declined; though it is a difficult matter to know what is the proper course. The expense of keeping the Museum of the Exploring Expedition ought not be put upon the Smithsonian fund, while on the other hand the collection should be under the care of some institution properly organized. If the National Institute would confine its operations for the present merely to the care & increase of the collections now in Washington, it might render good service to the country, & in time, under other direct or relative it character. It cannot however ever become a National Institution in the proper sense of the term without securing the coöperation of all the real men of Science in the country. But this can scarcely be accomplished because they are so widely separated. Washington is not, like Paris, a nation in itself.

Mr. Henry joins me in kind regards to you & yours.

I remain, as ever

truly yours

Joseph Henry

Dr. Gray.

P.S. I have now a confidential assistant who relieves me very much by writing to my dictation. J. H.

Washington January 18th 49

My dear friend

Your favour of the 1st of January was received last week by the hands of Capt Davis and I have delayed answering it until I could get some definite information as to the appointment of a botanist to the boundary survey.

I wrote immediately to Col. Emory who has been appointed to command the expedition but did not get a reply until yesterday. I enclose his letter

You have no idea of the difficulty of transacting business in this place and how much my time is cut up and dissipated by visitors and correspondence of an unimportant kind. To

a very pleasant house directly in the rear of the Patent Office and are now comfortably situated. The affairs of the Smithsonian are now getting into order Prof. Jewett has entered on his duties and will relieve me of some of the drudgery to which I have been subjected as man of all work for the last two years. The Board of Regents have adjourned after a very harmonious session all the arrangements I was anxious to have made have been settled to my satisfaction. Your report will be printed as soon as it can be prepared — I think we shall be able to purchase two copies of your book provided you can wait until the end of three years. I recommend an plate from Agassiz which I presume he intends for one of his papers in the Smithsonian Contributions It is very beautiful. I remain as ever truly yours &c

Dr Gray

Joseph Henry

obtain a single interview with one of the heads of Departments during the session of Congress members having precedence of all others sometimes cost me several calls. Most of the business has to be transacted at this season of the year by letter and these answered by clerks. I make these remarks to excuse myself in part for the seeming neglect of your communication.

Naturalists of late have become quite plenty. I have now on my table six applications for assistance in obtaining situations as explorers of California.

I doubt whether any appointment of the kind will be made this session. Buxton thinks all operations of this nature should be performed by the officers of the army or navy. He has introduced or asked leave to introduce a bill for the discharge of all civilians from the coast survey. He has attacked the geological surveys & the exploring expedition. Though he has but little influence at present yet he is feared.

I will see the secretary of state on the subject of your letter and endeavour to learn definitely whether an appointment of the kind can be hoped for from the present administration.

I am sorry to learn that Mrs Gray has been unwell but hope she will soon be restored to health. When you come again to Washington we shall be able to offer you and yours a room. We have taken

Smithsonian Institution
Feby 7th 1849
[FEBRUARY]

My Dear Dr

I have called upon the Secretary of State and though he professes himself very favorably disposed to advance the cause of science he does not give me the slightest encouragement relative to the appointment of a botanical on the boundary survey. He informs me that there is nothing in the act directing the survey which will authorize such an appointment

I am sorry to say that I do not see our way very clearly as to the adoption of your botanical book. Were the matter to do again we could manage it without difficulty by adopting the whole as a part of the contributions. Now it must either be adopted as one of the Reports or we must purchase a sufficient number of copies to enable you to go on with the publishing

There are difficulties in each course but the latter appears the most feasible though we cannot adopt it until the building is finished. I hope however to have a long conversation on this and other matters when we meet. In the mean time I hope you will not forget the Report on Forest trees. Could not a considerable part of your other work be introduced into this?

I wrote to Agassiz a few days ago authorizing him to go on with the preparation of his plates for the illustration of the paper on the Cetacean remains. He sent me one of the copies as a sample which I think very beautiful.

We hope to get out a volume of our Reports in the course of the next summer. Among the numbers will be one on the application of science to arts, giving the more recent improvements.

Remember me to Professor Peirce and your good Lady and receive for yourself the assurance that I remain as

Ever your obs.

Louis Agassiz

Dr. A. Gray
Cambridge

P.S. I have written to Dr Torrey to prepare a Report on the present state of our knowledge of the Physiology of Botany. He does not however seem willing to engage in it for the present at least.

Washington July 21st 1849

My Dear Sir

Your letter of the 8th inst was duly received by the Lowering and I have to regret that owing to the press of business under which I am now labouring and shall continue to labour until the adjournment of Congress I had not an opportunity of giving him as much of my time as he is entitled to from his connection with you.

The Secretary of War has sent this afternoon the accompanying letter which though it is perhaps not quite what you expected yet I hope it will be of much service to you Botanist.

I have just had an interview with an Officer of the Army, Major Kendrick of the 2nd Artillery under orders for New Mexico who will be much pleased to collect plants for you provided you furnish him with a set of directions as to the method &c you can address him at Jefferson Barracks near St Louis. He starts for Santa Fe but will probably make many excursions in to the country around. He is a graduate of West Point and has much taste for science. I wrote a few days ago to

inform you that I could not get any encouragement relative to the appointment of a botanist on the Mexican boundary. Major Kendrick was recommended to me at the War Department as the proper person for your object. He belongs to Company B. of the 2nd Artillery. He leaves Washington in the course of a few days for St Louis.

Withregard to the adoption of your Genera I scarcely know what to say we are so pressed for funds and shall be so until the building is completed, that I had concluded to begin nothing in the Report line but articles of a more popular nature such as the Report on Chemistry applied to Agriculture the Report on Forest trees &c. Give me a particular account of the work of the number of volumes it will occupy – of the cost of each volume including the plates of the number of copies which should be struck off – of the plan of offering it for sale – of the time which would be required to prepare and publish the work – Whether it should come out in volumes or in parts – I hope your good Lady has recovered and that free from all interruptions you are now prosecuting with your usual ardor and energy the mission allotted to you in the distribution of our duties by an all wise and benevolent Providence.

All things relative to the Smithsonian are just now in a quiet and apparently very favorable condition. You have probably seen by the papers that the coast survey has had a little brush but it has been made the stronger by the contest. What a noble report was that of Pierce and the other members of the committee of the House. It produced an excellent effect in Congress and was worth a hundred clap trap puffy articles such as are usually got up for the purpose of gulling the members of our national Legislature.

If the scientific men of the country will only be properly united they can do much for the advance of their pursuits through assistance from Congress. Politicians as a class are timid except when they have an object which they know is worthy and in the advocating of which they are sure of being sustained by authority.

All the world is to be here in the course of the next two weeks. One of my very intimate acquaintances (I do not boast) has been nominated for the Secretaryship of State I allude to Mr Clayton.

Give my kind regards to Professors Peirce Guyot, Gould and Bond and receive for yourself the assurance that I remain as ever truly yours &

Joseph Henry

Dr Gray

If the ~~fact~~ laws passes congress to establish a new mint in the city of New York Dr Torrey must be appointed one of the officers. All his friends must unite on this. The appointment would be just and popular

J. H.

Smithsonian Institution
Washington March 20 1849

My Dear Sir

I beg leave to inform you that Lieut Woodbury, U.S.A, has left this city within a few days, to join his command, at Fort Kearney, which is about two hundred miles above the mouth of the Platte River. As he has agreed to collect, and preserve the plants of that vicinity for you, I subjoin his address to which any communication you may please to send him must be directed; viz Lieut Woodbury, Fort Kearney (via Linden) Atchison Co, Missouri.

Dr Foreman, my assistant, gave him such instructions as, default of better, would aid him in collecting and preparing the plants, but it will be best that you write to him yourself, and give him such definite instructions, as you may think proper, with directions as to their transmission home.

Dr Foreman has suggested that you should furnish detailed instructions in regard to the method of collecting plants, which we may have printed, and ready to furnish on any occasion which may offer. It might be well also, to have prepared, similar instructions for the collection of other objects of Natural History — and, could you not prevail on Dr Gould and other Naturalists in Boston, to furnish us with instructions of this kind? Full credit will be given to the authors.

I fear the adoption of your "Genera" just at this time will be too heavy an undertaking for us, but if you can delay the publication, untill our funds will be free from the expense of the building,

we can then go on with it. For the present, the Report on Forest Trees will be as much as we can do, in the way of Reports on Botany. You mention the propriety of our purchasing the stones, and I agree with you in opinion as to this. We have just paid $150, for the stones on which are engraved the 52 quarto maps of Squier and Davis' Memoir. At this rate, the stones from your genera, which might be used in the Report on Forest Trees, could not cost much; and I could advance the money for them, at almost any time.

Enclosed I send you some letters, extracts from which, you may send me, should we conclude to make any arrangement in regard to the "Genera".

I remain very respectfully
your obedient servant
Joseph Henry
Secretary of Smithsonian Institution

Dr. Asa Gray

Washington April 2nd
1849

My Dear Dr.

I write to suggest that in the preparation of your Report on Forest trees you apply to the Hon Mr Marsh of Vermont for information relative to the economical value and uses of timber. He was once engaged in 'lumbering' and has I think much information on the subject. I have found him since I got under his hat a most estimable gentleman of extraordinary acquirements not only in litterature but also in general science.

Washington presents just now quite a contrast in appearance to what it was a month ago. The deluge of office seekers a few days in Washington to recruit and then return to the north.

I remain as ever truly
Yours friend &
Servt
Joseph Henry

Dr A Gray

P.S. Mr Lewis Haynesworth of Blossburg Tioga County Penna starts in a few days for for California via Fort Independence St. Fe &c I will request him to make a collection of plants for you

I wish you would send me the instructions I requested in my last letter. J. H.

has subsided and the Hotel Keepers have again a vacation.

Professor Koepken has just finished a course of four lectures on Greece which has been attended with full houses. The lectures appear to have taken very well though they could not be more than half understood on account of the pronunciation of the speaker.

I think courses of lectures in Washington will tend to do much good there are in the several offices of the city many intelligent gentlemen with small salaries who will attend with their families provided the lectures are free.

We have not yet got into the new building though it has been promised to us for three months past, we shall however probably move into it this week.

I have heard since this letter was commenced that Agassiz has arrived in the city and that he is in bad health. I will call on him and let you know more about him before I close this letter:

When you next visit Washington cannot you bring with you some of the large drawings of the Lowell Institute and give us a few lectures on botany or any other subject you may choose?

I have seen Agassiz he appears to have been overworked but looks much better than I expected to see him. He will remain

the introduction only in obedience with the authority of the law — I gave a brief history of the discoveries in Electricity bearing on the telegraph — an account of my own experiments and of the communications I have had with Mr Morse on the subject. The result of the trial I think will be doubtful — He claims too much but I am not certain that the law will sustain his right to the use of electricity & magnetism for making and recording marks though in justice I do not think it ought to do so. I was detained on account of the difficulty in verifying dates by the publications and was obliged to send two days with the clerk in the Library of the Academy.

Mrs Henry joins me kind regards to Mrs Gray and in grateful acknowledgements for your unwearied attention to us. We shall ever remember our visit to Cambridge as one of the most pleasant periods of our lives — Let me hear from you as frequently as convenient — With the assurance that I remain as ever your friend I am yours obt Servt

Joseph Henry

Dr. A. Gray

Revere House
Saturday morning
Sept 18th 49

My dear Sir

I regret that after remaining in Boston since monday night I am obliged to leave this morning in the train for Albany without seeing you — I expected to be detained but two days and to have spent a day with you — but I was not released until yesterday at 2 o'clock and then I was obliged to do some business which occupied me until night when I was so fatigued I was obliged to go immediately to bed. Mrs Henry proposed each morning since Wednesday to go to Cambridge without me but I expected to be released every afternoon and hence she delayed her visit that I might accompany her

the cloak which was left at your house probably belongs to Dr A D Bache. He has lost a dark blue one with velvet collar and plaid lining with holes in the back eaten by a mouse. Please send the cloak to Mr Bond the astronomer who will forward it to Dr Bache — By mistake Mrs Gray's vail was put into the ~~cha~~ carriage when we started for Portland — I leave this to be sent to you by the omnibus to Cambridge — Please put the "Etna" into the bundle with Dr Bache's cloak with a paper attached on which is written "From J. Henry." — I return you with this the letter from Lieut Alvord relative to the polar plant — I have no faith in the success of the experiment he wishes tried. It is however very easily made. Borrow from

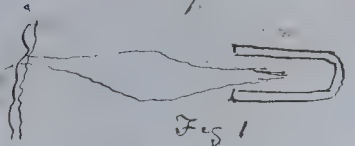

Fig 1

Lowering a strong horse shoe magnet and carefully approaches the two legs of the magnet to the bowl of one of the leaves so that a leg may be on each side. If any action takes place it will be shown by the leaf being attracted by the one pole and repelled by the other as shown in figure 2. If no action takes place the leaf will remain as in fig 1. Care must be taken that the motion be not produced by the disturbance of the air and to prevent this two panes of glass may be used as screens on on either side of the leaf the magnetic action is not intercepted by glass.

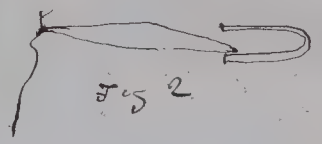

Fig 2

I also send you a letter from Bailey which he requests should be referred to you. Please give me your opinion of the proposition which it contains and return the letter to me at Albany. I am obliged to hurry ~~back~~ to Albany in order that I may make a visit to the observatory at Toronto before I return to the south. Bache and myself have concluded to have constructed immediately for the Smithsonian a set of self registering magnetic apparatus and in order that there may be no difficulty in using them it is thought best that I accept the invitation of the director of the observatory that I should visit him for a few days for that purpose.

I gave my testimony in the telegraph case unwillingly and as I stated in

Smithsonian Institution
Nov 21st 1849

My dear Dr

Your favour of the 19th has just been received. We shall be much pleased with a short course of lectures from Professor Harvey on his return from the south if he cannot give them when he first visits Washington. We cannot pay much, the drafts on our income on account of the building have left us for the present in rather low water. We can pay 25 dolls per lecture and any expenses which may be incurred on account of illustrations. Prof. H. could give us three lectures in a week and would therefore not be long delayed in this city.

I regret to learn that Sprague is unwell and that he comes on slowly with his drawings. I hope you will keep him alive, he is too valuable a man to be allowed to slip off the stage for want

of attention to his physical condition.

The second volume of contributions is in the press. Eight memoirs have been received and accepted. I have concluded to print each memoir separately after the plan adopted by the academy of Brussels. I do not think there will be any difficulty in the way of reference, if on each memoir we give the vol, and the number of the article in the vol.

I hope you will not draw on me again, if possible, until the 1st of Jany we shall then have from interest upwards of 20 thousand Dolls. The building has been pushed on very rapidly this fall in order to close it in previous to the begining of winter.

write Walker.

I would be pleased with an account of the progress you have made in the Report on trees to present to the Regents at their next meeting which takes place on the 1st Wednesday (the 2nd) of Jany. Also an account of the explorations of Wright, and any ~~other~~ suggestions ~~which~~ which you may be pleased to communicate.

I have spoken to Professor Lewett relative to Michaux and he agrees with me that it will be best for you to secure the copy you mention for the Library of the Institution, you can have the use of it for the preparation of your report.

All things relative to the Smithsonian appear to be in good condition. Our 1st volume has been well received abroad, and all the learned societies of Europe, from present indications, will exchange with us.

The box containing the articles you sent was received a few days ago, the books presented by yourself, have been deposited in the library, and will be acknowledged.

I am rejoiced to hear that the health of Mrs G has improved, and I shall not fail to inform Mrs H of the message to her. Dr Hare is at the table with me while I am writing this letter and bids me give you and your good Lady his kind regards and to assure you that there have been but few days of his life more pleasant than those which he spent at your house.

Dr Torrey's youngest daughter is to spend the winter with us; she is expected at the opening of congress. Shall we not have the pleasure of a visit from Mrs Gray and yourself this winter? Cannot ~~we~~ you favour us with a course of at least 3 lectures – we shall, I think, be able to make your time pass agreeably in Washington and both Mrs H and myself would be delighted to have you for our guests.

I remain as ever your friend & servant

Joseph Henry

Dr Asa Gray

P.S. Please sign the accompanying account and return it to us. The allowance for stragglers without for the explanation may produce some difficulty in auditing the account. J. H.

P.P.S. Enclosed I send you samples of shavings from dead wood for examination under the microscope J. H.

Smithsonian Institution

December 30 1849

Dear Sir

I wrote to you several days ago enclosing an account to which I wished your receipt appended. Not having heard from you I fear my letter has miscarried. We send you a second copy of the account.

Also enclosed is a copy of a letter from Dr Trost upon which I beg confidentially to receive your opinion. What is the character of Dr Trost as a naturalist? Is he up to the present state of knowledge upon the subject he mentions? Will his paper be an original contribution to knowledge, or will it form one of our Reports? Please give me some information on these points as soon as possible that I may answer the Doctor's letter.

I remain very respectfully & truly
Your obedient Servant
Joseph Henry
Sec'y Smithsonian Institution

Dr Asa Gray

Smithsonian Institution
February 19 1850

Dr. Asa Gray
Sir

The package of plants mentioned in the letter of which the enclosed is a copy, has been forwarded this day by express line to your address. I beg to request that you will examine the specimens and inform me as to their value, and whether any of them would be worthy of special description in our contributions or some other publication.

I have also written a letter to the Secretary of War in behalf of Mr Wright, and I agree to your proposition in reference to the additional subscription of One Hundred dollars in his favor.

I am unable to say when the memoir on Wright's collections can be printed. The operations of the press here are so slow that I can make no calculation as to the time of the completion of the present volume.

You can draw on me for One Hundred Dollars in behalf of Mr Sprague.

I remain very truly and respectfully
Your Obedient Servant

[illegible]
Sec. Smithsonian Institution

Smithsonian Institution

February 26 1850

Dr Asa Gray

Dear Sir

The draft for $100. in favor of Mr Sprague was honored yesterday. We have received the accompanying letter from the Secretary of War. It takes no notice of one part of our communication requesting him to furnish a general letter to officers of the Army in the regions to be explored. We shall write again and call attention to this point, and if any letters are obtained they will be sent to you. We have also written to the Mormon delegate for letters.

We send an official circular from the Smithsonian Institution which we hope will answer the purpose for which it is intended.

Prof. Agassiz has arrived and lectures to day. In order to save time, I have concluded to give the printing of his papers in charge to himself at Cambridge. I find it impossible to get on otherwise than very slowly with the publication of memoirs in Washington, and since we have adopted the plan of printing each separately, provided the same type and similar paper can be obtained, the work can be as well done in Cambridge as here. We can thus have two memoirs in the press at the same time. If you will take charge of the printing of the paper on Wright's collection, it may be put to press as soon as you can prepare it. I shall place full confidence in your discretion and prudence with regard to the expenses, and shall request

Prof. Agassiz to confer with you with regard to the printing of his memoir, although I have the fullest confidence in his caution, still he may not have as much experience in doing business in our country as you have.

I have no objection to the proposition you make with regard to the working off, by Mr Prestele, of the copies of the plates for coloring.

The proofs of engravings for the Report on Trees were sent sometime since to Cambridge by Mr Cooke, tutor in Harvard.

I remain very respectfully and truly

Your Obedient Servant

Joseph Henry

Sec. Smithson. Institution

Smithsonian Institution

May 17 1850

Dr Asa Gray

Dear Sir

The plates for Prof. Bairds memoir may for the present remain with the Lithographer. We have written to Baird requesting him to send on his manuscript to Cambridge.

The directions you have given with reference to clearing off the stones, to be again used, is proper. We shall be ready to pay Smith's bill when it is presented. I wish you to look into the financial part of the business, that the bills are not overcharged. There is a disposition on the part of artists to charge extravagantly for work done for public institutions.

The proofs of the memoir on Mosasaurus has been received. I am much pleased with the appearance of the printing, and agree to your arrangement with regard to the commission, though I am not fully decided whether the word "which" or "who" should be employed, as there is some doubt on this point I leave it to be settled by the literary men of Cambridge. As Ellet's paper is not yet published and any alteration may be made which is needed. I have not a copy before me and do not recollect the phraseology of the sentence to which you refer.

Your draft together with that for paper will be honored when presented.

The memoir on Mosasaurus is to be marked 2d Vol, but I am undecided whether the No 5 shall be affixed to it — I find upon examining the Transactions of the Academie Royale Belgique that the articles in the Volume are not numbered the advantage of which is that all memoirs on similar subjects can be placed together. I wish you would give this point some consideration. Vol. 2d must be printed on the side as in the memoirs of the Academy above referred to.

I am pleased to learn that Dr Wyman has consented to act in your place whilst —

you are absent.

Please to inform us whether you can take charge of a box of our Contributions intended for the learned Societies of France, and where they shall ~~they~~ be sent in order that they may reach you.

We send a copy of a letter from Mr Lining relative to Mr Wright. Mr Bartlet an intimate acquaintance of mine has been nominated a Commissioner.

I remain very truly and respectfully Your humble Servant

Joseph Henry

Secretary S.I.

Smithsonian Institution
June 7th 1837

My Dear Sir

We have concluded not to trouble you with the box for France, and we shall write to Putnam to retain it until called for. Accompanying this I send you a letter of introduction to Lambert and if you wish any thing else of the kind while abroad drop me a letter and I will answer it by return packet. I shall expect to hear from you occasionally but I know your time will be too valuable to allow of many drafts on it in this way.

There is one thing I am anxious you should do for us while in London namely to call on the widow of widow of John Fitall the widow of the confidential servant of James Smithson. We have lately purchased through the Hon Ab'm Lawrence from this person a portrait of Smithson and since she must be old and consequently her tenure on life very uncertain, I will be willing to collect from her without delay an account of all she knows and all she remembers of Smithson. Take what

falls from her lips in wooing. I make this request of you because there is no other person I can trust with this commission. We shall send her direction by mail with the next packet if we should not be able to find it you can learn it of Mr Lawrence. We find ~~that~~ from some letters in our possession which came with the picture of Smithson from Mrs Estell that there is another portrait of our patron saint in the possession of a Mr Hungerford - please make enquiry of relation to this of the old woman. You will of course do this business without giving it an air of too much importance (except the remark it was unnecessary) the Henry Stevens who was engaged, as you know to prepare for the Smithsonian Institution the Bibliographia Americana has thus far taken charge of the distribution of our books in England and the receiption of donations in trust for us. I may say to you in confidence that I am not very much pleased with his course though, I do not wish to make any charges against him He is a dealer in books as well as in literature, and his bias is inclined to be more pronounced in the character of the former than that of the latter, He has sent in our boxes in an irregular manner, a number of books which ought to have been entered differently with the customs here — These remarks are intended for you Eye Lone

Professor Guyot leaves here or rather has just left in the afternoon train for Cambridge via Albany — he will not reach home until the latter part of next week — Professor Bailey is now at our house. He has returned from the south somewhat strong, but not much improved in his health.

I think it probable we shall succeed in adjusting our difficulty with regard to the building. The proposition now is to finish the out side and as much of the inside as may be required for several years and then gradually complete the remainder as it may be wanted out of the accruing interest — At the meeting of the Board on saturday last it was resolved to dispose of our stock worth 240 hundred dolls and out of the sum to ask congress to take 150, thousand dolls to be placed along side of this original 515 thousand, never to be expended this will make our principal 665,000 which will yield us nearly 40,000 per annum

I have not heard anything concerning the health of Mrs Gray for some time past I hope she will be much benefited with the voyage and that your visit may be highly pleasant and profitable to you both

I am writing this in the Institution

would join us in kind wishes to Mrs Gray and yourself — we are all well but [illegible] feel the influence of the heat of this extreme climate

Poor Beecher is much distressed with the intended death of his last brother who was lost in the surf from an exploring boat on the coast of California

Remember me, Dear Sir as ever

truly yours

Jacob Stump

P.S. We have not the present residence of Mrs. Fitall she lived in the days of Cruikshank at 238 Whitechapel Road — Since then she has lived or rather her husband 27 Jubilee Place North Mile end, Old Town.

The person who communicated with Mr Lawrence on her behalf is H. F. Bone 22 Percy St. Bedford Sq. London. Her name is Mrs Elizabeth Fitall — This is all the information in our power.

J. H.

Rec'd
May 6.

Smithsonian Institution
Washington April 5th 1851

My Dear Doctor

Your interesting communication of March 14th was received about 3 days ago. We are much pleased to learn that you are recovering from the effects of an accident which nearly deprived you of life, and an account of which you much fear to your friends on this side of the Atlantic. They are also pleased to learn that Mrs Gray is much renovated in health, and we hope that you will you will both return, physically as well as mentally, improved by the voyage.

We had a letter a few days ago from Dr. Harvey in which he reports good progress in the preparation of the first part of his memoir. The cost of this will be very great in proportion to the means of the Institution, but as you know, we propose to spread it over at least three years and we have also concluded, at first, to color but 550 copies to supply the market and our foreign list of distribution. It is not thought advisable to present colored copies to the colleges and other public Institutions of this country.

Your remark in regard to the National Institute is very true. No doubt the reputation of this country has suffered much on account of the operations of this society, and indeed though it has apparently been dead for some time past, its malign influence still exists. During the last twelve months I have been much troubled in connection with it, by endeavoring to direct in a proper channel, the business of the Central Commission of the Great London Exhibition which Mr Clayton unfortunately placed in its hands. I opposed the proposition of having

any thing to do with the matter believing that it would involve an expense of time, money and perhaps of character. I was however overruled and made one of a committee of five to attend to the affair. The result was, that after much trouble the Executive Department of the Government, was induced to grant the use of a ship to convey the goods to England but declared its inability to appropriate a single dollar towards employing an agent to attend to the business abroad. The result was that Peter Force Joseph C G Kennedy and myself were obliged to be responsible for the outfit of Mr Stansbury who accompanied the articles to England.

I had some thought of making the trip across the Atlantic during the coming summer, but circumstances of a pecuniary nature will prevent the execution of this design.

We shall be much indebted to you for your kind interest in Smithsonian exchanges. The second volume is now in the hands of the binder and I hope will be ready to be forwarded to your care in the course of a few weeks. We have during the last year received from different Societies in England, copies of papers and transactions to be distributed among institutions and individuals, and from this the idea has been suggested that we might render good service to the cause of science by acting as the scientific agent of exchange between the United States and the different parts of the old world. In furtherance of this object we have petitioned the British Government to admit our packages free of duty. With our second volume we shall send to most of our foreign correspondents, copies of a splendid book relative to the Indian Tribes of N. America prepared and published at the expense of the Government. Professor Baird is much interested in this scheme of exchange and will superintend its execution.

The books from the Bavarian Academy have not yet arrived though I presume they will be received in due time.

The distribution of the volumes in Paris has been entrusted to M Bossange which I think will prove an efficient agent.

All the affairs of the Institution are in a prosperous condition though the funds will probably, for some years to come, be burthened with the erection of a building. It is certainly too bad that in this civilized age, literature and science should be obliged to make such a sacrifice for the reproduction of the mementos of barbarism.

I remain very respectfully and truly

Your friend and servant

Joseph Henry

P.S. I am glad that I still live in the memory of Henslow. He was very attentive to me while I was in England and I recollect him with much pleasure. You perhaps remember that I was not so fortunate in my intercourse with Prof Lindley and that he afterwards complained to Dr Torrey of my conduct in regard to him. The circumstances as I recollect them were as follows. Dr Torrey promised me a letter to Dr Lindley and gave me a package to deliver to him. He however forgot the letter and when I arrived in London I delivered the package without leaving my address, thinking this unnecessary as I had no introduction to present. Dr Torrey afterwards forwarded a letter of introduction but before this arrived my time had become so completely absorbed in the numerous engagements I had made, that had not the letter contained some matters of business I would not have delivered it. I sent it however to Dr Lindley but unfortunately neglected to state my address. After much trouble he found my lodgings and called upon me at a most unfortunate hour. I was at Dr Bache's lodgings, my trunks packed and ready to depart for Paris. I was engaged with Dr Bache in preparing an article for the press – I had no place into which I could invite Dr L. when he called – He mistook my embarrassment for a desire not to make his acquaintance and

under this feeling I presume wrote a complaining letter to Dr Torrey. I regret the occurrence and certainly under other circumstances would have been highly delighted to have formed a more intimate acquaintance with Dr L. and to have received the his attentions with becoming thankfulness.

J. H.

Albany, Saturday Sept 27th - 1851

My Dear Sir

I learned from Dr Torrey, for the first time, on Tuesday that you had returned to this country and I immediately resolved to give you a short visit - I came to this place with the intention as soon as my business was finished to return by the way of Cambridge but unfortunately I find on my arrival a telegraphic dispatch informing me that one of the carpenter's shops on the Smithsonian grounds has been burned as it is supposed by an incendiary and I am therefore somewhat anxious to return as soon as possible. It is possible however that I may learn something by the next mail which will enable me to carry out my intention. I therefore write to ask whether you intend to be in Cambridge during the whole of this week. Also whether you intend to visit Washington soon. I wish to have a long and confidential conversation with you relative to the operations of the Institution - to learn what of interest you have gathered in your tour and ~~[illegible]~~ what you propose

as to the preparation and publication of your Report.

I am now called to Albany to settle up the affairs of my deceased Brother. I shall be engaged until Wednesday and if you can give me an answer before that time I shall be better able to determine whether I shall make the circuit to Washington by the way of Cambridge.

Cannot you give us a course of lectures at the Smithsonian this winter? You will probably have occasion to visit Washington during the session of Congress and you can then favour us with a few lectures.

All the affairs of the Institution I think have made good progress since your departure and I hope in the course of one or two years to settle its character and develope all the plans set forth in the programme of organization.

Baird has proved a very efficient assistant and rather requires the rein than the spur.

I am much pleased to learn that Mrs Gray has profited very much by the voyage - the restoration of her health is a matter of more importance to you and your friends than all the acquisitions you may have made in science.

Mrs Henry has accompanied me to Albany and bids me say that she expects to see Mrs Gray at our house in Washington. The bachelors at the Depot will inform you where we live. With the kind regards of Mrs H and myself to Mrs Gray

I remain very truly
your friend & servt.
Joseph Henry

Dr A. Gray
Cambridge.

to Washington she will of course come with you and we shall expect you to take up your abode with us

I remain as ever
very truly your
friend & servt
Joseph Henry

Dr. A. Gray

Smithsonian Inst
Oct 10th 1857

My Dear Dr

I regret that I did not receive your kind letter of the 29th a little sooner. It was delivered to me after our passage had been taken from Albany to New-York and but a few minutes before the starting of the boat. I wrote to you on saturday the 27th immediately on my arrival in Albany to ask whether you would be in Cambridge during the week. not receiving a reply I concluded you were absent. your letter of the 29th reached me

on Friday evening Oct 3rd — I am anxious to have a long conversation with you relative to your tour and other matters.

Accompanying this note I send you an invitation to lecture before the Institution next winter and hope that you will be able so to arrange your business as to spend a few weeks in Washington.

Do you know Dr J. V. C. Smith editor of Boston Medical & Surgical Journal. He has lately returned from Europe and has intimated that he is prepared to deliver a course of lectures on the present state of Egypt Turkey and Greece — Give me confidentially some information relative to the man. If he is a good lecturer and of the proper character we would be pleased to engage him, since a course on the subjects mentioned would be very acceptable.

Mrs. Henry and our children are in Princeton, they will return to Washington in the course of about two weeks.

I am glad to learn that Mrs. Gray has been much benifited by the voyage. If you come

Smithsonian Institution
Oct. 11 1851

Doctor Asa Gray
Dear Sir

The series of lectures before the Smithsonian Institution for 1851-52 commences about the first of December next and will close in April. I write to request that you will favor us with a course of lectures on Botany and that you will inform us at what time it will be most convenient for you to deliver the course.

Please also give the number and title of your lectures and we will endeavor as far as possible so arrange the programme as to meet your wishes.

I remain very respectfully
Your Obedient Servant
Joseph Henry
Secretary S.I.

Statement of Account

Report on Forest Trees to Smithsonian Institution Dr.

1849			
Oct 5.		Cash to Mr Sprague	$ 195.
1850		Express, Postage &c.	15 -
May 14		Dr Gray's acct.	76. 26
Feb 22		Dr Gray for Mr Sprague	100.
July 16		" " "	100.
Aug 26		Prestele's bill	112. 80
		Sonneli Bill	127. 38
Nov. 26		Draft of Sprague	100 —
Dec.		Prestele Bill	110 —.
1851	Feb 25	Prestele Bill	148 —
	April 4	Draft of Mr Sprague	100 —
			1185. 26
	Sept 29.	Prestele Bill unpaid	323. 00
			$ 1508 26

Smithsonian Institution
Oct. 14th 1857.

My Dear Sir

In answer to your letter of the 10th inst. I am very sorry to inform you that we shall be unable to pay the account of Prestele until after the 1st of Jany. next. Our appropriation for the year will be expended in meeting the demands on account of the first part of Henry's machine and other outstanding bills. We did not expect any further drafts on account of the Report during the present year.

According to my understanding of the agreement, work to the amount of only three hundred dolls. was to be done during your absence; we have however honored the drafts of Mr Sprague to the amount of nearly eight hundred dolls. as you will see by the accompanying account.

In order that I may present to the Regents at their next meeting (January 1st 1852) an account of all the operations of the Institution you will oblige me by a statement of the present condition of the Report - the number of drawings which have been made by Sprague and the number of plants engraved. Perhaps also before the next session of the Board you may find time to give a probable estimate of the cost of the remainder of the work and of the time which will be required to finish it. I constantly regret that so much money has been expended on the building and that it is impossible for us to be as liberal as I could wish. The whole appropriation during the last year for all the active operations of the Institution will not amount to more than 6000 dolls.

I am glad to learn that you intend immediately to finish your memoir on botany which if it contains 200 pages will enable us to complete our third vol. by the beginning of the next year. You will of course prefer to have it printed under your own eye and you will find sufficient aid for the purpose in the secretary, Mr Schelly. — The number of copies of the part already printed is 1308 and this will therefore limit the size of the edition.

We will take from you the extra volumes purchased at Berlin provided they are not now in our library, but I do not think that at present we can afford to order at this time the work on Brazil &c.

I have just received a letter from Harvey informing us that the printing of his memoir will be finished in the course of a week or two. He desires to know whether he is allowed to sell any of the extra copies allowed him. Had the cost of the work been known at the time it was commenced I should not have had the courage to undertake it with the present income of the Institution, and particularly should not have agreed to furnish so many extra copies. I make this remark with reference to restricted means and not as to the value of the labours of Prof. H. My feelings

as a man are constantly in antagonism to my duty as secretary of the Institution I am constantly called upon to decide upon, not what ought to be given, but what can be. I trust however that an arrangement can be made with Prof. H. which will be satisfactory to him and within our power to execute.

I hope that you will be able to visit us this winter and should you be obliged to do so I shall be rejoiced provided the journey do not redound to your disadvantage.

I remain very truly
your friend & servt
Joseph Henry

Dr. A. Gray

Am. Museum Dept.
Oct. 29th 1851

My Dear Professor

Your favour of the 20th was duly received and gave me much pleasure. It is very unlike many letters I receive on similar subjects.

You are perfectly free of all sides & exhibitions and are obliged to guard against the constant tendency to accumulate photos in advance of requirement.

I should be much obliged to you for the statement relative to the present condition of the Cabinet or Forest trees. I will be pleased to be the Regent at their next meeting in Albany.

I regret to inform you that it will be out of my power to accept the very flattering invitation to lecture before the Lowell Institute. All the lecturing I can do in the winter might to be done in Washington. The liberal compensation offered by the Institute would be an important object in the way of making up some heavy losses I have met with during the last twelve months. I am crowded out of debts

and have my life insured for the benefit of my family. I am grateful to you for your kind offices in this matter.

I hope you will go on as rapidly as convenient with the printing of your botanical memoir.

I hope we shall meet before this ending the winter. Mrs. A. and my family are still in Princeton. Notice this afternoon for Phil.d is transact some business of the Institution and to remit Mrs. A. home with kind regards to Mrs. G.

Believe me very truly
your friend & servt
Asa Gray

A. Gray

Smithsonian Inst.
Dec 16th 1851

My Dear Professor

I find on examining our programme of lectures that there will be a vacant week in Jany, the last in the month, which we shall be glad to have filled up by Professor Silliman.

There will be room for three lectures. If this time will be convenient to him we may consider the matter settled and shall expect to hear that he will not fail us.

His first lecture will be advertised for monday the 26th of Jany.

In a postscript of a letter

to Prof. F I intimated that a course of lectures from him would be acceptable.

We find considerable difficulty in so arranging the time of the lectures as to accomodate the different lecturers

I regret that the state of our income is such that we are unable to pay but little for our lectures and I hope Professor F will not be disappointed in this respect.

I have written an official letter asking for the services of the Lyceum. It will be an interesting article relative to the meteorological exhibition it will afford of the relative frostpoint of the different years during the long period of its growth.

With kind regards to Mrs Gray I remain very truly your friend &c

Joseph Henry

Dr. A. Gray

Please communicate to Professor Felton the invitation to lecture

J. H.

P.S. Will you oblige me by sending as soon as convenient a brief account of your botanical paper, such as will answer as a notice of it to be inserted in my next report.

Smithsonian Inst.
May 4th 1852

My Dear Sir

I drew a warrant yesterday for the payment of the bills for your museum the vouchers of which have come safely to hand —

You can settle Metcalf's bill next month though it will be most convenient to pay it on the 1st of July when the half yearly income of the S.I. becomes due. The 90 dolls. for Latin is a charge which I have never before met

on the subject of the Report and other matters. When do you intend to visit Washington? I hope you will be at the meeting in Cleveland

With kind regards to Mrs Gray I remain as ever truly yours &c —

Joseph Henry

Dr A Gray
Cambridge

with in our dealings
with farmers

Professor Baird
has informed me
that he has forwarded
to you copies of all
our Memoirs on Natural
History. If you will
specify any articles
you have not received
we will send them
to you.

We have of late ex-
hausted so rapidly
in our operations that
unless we hold back a
little we shall run beyond
our income. I hope therefore
that you will not make
any very important drafts
on us on account of the
Report on trees during the
remainder of the year.
Cannot you so arrange
the work that the first
part may appear early
in the year 1853. We have
now several thousand
dollars invested in plates
of unfinished memoirs to
which we are anxious
to render available as
soon as possible.

I wish to have a
conference with you

instruments and instructions and have also fitted out in the same way several parties for exploration in the regions between the Mississippi and the Pacific. The instruments however which were furnished to the latter were paid for by Government. We have just completed a new building for a set of self-registering photographic magnetic instruments at the joint expense of the Institution and the coast survey and we have now as much matter on hand as will make the 7th and perhaps the 8th volume of our contributions. The 5th and 6th volumes are in the hands and will be distributed before the close of this year. The 5th will be ready for delivery in the course of about 3 weeks.

I shall be able to procure to

the satisfaction of any intelligent set of men who choose to look into the affairs of the Institution that it is doing more good than any other institution ever established in our country and that it cannot be meddled with by Regents or Directors without danger of evil.

In the development of the plan it has become evident that the support of a large library and an extensive museum is incompatible with the limited income of the institution and that these objects must be provided for by other means. I gave my views on these points in full at the last meeting of the Regents and recommended as a part of the plan of reduction that the east wing of the building be fitted up as a dwelling for the accommodation of the family of the secretary. This will be an arrangement of economy on the part of the Institution for the rent which results from the expenditure on the fitting up of the rooms will not exceed 200 dolls per year while I am now entitled to a sum not exceeding 500 dolls. *

I have been obliged to take some unpleasant steps as to several parts of my duty with reference to persons and measures but I must be the head of the Institution and it must be carried on in accordance with the plan which I have laboured to develope or I will abandon the enterprise and give to those who attempt to ~~[illegible]~~ thwart me the honor of having defeated or interrupted the operation of a plan for the advance of the best

* Not the position was agreed to by the Board

of humanity. I have no fear of the result of the meeting of the establishment. What even may have been the inducement for calling it, I think it will result in good. The President as I am informed is a very good man and desirous of doing what is proper on all occasions.

I must see you during the summer and have a free and full conversation with you on a number of points connected with the policy of the Institution.

I have now given you a long letter and indeed I ~~never~~ commence one to you without being impelled to write more than is quite safe to intrust to paper. With kind regards to Mrs. Gray I remain as ever truly

Your friend & servt.

Joseph Henry

Dr. Gray

Washington is a Democratic city. It stands as regards all the personal feelings & all the evil passions of the human heart.

Cambridge, Monday Evening. 31st May. 1852

My dear Prof. Henry

I have only this evening returned from a week's absence in New York; and find here your kind notes of the 23rd & 27 inst.

To these I wish to reply in full, answering the statements in Capt. Wilkes' communication to the Hon. Mr. Pearce (a copy of which you enclose) which reflect so unjustly upon me. But I have to prepare for a lecture and two recitations to-morrow; and so shall have no time to write to you before to-morrow evening, when I will endeavor to place the whole matter before you, with many thanks for your kind proposition to act for me, and for the just statements which you have already made to Mr. Pearce, on one point. In respect to this I trust to show you that I have in good faith conformed to the views of the Library Committee as I understood them from a letter received from Mr. Pearce. Which are all that I know of or have had anything to do with, except a letter of Capt. Wilkes to Dr. Toney, which I do not recognize as instructions of the of the Committee to me.)

The other statements of Capt. Wilkes in the letter before me have caused me the profoundest astonishment.

I have only to say at present, that the English descriptions in my Mss. do contain everything that is in the Latin characters, notwithstanding his assertion "that such is not the case." If a single idea or phrase, or even word of the Latin has not its counterpart in the English, it must be a mere slip or inadvertence, which it will be easy to correct, when pointed out. And I shall be glad to have the instances indicated.

Again, nothing can be further from the truth than his assertion that I engaged that "my whole time was to be given to the preparation" of the Exploring Expedition. You well know that this would be impossible for me. Ever to have promised the copy of the contract I shall send will show that it has not the least foundation; & I solemnly declare that the whole conversation between us at the time, upon which the contract was based, proceeded upon the contrary supposition & statement.

Further, it is not true that I have failed to fulfil my contract by declining the correction & proof-reading of the other portions of the Botany. They were never offered to me; so that I have had no chance to decline.* It is I rather who have to complain of the infraction of this part of the contract, as I always understood it, by that very action of Capt. Wilkes which has caused all this trouble.

Nor have I ever thrown any "impediment in the way of the publication of Mr. Brackenridge's part," except by giving my opinion when asked, in a letter to Dr. Torrey, that the three-fold repetition which the plan required by Capt. Wilkes (then for the first time made known to me) involved, was not creditable, nor in good taste, nor of any use I could see, & that I could not myself adopt it.

You are right in saying that letter of mine ought not to have been laid before the Committee. It was a letter to Dr. Torrey, in answer to one of his, of which I gave him leave to use my opinions there expressed; but it was plain that the letter was not intended to be used in the way it was. You see then that I explicitly deny the three charges, of which you give a summary in your favor of the 28th inst. & I shall be obliged if you will, on a proper occasion, state this to Mr. Pearce.

In my next I will confirm my asseverations by proof, on all the points capable of being attested by documents. For the rest, it would seem that Capt. Wilkes' memory or understanding of some things must be different from mine.

* On the contrary, I have every reason to believe that Mr. Drayton communicated to Capt. Wilkes, the expression of my wish, in Sept. last, that the proof-sheets & Mss. of Mr. Brackenridge shou'd be sent to me.

As to my bills, they have been duly presented, & attention has been ~~drawn~~ called to the delay. The Committee must decide whether they should be paid or not — You see that while such charges hang over me, it is not proper that I should urge their payment —

Tomorrow I will give you, I hope, the information you desire, & cheerfully leave the matter in your hands — Though I may not be so judged by others, I know that you will fully believe that I have no unworthy motives or selfish ends: — I will thank you also to say to Mr. Pearce how far I may be deemed qualified to judge of questions of scientific accuracy & taste or style —

It is absurd to charge me with wishing to make the work technical, & too Latin: I have said before, that, tho' I would not recommend it, I have no objection to writing & printing every word in English only. I remain,

Yours faithfully & truly,

Signed Asa Gray

Coast Survey station
near Batt
Sept 24th (Friday)
1852

My Dear Dr.

I regret to inform you that I am unexpectedly called to Washington on public business and that I shall not have the pleasure of seeing you again until you come to Washington.

I wished to have a full conversation with you relative to the operations of the Institution and to make some definite arrangements with you relative to the Report on Forest-Trees.

If we succeed in getting Congress to receive from us the 150000 dollars our income will be sufficient, next year, to allow of prosecuting the Report as rapidly as you may wish.

I think I shall be able to obviate the difficulty of which I spoke to you through at the expense of some disagreeable acts.

I shall send to you the lists of plants for the record of periodical phenomena.

Give my kind regards to Mrs Gray and do not fail to bring her with you when you come to Washington. We shall always have a room for you and your.

I remain very truly
Your friend & obl. Svt.
Joseph Henry

Dr Gray

P.S. I learn that a pamphlet was published by Dawson relative to the quarrel between Rumsey and Lieut Davis. Can you send me a copy?

J. H.

If any communications come from Washington relative thereunto send to the Institution

(1)

Smithsonian Institution

My Dear Sir Nov 6th 1852

I hope you will pardon me for prompting your very kind and interesting communication of Oct. 10th so long unanswered. The truth is I have been so harassed with engagement since my return from the north as to be obliged to put aside every letter which did not imperiously demand an immediate reply.

I was unexpectedly summoned to Washington on account of business concerning both the Institution and the Government and could not fulfil my engagement to stop at Cambridge I did hope however to give you a short visit when I went to Albany but in this I have also been disappointed - On my return I found an accumulation of business on my table which demanded immediate attention and before this could be cleared off the duties of the committee on the organization of the Light House Board absorbed nearly all my time. I procured an adjournment of the

Board for a few days and embraced the opportunity afforded by this to visit hastily New York and Albany principally on business relative to the affairs of my deceased brother.

I would not of my own accord have engaged in the business of the Light House Board but as I was especially requested by the President to assist in reorganizing this important part of the executive duty of the government ~~wadtherefore~~ could not well decline.

I will now refer to the several heads of your letter in the order of their occurrence. 1st as to the distribution of our publications - the fact you mention as to the tardiness of the packages in reaching their destination shall be communicated to our agent and greater dispatch urged upon him.

2 The fact you mention with reference to ordering the paper has been referred to Professor Baird who has taken note of it and will attend to the settlement of the account.

3 We have in no case given a full set of the Smithsonian contributions to an individual for services rendered

the Institution and though it would give me much pleasure to present a set to Dr Wyman yet I would prefer to pay in money for the labour he bestowed on the printing after you left.

4. I did promise to send you copies of all our publications relative to Natural History and requested Professor Baird to see that the promise was fulfilled. He now informs me that copies were sent but as these probably did not reach you I enclose a list of all our publications with the request that you will designate such as you would be pleased to receive and if possible they will be forwarded to you.

5 Do not forget the list of botanical books you promised for the library of Congress.

I have referred the matter of your last letters to Dr Foreman & Prof. Baird and I trust before this time you have received the information required.

A number of copies of the book I inquired for were sent to the Smithsonian Institution

I shall not forget to direct that a copy of the list of plants for marking periodical phenomena be sent to you for revision.

All the affairs of the Institution are going on smoothly and harmoniously notwithstanding the attempts which are made through the newspapers to impeach the plan of operation. A few weeks ago a very silly attack was made on us in the New York Times but in an article of this week the Editor takes the whole back and commends our exertions

The trip to the hills of Maine very much improved my health and since I left Cambridge I have been quite well.

Nov 11th Your letter of yesterday has just come to hand and I hasten to answer it before the accumulation of other business causes a delay. I had heard indirectly of the intended proposition of Mr Berkely and if he or you will present me with a definite proposition relative to the

matter. I will give it immediate attention and return an official answer without delay. I am pleased with your suggestions as to the fungi hurtful to animal and vegetable life and hope you will incorporate them with other illustrations of the importance of the work in your letter to me as secretary of the Institution.

I suggested Professor Baird to answer your inquiries relative to the books you supposed were sent to us in stead of the Amer. Acad^y. He informs me that they were not received among our packages. I regret as I have before said that we cannot give Dr. Wyman a full set of our publications but it will give me pleasure to draw a warrant in his favour for any sum you think we ought to pay him; and also to present him with copies of any of the separate memoirs which may be of special interest to him.

I must again beg your indulgence on account of the long delay of my answer to your letters. So much of my time has been occupied with the organization of the

Since my visit to the North that I have been unable until to day to get up with my official correspondence, which to me is a most laborious and unpleasant service. Besides this, for the last year, I have been obliged, to transact all my business, and write all my letters, in the public office, with three persons and some times more, in the same room, and subjected, almost every moment to interruption, from visitors and calls of business. A large room, has just been finished in the south tower of the main building of which I have taken possession and devoted to my own special use. This arrangement, which I was unable to adopt before on account of the want of room, will conduce to the better government of the Institution as well as to my own comfort. I can call on my assistants daily for information as to their operations and receive their reports without embarrassment occasioned by the presence of a third person. We are now in good working condition and hope to accomplish much for the advancement of knowledge during the

coming winter.

You have been informed that the secretary of the Navy has called on us for suggestions, as to the scientific operations of the expedition to the Northern Pacific. He informed me last night that he had appointed your friend Dr Wright as botanist and the assistant of Mr Agassiz as zoologist. There is another expedition to be sent to the River La Platte and the secretary has requested me, to name, two young men of the proper qualifications, as naturalists who would nominally serve in the capacity of master's mates with small compensations. I spent several hours with the secretary last night and he promised, to carry out as far, as his means would allow, any suggestions I might offer. If you can give me any hints of importance relative to botany I will incorporate them with those I get from Baird and from other sources, in my report on the subject, to the War Department. The specimens of Natural History which may be collected will be forwarded to this Institution as often

as opportunity is offered for their transmission also the records of meteorology and magnetism will be submitted to us. Baird ~~plac~~ is much delighted with the prospect of a large and interesting harvest of new results.

There will also be an expedition sent to africa in the course of next year, Lieut Lynch of the Dead sea expedition starts in a few days, for cape Palmas and will remain there, until he becomes acclimated after which he will make a preliminary excursion into the interior with a company of the inhabitants of the cape, in order, to gain the information necessary, for a more thorough exploration, of the country with a larger party. The secretary thinks it best, not to send any one, with Lieut Lynch, at this time, because the liability to sickness would increase the probability of delay.

Mr Thomady, the present secretary of the navy, is a man of more liberal views than his predecessors, and is inclined, during his short reign, to make his marks, so deeply that they cannot be readily ~~be~~ effaced.

We are rapidly extending our meteorological

correspondence and have lately received offers of cooperation from central America the west Indies and a promise of the same from the British possessions on this continent...

I perceive by the papers that there is a prospect of the election of Felton to the Presidency of Harvard University. If he should be appointed, can he fulfil his engagement to lecture the coming winter at this Institution? If he should be obliged to decline we must insist on your taking his place. We must have a course from you sooner or later.

With a little drawing of the reins and a more frequent calling for reports of operations than I have been able to do, I shall be able to succeed in removing the difficulties of which I spoke to you in confidence. The plan you have adopted in addressing your letters to me under cover, is the proper one, and hereafter I shall have a better of writing confidentially to you, than

I have had time I saw you, on account of want of convenience both in the Institution and at my lodgings.

My family have just returned from Princeton, where they have been spending the summer, and we shall resume housekeeping, in the course of a week or two. We shall be glad to receive Mrs Gray and yourself at any time you can make it convenient to visit us.

I have now inflicted on you, a long and rambling epistle, making up in quantity if not in quality for my loss of time; an adjustment of scores which though it may not be quite the thing required, I hope you will accept, as a testimony that I remain as ever

Truly your friend.

J. P.

To Dr. G.

P.S. I have had no time to make this shorter.

Smithsonian Inst
Nov 15th 1852.

My Dear Dr.

Accompanying this letter I send you a list of our publications and, also a copy of our instructions for the observation of periodic phenomena.

Any memoirs in which you are specially interested will be forwarded to you.

Do not forget to send me the account of your last memoir and any other suggestions you may think of interest for my next report.

I regret that I had not an opportunity of seeing you on my return from Mr Bache's conferences particularly with reference to some definite plan of completing your

work on Forest trees. What shall I say with reference to it in my next report to the Regents.

During my last visit to the north I saw Mr Smith and Mrs. Morris of Germantown. They both separately expressed their regret that your Genera of the plants of the United States could not be continued. I think it would have been better had we taken up that work instead of the Forest trees though the fact of its having been commenced was a difficulty.

I remain very truly
yours &c
Joseph Henry

Dr. Gray.

Smithsonian Institution
Dec. 3rd 1852

My dear Sir

The time of presentation of my annual Report to the Regents of the Institution is rapidly approaching and I beg to urge that you will favour me, as soon as possible, with the information asked in my letter of the 15th ult. and in that of a few days earlier date.

I hope you do not intend to repay me in my own coin by an indefinite postponement of the acknowledgement of the receipt of my letters. I surely made up in quantity, if not in quality

of matter in my letter of about the 10th ult. and I trust in consideration of the excuse I had to offer you will balance old accounts and speedily commence a new one.

Mr Wright is now in Washington; he appears himself a well preserved specimen of a variety of the genus Homo and is I doubt not a model explorer or rather I should say collector.

I might to inform you that the secretary of the navy finds that he cannot undertake naturalists with the expedition to the interior of South America as mentioned in my letter previous to the last.

I think it very probable that the expedition to the north, by the way of Greenland, at the expense of Mr Grinnell will receive aid from the Navy Department and encouragement from Congress.

Mr Bache and myself addressed a letter to the secretary on the subject recommending attention to particular points of science. This letter was requested by the secretary and will be used in furthering the object.

I shall expect to hear from you in regard to the proposition of publishing the work on the fungi.

Can you favour us with a short course of lectures on some branch of botany between the 1st of January and the 4th of March? I fear Fulton will not be able to to deliver his course this winter and that consequently our programme will be somewhat deficient.

With kind regards to Mrs Gray I remain as ever

Truly yours
Joseph Henry

Mr. Gray

Smithsonian Inst.
Dec 9th 1882

My Dear Dr

Your package of papers was received this morning and I have just signed a warrant for the amount of your small account. The money will be transmitted in the form of a draft by the mail of tomorrow. The weight left by the early train of this morning for Count. The letter addressed to him which came in your package will be forwarded to him by the mail of this evening.

We shall be obliged to let the other account remain unpaid until after the first of next month.

The printed list of publications containing your marks I did not

find in your ~~the~~ package, you probably forgot to insert it. I send you with this letter another copy which you will please to mark and return at your earliest convenience.

I have written to Dr. Wyman and made him an apology for taking the superintendance of our printing from him after the appointment of Professor Baird.

I shall adopt your suggestion as to the notice of the Report on Forest Trees in my next communications to the Regents. Also with reference to the notice of your last memoir.

I have referred the subject of the books mentioned, to Professor Baird and also that of the number of copies of your paper.

I am much obliged to you for your kind and encouraging letter. I am gratified to know that my endeavours to direct the affairs of the Institution are so heavily appreciated. I am confident that the Institution is doing much good though a proper idea cannot be formed of the value of its operations unless by a more minute study of the details than the public generally are willing to bestow.

I appreciate your remark in reference to botany we should guard against running too much in one line. The object of the bequest is the encouragement of every branch of knowledge.

I am pleased to learn that you have been favoured by a visit from our friend Dr Torrey

I think we shall be able to assist him considerably in the way of giving him jobs of chemical analyses and examinations. We have almost constantly matters of this kind referred to us which we are glad to put in charge of so reliable a person as our good friend the Dr.

We have just received a communication on a tornado which passed over a part of Indiana last year. Do you not please inform me what the academy has done with the materials relative to the tornado which occurred near Cambridge two years ago.

I remain very truly
your friend & servt
Joseph Henry

Dr A Gray

Your catalogue of books has been received and presented to the Library Committee of Congress.

Smithsonian Institution
Jany 10th 1853

My dear Sir

I am somewhat perplexed with the proposition contained in your letter of the 6th inst. It is a fundamental maxim of this Institution to do nothing with its funds which can be equally well done by other means. Before the establishment of the Smithsonian Inst. there was no adequate provision in the United States for the publication of original memoirs while in Europe it is supposed funds for this purpose are abundant.

Hampered as the Institution now is with the erection of the building and the restrictions

as to local objects, it becomes a grave question whether we should encourage the presentation of papers from abroad while our income is insufficient to subsidy the wants of this country.

On the other hand I do not feel authorized to-day we will not accept foreign papers. On the one side the liberal spirit of the plan of organization would prompt us to publish the memoirs and on the other we are deterred from doing so by the danger of opening a door through which we would be overwhelmed by applications of the same kind.

Give me some of your wise suggestions on this point. I have written on the spur of the moment and have not definitely settled in my own mind the proper course.

What is the inducement which prompts the presentation of these memoirs to this Institution? Cannot they be printed in Paris?

Perhaps the fact of the papers translation into english by yourself may somewhat change the aspect of the proposition.

The Boundary Regents are now in session and are called upon to make some important decisions as to the Building which may affect the future policy of the Institution. We shall have plan for the accomodation of 50.000 vols. and a room 200 feet by 50 for a museum. These spaces are more than sufficient to accom-

odate all the collections the Institution ought to make in 20 years. I regret more and more that I was obliged to give way, in accordance with the law of congress, to the establishment of a museum and library and I am determined while I have any direction in the operations that they shall be entirely subordinate to the publications and other active operations.

The Report to congress was struck off before I got back to Washington and consequently some of the suggestions made by yourself could not be introduced. Give me your opinion as to the remarks beginning page 211 relative to library and collections.

I remain your friend & servt
Joseph Henry

Dr. A. Gray

Smithsonian Institution,
May 26th 1853.

Dear Sir,

Your note and the accompanying correspondence with Mr Girard have been duly received, and in behalf of the Smithsonian Institution I beg leave to thank you for the candid opinion you have given as to the character of the work submitted to you for examination, and to express my regret that you should be subjected to any unpleasant correspondence on account of the favor you have conferred upon us.

I do not approve of the letter of Mr Girard, and regret that he should have addressed you on the subject. It is a violation of our rules to allow any discussion to spring up between the author of a communication and the members of the commission to whom it is referred for examination. In all cases the correspondence must be carried on through the Secretary, in order that he may obtain the data on which to found the decision as to the acceptance or rejection of the communication.

The Smithsonian Institution had concluded to make an experiment with reference to the publication of Bibliographies on different subjects, and it was important that it should begin with those which were the most needed, and that it should adopt the best plan. Mr Girards Bibliography was recommend as one of much importance, and the proposition was made to print it as a sample of what was intended to be produced by the Institution. Through inadvertency a number of copies were distributed under the stamp of the Institution, and the printed name of the author, before I had an opportunity of examining it myself, or of referring it to others. I regret this occurrence because the question is wider than that of the

mere acceptance of an ordinary paper. It includes the adoption of a plan of Bibliography to be followed in all our subsequent contributions of this kind. May I ask as an additional favor, that you will furnish us at your convenience, with any suggestions which may occur to you, as to the preparation of Bibliographies, and what subjects are at the present time most in need of them.

I have the honor to remain
Very Truly
Your Obdt. Servt.
Joseph Henry
Sec. S. I.

Dr A. Gray.
Professor of Botany.
Harvard University.

Smithsonian Inst
Nov 7th 1853

My Dear Sir

Your letter and the invoice of books to be sent to the Royal Society for distribution have just been received and I hasten to request that you will also send the bill of lading. I think it best that all the papers relative to the transaction should go through the Smithsonian Inst.

I am much obliged to you for the correction of the proof; though unfortunately it was too late to be noted in the present edition. I mailed the article on the 20th and it did not reach me in return before I left for New York on the evening of the 24th. I found it in Washington on my return to this city.

You mentioned to me in one of our conversations, or in one of your

letters that some improvements could be made in our circular for the record of periodical phenomena and in accordance with this remark I send you a copy of the article with the request that you will furnish us with any corrections or additions which you may think important

I am just about to commence my next report to the Regents and I wish some definite information as to the Report on Forest Trees. We agreed that it should appear in the quarto form and be published as one of the Memoirs of the Contributions to Knowledge. If I remember aright the Report was to include an account of the economical uses of the timber, the methods of rendering it durable &c. I think that it was also proposed to make some experiments on the strength of different specimens. If you can furnish the materials I can superintend experiments relative to strength at the Navy Yard of this city. All the apparatus for this purpose can be obtained at this place without difficulty.

Would you propose to give these practical facts in the body of the work or in an appendix at the end? When can you have the first part ready for the press and about how many pages will it make?

Can we hope that you will favour us, sometime during the ~~present~~ coming winter, with a

short course of lectures on forest trees?

I am just now making up some notes for the Sec.y of the Interior relative to the improvement of the Public grounds, can you give us any suggestions?

With kind regards to Mrs Gray I remain very truly your friend & servt.

Joseph Henry

Sec.y Sm Inst

Dr A. Gray

Confidential

I know you are anxious to learn something of the affairs of the Institution. The Regents met on Saturday Mr Choate who had not before been present for six years was in attendance to protect his favourite. Mr Pearce from the committee of the Regents made a Report supporting my views in full which will be printed in a few days. I will send you a copy which ought to be inserted in the Boston papers. to answer the article in the Daily Advertiser of the 18th inst. Mr Pearce was also instructed by the committee to make some remarks on the communication of Mr Leavitt to the committee. The members of the committee six in number were unanimous with the exception of Mr Meachum who intends to make a counter report.

The Chief Justice was not present and Mr Choate begged as a favour that the consideration of the Resolutions appended to the Report might be deferred until the 8th of July. He thought the gentlemen in the expression of their honest opinions might have been rather warm but he hoped that the whole affair might be amicably settled. The consideration of the subject was therefore deferred until the time above mentioned. I regret the delay and had I been present would have objected to it. I left the room when the discussion commenced.

The members present stood as follows - for the Resolutions

Certain in favour	6
Uncertain	3
Certain unfavourable	2

Three members of the Board were absent of whom there is no doubt very. The Chief Justice Mr Pond and Mr Bernard

great efforts are however making to get up a feeling in Congress and in the city. I feel somewhat apprehensive as to the final result but not on my own account. Let the affair terminate as it may I think I shall personally be better off.

Sincerely yours
Joseph Henry

Dr. A. Gray

March 2, 1964

Mrs. H. B. Gray, Jr.
29 Claremont Avenue
New York 27, N.Y.

Dear Mrs. Gray:

I have sent the following letters over to the photographic department at Widener.* The photostats and the bill will come direct to you.

This library is open Monday through Friday from 9 to 5.

* Letter dated	April 15, 1863	J. Henry	to A.	Gray
"	Jan. 22, 1964	"	"	"
	March 9, 1983	J. Torray	to A.	Gray
"	July 8, 1868	J. Henry	to A.	Gray
"	March 28, 1870	"	"	
"	March 22, 1870	"	"	

A copy of the letter to G. Engelmann, Feb 27, 1863 herewith (taken from "Letters of Asa Gray")

I could not locate A letter from Asa Gray to Joseph Henry April 18, 1863
nor two from Asa Gray to George Engelmenn one dated September 2, 1863, the other dated July 20, 1866.

Very truly yours

(Mrs.) Lazella Schwarten
Librarian

CRINEAN WAR (ENCYCLOPAEDIA BRITTANICA, PAGE 6-

Smithsonian Institution
Washington. March 7. 1854.

My Dear Sir,

My time has been so much occupied since the receipt of your letter of the 14th Feb.y that I have not been able to give you a definite answer relative to the coloring of the plates before to day.

Eighteen cents a plate is a very startling price though the labor may be worth that sum and perhaps more. There is now however in the Smithsonian Institution, a Mr Richard, who colored the plates of the Exploring Expedition, and who is said to be inferior to no person in this country in work of this kind. He offers to color the plate of the magnolia, at $12. a hundred, and I would prefer making a definite bargain with Prestel, that none samples should be given to him. If you will send on a copy of the plate of the magnolia, we will put it into his hands. We will take good care of the specimens you have sent us and return them after they have been used as samples of colors.

I remain,

Very Respectfully

Your obed.t serv.t

Joseph Henry

Sec.y S.I.

Dr. Asa Gray.

Smithsonian Inst.
March 23rd 1854

My Dear Sir

Dr Torrey has given us a short but very pleasant visit and I have to day received a letter from him since his return. I send to him a part of a communication of Professor Jewett to a committee of the Regents which in his letter of to day he advises me to send to you. It will serve to show you the animus of the man and his power of sophistical statement.

The original paper consists of upwards of 50 pages of closely

written manuscript. It abounds in quibbles verbal criticisms and abusive insinuations. It will do him no good and can readily be answered in every postulate.

I fully agree with you that the Regents must hut down the assumptions of the assistants or I must leave.

I have no fears as to the results and as the air is more pure after a storm so I doubt not the atmosphere of the Smithsonian will be more salubrious after the present tornado has passed by

In much haste

Yours as ever you
friend & servt

Joseph Henry

Dr. A. Gray

P.S. I do not wish you to make any other use of the extract than to give me if you have time a few remarks upon it

Smithsonian Institution
May 22. 1854

My Dear Sir,

We send you to-day by Adams & Co's Express, two samples of plates of the "magnolia," colored by Mr Richard, which he will execute for twelve cents if he has the whole edition. Mr Richard thinks that the No 1 of Prestele could be done by him for 10 cents in the same style, and the No 2 for 8 cents, but he could not undertake the work unless there were a large number to be done.

Please have these patterns carefully kept, and inform us what you think of the work and the propositions of Mr Richard.

I remain, respectfully
Your obedt servt
Joseph Henry
Secy S. I.

Dr Asa Gray,
Cambridge.

Smithsonian Inst.
May 24th, 1871

My Dear Dr

Accompanying this letter I send you a list of the Foreign societies to which the Smithsonian Institution sends its contributions in whole or in part. Please look it over carefully and give me any suggestions relative to it which may occur to you.

The affairs of the Institution still remain unsettled. Mr Pearce has made a report vindicating the course of the Regents in adopting the plan of action. operations. This Report is accompanied by a set of Resolutions the consideration of which was postponed until the 8 of July next.

The postponement was made at the earnest request of Mr Choate who after an absence of six years from the meetings of the Board made his appearance at this time to support the assumptions of his favourite

The only violation of the law of congress was the appointment of Mr Lovett as assistant secretary to take charge of the Library.

I have little doubt of the result of the battle but I am anxious to have the matter settled.

I remain very truly your friend

Joseph Henry

Dr. A. Gray

Smithsonian Institution.
May 26. 1854.

Dear Sir,

[illegible] I send you a communication from [illegible] of the United States [illegible] giving an account of some experiments made under the direction of the Government, relative to the preservation of timber. This communication was accompanied with a series of specimens of [illegible] of the [illegible] specific [illegible] permanent change of form. [illegible] that the experiments may be [illegible] of the specimens [illegible].

[illegible] the whole [illegible] with the [illegible] that you will [illegible] which may occur to you [illegible] the experiments [illegible] attention.

Joseph Henry

[illegible]

Smithsonian Inst
May 31st 1854

My Dear Dr

Many thanks for your kind expression of sympathy I am much pleased to find so much good and warm feeling among my friends.

I regret the delay though I do not think the opposition will ultimately be able to do but little in the way of injuring the Institution. They have made a dastardly attack on the mayor of the city who was one of the committee to which the affairs of the Institution were submitted. He signed the Report of the Peace and now am

attempt is making to prevent his reelection by asserting that he is against the interests of the city in supporting the action of the trustees of the Smithsonian Institution.

I will send you the copies of Mr Pearce's Report as soon as it is through the press. He does not allude to the communication of Mr Lovett and I have made no reply or at least none but a very general one to the part which I sent to you.

It would give me much pleasure to receive any strictures on the remarks of Mr Lovett a copy of which I sent you that you may think fit to make. I shall have occasion for all the hints and expressions bearing on the subject which I can muster. Though I may have all the prominent points in my mind still variety in the mode of presenting them is desirable.

The city election takes place next monday. Should the mayor be run out I shall lose one of my friends and gain an opponent such a gain will be very near a serious loss.

I am aroused to high indignation when I think of the opposition I am subjected to from one of my assistants who was put on my shoulders in order to give him a situation and that he might be at hand to carry out an opposite plan if

I should fail to sustain myself.

We have had a very pleasant visit from Eliza Tracy. She came with her father to the meeting of the association and remained until the beginning of last week.

I wrote you an official letter this morning relative to experiments on wood.

I remain very truly
Your friend
L. A.

Smithsonian Institution,
Washington June 10/54

Dear Sir,

Your letter of June 7th is just received, and I hasten to dictate the following answer.

In the following reply I agree with you that it will be scarcely worth the trouble to transport the package from Buffalo to Washington in consideration of the small difference in expense.

Please accept my thanks in behalf of the Institution for your interesting experiments relative to preserving timber. Several suggestions which you have furnished us will receive due attention.

I remain
Very Respectfully
Your obedt. Servt.

Joseph Henry
Secy. of the Smith. Instn.

Dr. Asa Gray
Cambridge
Mass.

Washington July 12th
1854

My dear Sir

I think you are very anxious to learn the particulars of the meeting of the Board on Saturday and I would have given you an account of the affair before, this time had I not been very much prepared for it.

The meeting took place but owing to the extreme heat of the weather the old Chief Justice could not attend, Mr Crittenden and Mr Meacham were also absent the latter on account of illness.

On account of these absences the consideration of the Resolutions appended to the Report of Mr Pearce

Mr Pearce's Bill, Being equivalent to a recantation of the principles of the Resolutions

was deferred until the next annual meeting in May 1853 but a much more important Resolution introduced by Mr Mason of Virginia was adopted

This Resolution affirms that the secretary has not only the power to appoint his assistants but also to dismiss them. This motion was opposed by Mr Douglas but passed by a vote of six in the affirmative and four in the negative. Two of the gentlemen who voted against the Resolution did it because they were not clear as to its legality but they stated that if the secretary would request that any one of his assistants should be removed they would vote for such a removal. The proposition which Mr Mason at first proposed was that Mr Jewett should be removed by the Board but this I objected to, on the ground that if the secretary had the power he should exercise it this was necessary to vindicate the office and to establish a precedent which might affect the future welfare of the Institution

In accordance with the intention of the foregoing resolution I addressed a letter to Professor Jewett informing him that his services as one of my assistants would cease that day -

I am sorry to inform you that Mr Jewett was taken very ill on the day of the receipt of my letter and has since been confined to his bed. I regret this circumstance though I have nothing to regret on account of the course I have taken in the whole of the matter

the Senate has not only acted improperly as I conceive in a moral point of view but also in a prudential one.

This act of the Secretary will give the editor of the Boston Daily another opportunity of denouncing the Institution and will I doubt not be the cause of a storm in the capitol. I am informed that the Senate intends to contest the legality of the act - will let the storm come! I have a clear conscience on my side and I can think an overruling Providence that I have been kept from doing any thing in this matter that my friends need fear to defend or commend. With kind regards to your good Lady I remain as ever

Your friend & servt
Loathe Henry

Dr Gray - Cambridge

P.S. Prof. Baird came the afternoon for the seal shown me the letter wrote the resign in his assurance of loyalty to me I intend to abolish the whole system of salaries and

Smithsonian Inst.
July 14th 1854

My Dear Professor

I see in the Boston Traveller, a copy of which arrives to day, an answer to your communication of so vulgar a character that the writer is unworthy a reply.

These articles have no more effect than the idle wind. They are perfectly understood in Washington.

I have just received a very warm letter from the Chief Justice fully approving

of the Resolution of the Regents as to the power of the secretary and of my removal of Professor Lovett.

The only danger is that new Regents may be appointed who will be opposed to me.

The meeting of the Establishment takes place tomorrow. The President and his cabinet will be present. The subject of the difficulty in the Institution will probably come before them but I shall be prepared. The only one who will oppose me is Mr C Cushing.

Mr Lovett is still quite unwell but is gradually getting better.

I am just now much occupied in seeing members of congress. I learned from one of the editors of the Star that the attacks on the State mayor because he approved of Mr Pierce's Report were sent to the paper by Mr Lovett. He has pursued a most injudicious course to give it no worse a name.

With kind regards to Mr Gray I remain very truly

Your friend &c

Joseph Henry

Dr Gray
Cambridge
Mass.

Smithsonian Inst
July 19th. 1854.

My Dear Dr.

I am much pleased with your proposition to give a course of say 8 lectures. Our new Lecture Room will be finished and I am sure a course such as you can give will be highly appreciated

The meeting of the Establishment took place

thus far achieved much. It has been obliged to employ sophisms and misstatements of facts wonderful to exhibit a show of success.

With kind regards to Mrs Gray I remain as ever

Truly yours

Joseph Henry

Dr. A. Gray

on Saturday last but nothing was done with reference to the difficulties in the Lect.

A motion was made and adopted to appoint a committee to confer with the Board of Regents as to the official means of intercommunication between the two bodies.

This motion was made by Mr Cushing. Another meeting of the establishment is to be held on the 3rd Wed. of October for the purpose of electing another honorary member.

Mr Leavitt intends as I am informed to contest the legality of the act of dismissal but with the opinion of the Chief Justice to back me I do not think he can succeed.

I do not think that the united talent of the friends of Mr Leavitt has

Smithsonian Institution
Washington. Sept 20. 1854

Dear Sir,

In behalf of the Smithsonian Institution I beg to refer to you the accompanying specimens of wheat and chess and to request that you will favor us with the result of the examination you may make of them.

Please return the accompanying letter.

I am very respectfully
Your obedt servt
Joseph Henry
Secretary Smithsonian Inst.

Dr Asa Gray
Cambridge
Mass.

[See over]

own sophistry and misrepresentation

L. A.

P.S. On my return to Newyork on monday I found your note of Friday evening.

I am not surprised to learn that an attack is in preparation by the party you mention and that it is to be rendered more powerful by distribution in a pamphlet form.

I have however an abiding faith in the power of truth and justice and that they must ultimately prevail

Smithsonian Inst
Nov 13th 1854

My dear Dr

I wish to make some definite arrangements for our course of lectures during the winter and therefore write to ask at what time I may expect you. I shall depend on you and shall be much disappointed if anything should prevent your coming.

All the affairs of the Institution are just now in a tranquil condition

though we must consider this the cause which forced the action. In short he was intoxicated & the affair is as I am informed nothing less than an attempt to assault. I have another [illegible] in a Mr Blodgett, a person now employed to assume meteorological observations. He gained the Jewett records and laid claim to all the results obtained from the Smithsonian materials. I was obliged to discharge him in rather an abrupt manner and to lock him out of the room in which the meteorological records were deposited. He is also in Washington and will endeavour to make capital with our meteorological observers as well as the members of Congress.

The new lecture room is very nearly finished and the workmen will probably leave the whole building in the course of about six weeks.

I did not think the attack in the Boston daily relative to the Report was of sufficient importance to be worth a reply. The facts of the case were these. The Meacham minority Report was never presented to the Board of Regents and indeed I never saw a copy of it until after the Regents Report was presented to Congress. It therefore formed no part of

the proceedings of the Board and ought not to have been published with them. It was appended to the House Edition by the recommendation of the House committee on printing. I could have prevented the appending of this Report but was advised by the chairman to let it pass though I now somewhat regret that I did so.

We shall expect to see Mrs Gray with you when you come to Lecture. Please give her my kind regards. Mrs. Henry would join me where she present.

I remain very truly
your friend & servt
Joseph Henry

Dr. A. Gray

Smithsonian Inst.
Nov 27th 1857

My dear Dr.

Our next shipment for Germany will be made in April only we should have some pressing inducement to send a package before that time.

We shall depend on you for a course of nine lectures to begin any in the second week of Jany.

I would advise that you shut up your house and bring Mrs Gray with you. By so doing I should

say that you would not be a loser. It is true we cannot afford to pay much but I think you will have for the three weeks 225 dolls and all your expenses.

We can so arrange the time that you may give the first lecture the day you come or at furthest the day after you arrive and you can make preparation for leaving the morning after your last lecture. If you think fit to repeat your course at Richmond we can procure an invitation for you to do so.

We have just taken a house near the Irving Hotel and shall expect you and Mrs Gray to come to us the moment you arrive.

All the affairs of the Institution remain as when I last wrote Lowell and Blodget are I believe making no effort to circulate the numbers of tickets as fast as they ought. I do not think however they will do much though I cannot be certain as to the result.

With kind regards to Mrs G.

I remain very truly
your friend & servt
Joseph Henry

Dr. A. Gray

Smithsonian Inst
May 9th 1855

My dear Sir

I have merely time before the closing of the mail to say that I have run over your article for Silliman and think you have made some excellent hits - though I hasten to correct a slight inaccuracy in the note at the foot of page 21. Accompanying this note I send you a

ship containing the correction
I sent you on monday
last a copy of the whole
proceedings of the Committee
of the House. By reference
to page 113 and also to page
174 you will find two articles
which were intruded after
the meeting of the 21st of Feby
when the committee declared
that they had heard enough
and that the charges had
not been made out. The
two articles are dated 28
of Feby the day before the last
meeting of the committee but
the record shows no evidence
that they were received or admitted
They were endorsed to be written
by Taylor and by Puryear and
were introduced without doubt
by Upham. Besides this
most reprehensible perversion
of justice a part of the Blodgett
testimony is omitted while
the deposition of the Brown
which was introduced to see
but it remains without a
point. Moreover two papers

put in by the Prince to show the character and claim of Blodgett are also omitted

The whole printed proceeding of the committee were conducted by Upham and Lovett.

I am obliged to close with the assurance that I am as ever yours

J. H. G

Dr. G.

Give us 100 extra copies

Smithsonian Inst

May 24th 1855

My Dear Dr

Accompanying this letter I send you a package of gloves belonging to Mrs. Gray which ought to have been forwarded a long time ago; but we have been in such an unsettled state at the house as well as the Inst. that the package has been delayed. Mrs. H. who has been afflicted with a chronic disease for some years became worse after you left and I was obliged to insist upon putting her under a thorough course of medical treatment. To this she at length consented and is now

P.S. I have not heard anything about the illness of Mrs H. to any of our other friends who is very sensitive in regard to it

under the care of a medical gentleman in Penna. in whom we place full confidence. We hear from her almost every day and are cheered with the hope of her comparatively rapid and radical cure. My daughters are now my house keepers and they are exerting themselves to the utmost to make me comfortable and happy. They are very good girls and worthy of all the commendation that even a fond father may give them. Caroline's school does not close until the end of June and we can not well give up housekeeping before that time and therefore Mary will not be able to accept the

Oh were my poetically inclined by an impromptu presentation for a serious offering. D.T.

kind invitation of Mrs. G. to spend the month of June with you. If however a visit in July would be equally convenient to Mrs. G. Mary would go on about the first of the month, but if not, she can just as well post pone her visit until another time. I shall take the girls somewhere to board at the north during the warm weather.

I see that the Boston daily has again commenced to bark at the Smithsonian Institution but I trust it will not succeed in getting up an other excitement I think the intelligent public has its mind pretty well made up as to the merits and origin of the

controversy and what further light may be required will be afforded by your admirable article in silliman. I have become so thoroughly disgusted with the controversy that I should be happy with the idea that I was never again to advert to it; and on my own account, if it were not necessary, in order to preserve my ~~own~~ means of usefulness, I would rather suffer the vilest slander to go unanswered than be obliged to arrange my self to the unprofitable condition of mind necessary to a proper reply. A war of this kind is attended with a waste of thought and of labor and ~~is attended~~ produces a kind of such an effect on the feelings as renders

to usefulness undeservable. This life however is one of labour and trial intended to educate us for a better and more enduring one. The course to which I have been subjected during the last few years has tended to correct some defects of my character. It has rendered me in a great measure insensible to the morbid feelings I formerly had as to public censure and criticism.

I have still the unpleasant task before me of preparing an answer to the vile and cowardly attack made upon me by Moore. I have however all the materials collected and shall endeavour to give him an answer which will place the matter in a different light

from that in which he would be pleased to have it viewed. The Boston Daily republished the most offensive part of the Morse pamphlet and thereby laid itself open to a criminal prosecution for the part that its publication was grossly libellous.

We are now getting on quite smoothly at the Institution and making up as rapidly as possible the lee-way occasioned by the war. The 7th volume of the contributions will be finished in a few weeks and our annual Report which forms a book of upwards of 400 pages will be through the press to day.

The rooms in the building have not yet been commenced though every thing is in readiness for the workmen as soon as I can make a settlement with the late contractor.

I directed a copy of the testimony before the committee to be sent to you, which I hope you duly received. Jewett has accepted the appointment of the Professorship of Belleslettres in the Columbian College of this city a small establishment which he intends to use as an embuscade from which to make further war on me. The appointment was not made by the trustees with entire unanimity but it was pressed by his friends for the purpose of whitewashing him and for giving him the means of another attack. Baird is now endeavouring to retrieve his character

and I wish, as far as possible to forget the past and look only at the present and the future; a dark shade is however not immediately removed.

I have now inflicted upon you a long letter which I have written before breakfast at my house and which I shall send without the Smithsonian stamp. When you write to me confidentially inclose your letter in a second envelope and write private on the inner: or write private around the seal of a letter with a single envelope. I have of late heard nothing of Agassiz or from Felton I shall endeavour to have a personal communication with them when I come on

I remain as ever your friend

Joseph Henry

Dr. Gray

Washington June 2nd 1833

My dear Sir.

Your letter of the 29th was received and I now embrace the first opportunity to thank yourself and Mrs. Gray for your kind and generous invitation to the girls. I have however made an arrangement with Professor Guyot to take the two younger into his family for the summer to improve them in their French. Mary will also after making Mrs. Gray a visit take up her quarters in the same family for the same purpose.

I am much obliged to you for the suggestion relative to the subscrip-

to Professor Agassiz's work

tion. I received a copy of his circular and informed him that the Institution would probably subscribe for 15 copies. ~~[illegible]~~

I had a visit last evening from William Channing. He is full of the subject of spiritual influence and appears to be pleased with the idea of the support the matter has received from the late communication of Dr. Bell to the meeting of the superintendents of the asylums for the insane. It is really an astonishing and frightful idea that there is so much, as it were, of latent insanity in the community for I must believe that those who assert that they have really witnessed the phenomena are under a delusion.

I do not think I shall be able to remain more than a day or two at Cambridge. I shall be engaged on light house duty and be obliged to spend some time along the coast.

The girls are much pleased with the idea of going to Cambridge and I trust they will have a very pleasant as well as profitable time.

I doubt not the article in Silliman will serve to close, in a great measure the smithsonian controversy, though I think it very probable that Mr Jewett will make a new attempt at the meeting of the next congress. He has lately joined the Know nothing party and is endeavouring to make capital against

me through its organization. I shall however have a number of warm friends in the House who belong to that party and will defend the Institution.

I received a letter a few days ago from Dr. Torrey he appears in good spirits and I think is quite well pleased with his office.

I have promised to spend a few days with the Pennoyers of Mt. and shall start on Wednesday I find that the excitement to which I have been subjected begins to act upon me and that I need a change of place in order to strengthen my associations with Kind regards to Mrs Gray I remain as ever your friend

Dr. G. J. A.

Washington
July 5th 1855

My dear Dr.

Your favour of the 25th was received at the Institution on the 29th but I have since been so occupied with family and other affairs that I could not answer my letters at an earlier period.

You will take the whole number of extra copies of the article in Silliman's Journal and distribute such as you may wish to present to your friends or you may make the distribution of this part yourself.

Please send them by express

with bill receipted and we will forward a draft on Boston or New York for the amount

I remain very truly
Your obt. servt.
Joseph Henry

Dr. A. Gray
Cambridge

P.S. I put on this leaf what I have to say about my daughters so that it may not be copied by the press or the public book. They left here on Monday evening and I was very anxious as to the events of their journey until I received yesterday morning at about nine or ten o'clock the dispatch from Albany informing me that they had arrived safely. They were exceedingly fatigued before they started with packing up the furniture and settling the house hold matters. I trust the Physical and I know the moral atmosphere of Cambridge will have a favorable influence on them. The residence of the young girls with Prof. Guyot will give them an opportunity of improvement in French and other matters.

When Mary has paid her visit to Mrs Gray I wish Professor Guyot to take her also. Her eyes are considerably improved and I think the charge of the family and all the duties which have devolved on her since her mother's absence have been of much service to her in the way of education. She has done her part admirably and has evinced more character in the line of business than I thought she possessed. My children are a source of great pleasure to me and I am anxious to give them all the advantages my limited means will allow.

With my kindest regards to Mrs Gray I remain very truly your friend & servt

Joseph Henry

The article in Silliman is considered a very excellent one and I am advised by Bache to give it as wide a distribution as possible.

Cambridge Aug 31st 1833

My dear Dr

I regret that I had not an opportunity of bidding you farewell. I did not wish you to depart without receiving an expression of my high appreciation of the services you have rendered me and the cause of truth by your able defence of the Smithsonian Inst. and of my heart felt gratitude for your warm, constant, and judicious friendship. Mrs Gray and yourself have endeared yourselves to my children and I know they will ever cherish a grateful recollection of your kindness.

The girls spent the day with Mrs G. yesterday in assisting her to catalogue your books and though they gave

her little and they probably were company for her and served to lighten the dark hours which followed your departure. She is an admirable woman and you have been greatly blessed in your connection with her and her family.

I have been much gratified with my visit to Cambridge and feel myself much benefitted by the moral and physical atmosphere of the place. I have had several interviews with Agassiz and find him in a very pleasant condition of mind. There is, as there always will be, little chafings among the men of science of Cambridge but these do not amount to much and as far as I have any influence I shall endeavour to mollify them. On the opposite page I have given a few memoranda and on this I close with my warmest wishes for your safe and prosperous journey.

Your friend
Asa Gray.

Dr. Gray.

Smithsonian Institution,
October 22d. 1855

Dear Sir,

Your letter of the 18th Inst. has been duly received, and in answer I write to inform you that no box has been received from Prof. Von Martius addressed to this Institution. We will make inquiry respecting the box you allude to, and will inform you when it arrives.

We shall be pleased to receive any works from Mr Martius, and to reciprocate by sending some of the Smithsonian publications.

We have no duplicates of the "Archives du Museum d'Hist. Naturelle," and the copy in our library was presented by the Minister of Public Instruction.

I remain, very truly
Your obedt servt
Joseph Henry
Secy. S. I.

Prof. Asa Gray
Cambridge, Mass.

My Dear Sir

I am happy to learn that you have returned and hope you have had a pleasant and profitable voyage. I learned before I left Cambridge that your brother-in-law had improved in health.

My family including Mrs Henry are now in Princeton. The girls had a very pleasant and valuable time at Cambridge and are especially indebted to Mrs. Gray for her care and attention to them.

Mrs Henry has much improved in health and is now better than she has been in several years. The experiment of submitting her to a regular and systematic course of medical

treatment has been apparently entirely successful.

You have probably not had time to look over the horse pamphlet and to give me your advice as to the proper course to be pursued in regard to it.

When you have leisure give me an account of your tour and any suggestions you have collected in regard to the Smithsonian.

All our affairs are just now in a prosperous condition. Mr Scott as I am informed is about to enter into business with his brother in the publishing line.

With kind regards to Mrs G.

I remain as ever truly yours

Joseph Henry

Smithsonian Inst
Feby 22nd 1856

My Dear Dr

I think the little flurry on the part of our friend Prof. Broadwell has blown over. I found unexpectedly that there would be more delay in the publication of his paper than I had anticipated and as he had several times urged its immediate appearance I concluded to make, what I thought the next best arrangement, and

have it printed at the expense and under the authority of the Institution in Silliman's Journal. I think however that the publication of it in the transactions of the academy is preferable, but I was not aware that this could be done immediately.

Our friend, between ourselves, was a little too quick, his paper was not published in Silliman's Journal, but only arrangements made for its publication. The truth is he imagined that his paper had been rejected by the Institution and wrote to me as if that had been the case. He indeed submit it to an officer of the army, who therefore the principal ideas were not original. The critic did not know that the writer had borrowed from himself, or in other words that the Professor had anticipated in this paper some of the ideas he had previously published in a pamphlet form. I did [not

give the name of the writer and inserting to prevent the delay of a long correspondence I concluded to apply to Dana for its publication in the Journal.

I have since received a very pleasant letter from Broadwell which I have answered by the mail of to day.

All the affairs of the Institution are in a peaceful condition. You have probably seen by the papers that Felton has been elected to supply the place of the Chronic, and I hope

he will not hesitate to accept.
I see by an article from
Washington in the ~~Post~~ Journal that
an attempt will be made
to induce him to decline. I trust
he will have more courage
than Mr Everett who declined
to repeat a lecture at the
Institution which he is to
deliver at Baltimore and Richmond
because he does not wish
to take part in the controversy
and because he is the relation
of Mr. Polk!!! The article
in the ~~Post~~ Journal was written by

a scribbler who lends his pen as Major Dalgetty did his sword to any one who will pay for the use of it. He is now in the employment of that Prince of Humbugs the head of the observatory with whom I have lately been obliged to break a lance. His name is Major Poore.

At this season of the year I am constantly engaged in official duty and have not a moment of leisure for any other thoughts than those which relate to the duties of my office. I am however in good health and just now in pacable spirits.

I regret that I had not an opportunity to pay more attention to Mr Loring, his lady and the young gentleman. They appeared however to enjoy their visit to Washington and I am only sorry that they came when I was unable to give them more of my time.

You have very pleasant and commodious apartments in the Smithsonian building and would be delighted to

receive a visit from Mrs G.
and yourself.

I have not yet found time
to take up the pamphlet of
Mr Morse but intend to do so
as soon as I get through
with the business of the meeting
of the Board. The pamphlet
which you sent to Mr Stephens
of London came to hand about
10 days ago. We are all in tolera-
ble good health and spirits.
I had a letter yesterday from
Dr Forney as usual full of kind
expressions and indicating a
more cheerful condition of
mind. As ever yours D. H.

Smithsonian Inst.
June 10th 1836

My Dear Sir.

I think it probable that an appropriation of considerable magnitude will be made by the present Congress for the promotion of agriculture under the direction of the Commissioner of Patents. He will however consult me in regard to the expenditure and consequently I am anxious to give such advice as may tend to direct the operations into the most productive channel. I beg therefore to request that you will give

any suggestions which may occur to you bearing on this subject. The following objects have been proposed viz.

1 A large portion of the appropriation to be given for the purchase of foreign seeds to be distributed among farmers.

2 A smaller portion to be devoted to improve the meteorology of the Smithsonian Institution.

3 For experiments on the economical uses of the forest trees of the U.S.

4 An analysis of all the grasses used for fodder in this country with experiments as to the quantity of milk and butter produced under the same circumstances from each.

5 The analyses of the worn-out soils of the older states to ascertain whether they are deficient in any particular materials.

6 To continue the investigation begun by Dr. Lewis C. Beck on the value of the different kinds of grain from different parts of the United States.

In connection with this matter I wish you would give me some information as to the condition of the Report on Forest trees. When can it be finished in whole or in part? Perhaps something might be done to defray a part of the expense by means of the agricultural appropriation but I

this nothing is certain.

It is highly important that the proper persons should be employed in any investigations which may be made and therefore I write to ask what your opinion is as to the knowledge and talents of Mr Lapham of Wisconsin. He has been named in connection with researches on the grasses.

Any information you may give me will be prudently used without mentioning your name unless to your credit for the suggestion and to enforce the proposition.

I remain very truly
your obt. servt.
Joseph Henry

Dr. Gray
Cambridge.

Cambridge Mass
July 1st 1856

My Dear Dr

Mr. Hunt of the Firm of Rice & Hunt of Philadelphia has just called to make enquiries relative to procuring materials for the publication of a new edition of Michaux. He informs me that his house has purchased the original plates and intends to publish a new edition of the work with notes and additional plates and descriptions of all the trees which have been studied since the time of the appearance of the last edition.

He also states that the plates were purchased under the impression that our Report on Forest Trees had been abandoned.

They have employed as editor Mr J. Jay Smith of Philadelphia and would have applied to you to take charge of the work had they not been informed by Mr James that

you were so overwhelmed with engagements that it was impossible for you to think of engaging in the enterprise.

I have informed Mr. Hart, that the idea of abandoning our Report on Forest Trees had never been for a moment entertained, that I had heard from you on the subject this morning and that you would probably go on with the work and publish the first number within a year from this time.

He said that he could not compete with us but would ask ~~[illegible]~~ whether some of the old plates would not answer for our Report and whether some of the plates we had prepared would not do for an addition to the old work?

I have thought it best to give you the substance of this conversation and to ask from you any suggestion in regard to it which your practical mind may suggest.

I am not sure that I shall visit Cambridge this summer though I should be pleased to have a long talk with you on several points and particularly on that of the Report on Forest Trees.

Sincerely as ever
Your friend & servt
Joseph Henry

Dr. A. Gray
Cambridge
Mass.

Smithsonian Inst
Oct 25th 1856

My Dear Dr

Your letter of the 22d has just been received and I hasten immediately to reply.

I shall not fail to prepare a letter for Mr Wright and to request of the Spanish minister a passport which may facilitate the explorations in Cuba.

I am much surprised to learn the facts you mention relative to the the package of Books

involves an undue share of the income on a second speciality.

I remain very truly your friend & servt
Joseph Henry

Dr. A. Gray

P.S What shall I say in my next Report on the probable return of a second part of Stanley?

and shall require
into the matter as soon
as Professor Rand comes
in. The conduct of the
express company is inex-
cusable. They should
be made to pay for
the package.

You promised to
give me a letter on
the subject of the
publication of the Bright
tracks and I now send
you by the mail this

letter. Write the letters
and drawings relating
to the subject. The publi-
cation would be speedily
effected. A hundred
plates could not be furnished
for less than 7000 dollars.

I wish you would con-
fer confidentially with
some of the members of the
Lyceum on the subject.
While we wish to encourage
labor in every field of
research we must be
cautious in commencing
an operation which will

Smithsonian Inst
Nov 13th 1856

My Dear Sir

Your packages of the 7th has been received and all the points mentioned in the accompanying letter will be attended to.

We have just ~~published~~ purchased a number of copies of the census volume and shall therefore be able to supply that valuable and scarce work to several of our correspondents.

Dr. Engelmann is now in the city. He leaves this afternoon. I have endeavoured to make his visit to this place as pleasant as possible to himself and his wife and accordingly invited a number of persons to meet them at my house

a visit from Mrs G & you only

I remain very truly
your friend & ano
Joseph Henry

Dr. Gray

P.S. In sending of the packages about the middle of the next month Prof. Baird will make enquiry at the express office for the package of books.

We have sent you the drawings of the bird tracks. I think the expense of the illustrations can be much diminished by putting a number of figures on each plate. We have received a number of letters respecting the publication. I have authorized the author to have photographs of all the impressions made provided the expense does not exceed 2 or 3 dollars.

I am to visit New York on the 18th and shall endeavour to induce Mr. Elias Torrey to return to Washington with me. I wish him to take charge of completing a one line catalogue for the library of the Institution which I commenced last summer.

Our library is increasing very rapidly in books of the very first quality by means of our exchanges; but its value will be small if the study of the works is confined to this city. Exclusive of those used by persons connected with the Institution not more than one person in the course of a month visits it for the purpose of research. It is however important to have such a collection in the country.

We are placing our exchanges on a better footing and now that the building is finished and paid for we shall I trust be able to bring up all parts of our operations to a good condition. The meteorology has given us the greatest disquietude but we have now commenced the printing of our results and we shall I trust, convince the observers that we have not been idle.

We shall call on you to go on with the memoir on Forest Fires and endeavour to finish all we have at present in hand.

Mrs. H. and the girls are in good condition and would be delighted to receive a

Smithsonian Institution
November 1st. 1856

My dear Sir,

The drawings I mentioned in my letter of the 25th ult. have been sent to Philad. and will be forwarded to you as soon as they are returned.

I have examined a later estimate, according to which the price of illustrations will be very much reduced by the photographic process.

Accompanying this we send you a letter of introduction for Mr Wright, from the Spanish Minister, which I trust will be of some importance to him, and that he will endeavor to sustain the character we have given him. We also enclose the letter of the Spanish Minister to us which we beg to request you will return by mail.

Mr Baird is now in Philad. I have requested him to procure all the information possible in reference to Mr Wright's box.

I remain, very truly yours

Joseph Henry

Dr Asa Gray
Cambridge, Mass.

No. Smithsonian Institution,
Washington, D. C. 25th 1856

My Dear Dr

I am now busily engaged in making up my Report for the present year and you will oblige me by informing me as to what I shall say relative to the publication of the first part of the work on Forest Trees.

Can you have it ready for the press within the year 1857? If so what will it comprise? What drawings

in regard to those who have received the pay and have not done the work. I am merely obliged to be strict in such matters.

Give me all the facts in the case with which you are acquainted and your opinion as to what ought to be done. I will consider what you write strictly confidential.

What part of the work has Agassiz, and is there

been made and what will be required to finish the first part?

Drayton as you have probably heard has gone to his long home and Mr Pearce who has charge of the publication of the Reports of the exploring expedition is much perplexed as to what he shall do to bring the work to a close. The charge of the work was unwisely taken from Wilkes and given under the direction of the Pearce to Drayton but the letter was under the control of Wilkes and therefore the old condition was not materially changed.

Mr Pearce thinks some of closing the work with such parts as have been published or are now ready for the press. There really appears to be no end to the matter and I am not surprised that Mr Pearce should manifest some feeling

any probability that he will complete it soon? What part has Dr Torrey and when can he finish it? What is the condition of your part? Have all the Reporters been paid in advance? What parts could be best omitted in bringing the whole to a close? Girard has not finished the account of the Reptiles though he drew the pay more than three years ago.

Give me the information

[illegible] is [illegible] sufficient
for [illegible] to comply with
the requests in the course
to be pursued.

All our affairs are
in a peaceful and
prosperous condition though
the business of my office
constantly increases and
I am unable with the
assistance in the Office
at this season of the year
to keep up with the cor-
respondence.

Very cold weather — With
kind regards to Mrs Gray
and the congratulations of the
season I remain very truly
your friend
Joseph Henry

Dr A. Gray

P.S. We send you a copy of the Report for 1856 from which you will see that we have ventured to publish the lectures and I add this postscript to ask whether you cannot give us those you delivered at the Institution. They would serve to diffuse a preliminary knowledge of the subject and would enhance the value of your text-books. They should be illustrated with wood cuts

Smithsonian Institution
Washington Nov 27th 1856

Dear Sir

Your report on the proposition relative to the publication of photographs of fossil footprints has just been received, and I hasten in behalf of the Regents to thank you for the valuable suggestions it contains

As a preliminary step we have authorized Dr. Dean to procure photographic representations of all the specimens he can obtain provided the cost of the operation does not exceed two hundred dollars. The drawings themselves will be valuable should they never be published, and after they have been received we will submit them to Prof's Dana & Wyman.

Your suggestion in regard to the preservation of the negative plates is excellent, and may be acted upon in regard to other works. There is one question, however, to be settled, namely whether photographic illustrations are

permanent, and will stand a long exposure to light.

The packages you wish us to forward to Europe will be in time if they arrive soon.

I am very truly
your obedt Servt

Joseph Henry
Secretary S. I.

Dr. A. Gray
Cambridge

Washington Jany 27th
1857

My Dear Sir.

This is our most busy season and I am obliged to occasionally to put off some things which ought to be attended to immediately I hope therefore that you will excuse my delay in attending to your account relative to forest trees

I have just signed a draft for the amount and I hope the money will reach you in time to meet your demands.

Your relatives were

at the Lecture and room last evening - The city is now filling up and will be overflowing until after the change of administration -

Pierce's lectures have taken very well. I was some what afraid they would not suit the atmosphere of Washington but in this I was agreeably disappointed.

With kind regards to Mrs Gray I remain as ever

Truly yours

Joseph Henry

Dr Gray
Cambridge

Smithsonian Inst.
April 6th 1887

My Dear Sir

Your letter relative to the new tariff was duly received and will be presented to the Hon. Mr. Rusk at the next session of Congress. I fully agree with you in opinion that a tax of this magnitude or indeed ~~any~~ of any kind ought not to be placed on the "increase and diffusion of knowledge". The object of this letter was not however to merely acknowledge the receipt of the letter above mentioned but to ask as a favour that you will procure some reliable infor-

tion as to the method of preserving and exhibiting wet specimens of natural history. What is the experience of the Boston academy on this subject? How long will the specimens remain undissolved in alcohol? How can the bottles be kept tight? I make these enquiries because we have concluded to take charge of the museum of the exploring expedition now in the Patent Office on the condition that congress pays the expense of packing. It is necessary to fit up this museum and that of the Institution so as to produce a good popular effect or at least that part of the museum of the Institution which is intended

for public exhibition. I have much doubt of the propriety of putting in such a collection a large number of glass vessels containing wet specimens. If they can be preserved without smell we have not yet as the Institution discovered the proofs and hence no agency.

As a beginning Congress at the close of the last session voted 17,000 dolls. for cases and for the transfer and arrangement of the government collection and if we can make the establishment popular I doubt not that in due time we shall be relieved from the expense, if not the cares, of a museum. It does not become the dignity of the Institution to do any thing for popular effects on its

own account but as the custodian of the Government property it will be obliged to do something in the way of display.

My intention is to employ the best taxidermist we can obtain for putting up the specimens at first and to have them kept in order by competent persons. Perhaps it may be well to procure the information without making known the object of your enquiry. Dr Yarman can give you some valuable facts on the subject.

Eliza Torrey is still with us and working very industriously and apparently with enthusiasm on the arrangement of the pamphlets of our Library - with kind regards to Mrs G.

Yoeman as ever truly Yours
Joseph Henry

Dr A. Gray.

Smithsonian Institution May 22/57

Dear Sir,

Please accept our thanks for the name of the plant, which we will communicate to the person interested.

We have found the package of books, and have concluded to pay the bill & place the works in our library, provided you do not draw upon us before the 1st of July.

If you can sell Fendler's plants to any botanist who may want them we would prefer that you should do so, rather than purchase them ourselves. I am afraid we shall not be able to pay for them this year so many demands having been made on our appropriation.

Very truly,

Your friend,

Joseph Henry

Prof. A. Gray,

No. Smithsonian Institution,

Washington, D. C. July 24 1857

My Dear Professor

The ship which took our packages to Europe last autumn was accidentally delayed beyond the usual time; but we are now beginning to receive acknowledgements for the articles forwarded by it and I trust your correspondents will soon inform you that they too have received the books you sent to them.

We now make two shipments per year and to save expense, an important

matter, we generally employ a sailing vessel though the delivery may not be very prompt it is sure. Our system of exchange has now become a very impor-tant business and is attended with more labour than the public could readily imagine.

I shall hope to meet you at the session of the American association in Canada next month and until then and be assured that I shall remain very truly

Your friend &c

Joseph Henry

Dr A Gray

Smithsonian Inst.
Jany 8th 1858

My Dear Prof.

We cannot find a copy of the Report of Capt Sitgreaves except one at a Book store for which the extravagant price of $3½ is charged. We have concluded to purchase it and charge the excess of cost, above the limit mentioned, to the Smithsonian account.

Any suggestions you may be pleased to give relative to the printing of the scientific Reports by Congress will be thankfully received by us, and I doubt not can be turned to good account through the influence of Senator Pearce

I have home tomorrow morning on a flying visit to Albany. I do not much covet the journey at this season of the year and in the midst of the pressing engagements of this season of the year.

There is difficulty in the affairs of the Dudley observatory which it is thought cannot be settled without my presence, I go from a sense of duty not from choice.

Inman as ever

Truly your friend

Joseph Henry

Professor A Gray
Cambridge.

Smithsonian Institution
Jany 22, 1858.

My dear Sir,

Sitgreaves Report has been procured and will be sent as you direct. We can at least send a copy of the Rail road Surveys &c to the Society of Natural History at Geneva.

Accompanying this we send you a draft for $130, the amount of your bill. We also send a draft for $156,50 for Mr Sprague according to your request.

We have undertaken so many operations which are still behind hand, that we shall be brought to a stand still in our publications unless the 11th volume of the Contributions is made up principally of memoirs previously paid for, and we shall therefore expect it to contain the first number of your memoir on forest trees.

Do not forget your suggestions as to the future publications of the Government.

I remain, yours truly

Joseph Henry Sec'y

Prof Asa Gray.

Smithsonian Inst.
Feby 3rd 1858

My Dear Sir

It will be impossible for us during the present year to do anything in the way of distributing the Genera, ~~though~~ I am still of the opinion the work ought to be continued by this Institution. We have undertaken so many operations that until we have cleared off what is on hand we cannot think of beginning any thing more.

At the beginning of a new

year we are commencing a system of retrenchments in order to bring our expenditures considerably within our income.

We have an unsettled bill with Rice & Kendall and do not wish to increase our indebtedness to them. If however the stones can be purchased at auction at a low rate we would venture a small sum to secure them.

We find great difficulty in keeping the expenditures of the establishment within the receipts and this is increased by the delay in the completion of works we have undertaken and the uncertainty as to their ultimate cost.

If the stones are bid for on account of the Institution the fact ought not to be made known otherwise we shall be obliged to pay a double price for them.

With kind regards to Mr. Gray I remain very truly

Your friend

Joseph Henry

Dr. H. Gray
Cambridge Mass.

Smithsonian Inst
May 31st 1858

My Dear Dr

The proposition to publish a whole volume on the forest trees of North America will suit our arrangements very well provided it can be carried out without fail on your part. For this purpose the printing should be commenced on the 1st of January 1860 or in the latter part of the year 1859.

The tenth volume of the contributions is now nearly completed and will be illustrated by the plates of the 3rd and last part of Harvey's work with several other drawings. The

eleventh volume, or that for 1859 will contain Brewer's paper on eggs and other illustrated matter. The volume for 1860 may therefore connect entirely of your memoir.

I shall send you the map of arable land, before it is put to press, for critical examination. I shall publish a small copy of it in my next Report to the Patent Office on Meteorology.

I am not sure that I have given you a copy of my last report on this subject and shall therefore direct a copy to be forwarded with this letter.

I have made some remarks in this report on the character of the climate and soil of the great west, which have attracted considerable attention and given rise to a number of comments particularly in the agricultural journals and papers. To illustrate the same subject more fully is the object of the map now in preparation.

I doubt not your book will be well received by the public and serve to reimburse you for some of your losses.

I trust in due time we shall be able to assist in publishing the genera of the United States.

I remain very truly
Your friend & servt
Joseph Henry

Dr A. Gray
Cambridge Mass.

Smithsonian Inst

May 22d 1858

My dear Sir

I am glad to learn from your letter of the 12th that missing letters have been received.

I am just now in the midst of the preparation of our Reports and with attendance on congress am therefore much occupied.

Among other matters which is now occupying my attention is the completion of a map of the arable land

in the United States. I am specially impelled to this by the interest excited by my paper on Meteorology published in the Report of the Patent Office. The subject is of much importance in a moral and political point of view and I wish to make the map as perfect as the existing knowledge will permit.

I have engaged Mr Cooper the son of Mr Cooper of New York the naturalist to do the work. He has been over a considerable portion of the western plains and is a cautious reliable man. I should desire however to submit the map to your critical inspection.

While I am writing this I am handed by John the mail man a copy of your little book "How Plants grow" I shall put it into the hands of Mary and Helen and I doubt not they will be able to enlighten me on the subject.

With kind regards to Mrs G. I remain as ever

Truly your friend

Joseph Henry

Dr A. Gray
Cambridge
Mass.

Smithsonian Inst
June 24th 1858

My Dear Dr

We shall send you by Adams's Express of tomorrow a manuscript account of the wooded regions of the United States by Dr. Cooper which I beg you to examine and return to us with your criticism as soon as possible. I wish to make some extracts from the manuscript in my next Report for the Patent Office which must be finished by the 1st of aug.

The article may be published in a separate form with a large map when it is sufficiently perfect for that purpose.

The small map which accompanies the manuscript is reduced from the larger one and

is intended for the Report of the Patent Office.

The idea has occurred to me that it would be important to append a paper of this kind to your work on the Forest Trees of North America.

There is another appendix, which I think I have mentioned, which, it appears to me, ought to be added. I allude to a set of tables containing the results of a series of experiments on the strength of the different kinds of timber.

I hope the work will also embrace an account of the mode of cultivation and preservation of trees. I remain as ever

very truly yours

Joseph Henry

Dr. A. Gray,
Cambridge Mass

No. Smithsonian Institution,

Washington, D. C. Sept 18 1858

Dear Sir:

We have received a number of copies of the following work –

"Flora Brasiliensis" edidit C. F. Ph. de Martius. Fasciculus XXII. Lipsiae July 1858.

These have your address on, and the freight amounted to $20. Please let us hear from you respecting them, and as to the number of copies you wish sent to your address at Cambridge.

Yours respectfully

Joseph Henry

Prof Asa Gray
Cambridge, Mass.

Smithsonian Institution
Jany. 13th 1859

My Dear Dr

I am now busily engaged in making up my Report for 1858 and would be pleased to be able to say something relative to the work on Forest Trees.

According to our last understanding if my memory is not in fault you proposed to publish the whole or a part in 1860. We have sufficient material to make up the 11th volume of the Contributions and can make arrangements if you desire us to do so to devote the whole or a portion of the 12th volume to your work.

Let me hear from you as soon as convenient on this point

I regret that we could not at the time of the sale of the effects of Putnam purchase the plates of the "Genera". Perhaps however we may have an other opportunity to get possession of them on reasonable terms and to complete the work.

I remain very truly
Your obt. servt.
Joseph Henry

Dr. A. Gray
Cambridge

Smithsonian Institution
July 10th 1859

My Dear Dr

We shall be glad to commence the publication of the work on forest trees as soon as you have a part prepared for the press.

I think there is at present some some prospect that the further printing of the results of the exploring expedition will be stopped. There is in congress a great prejudice against printing Reports of a scientific character and this is not much to be wondered at considering the abuses which have been practised.

You may have seen that a resolution was introduced into the senate by Mr. Pearce in behalf of the Library committee asking for a Statement of all the facts connected with the

preparation and printing of the Reports of the Expedition.

Mr Pearce says that he cannot ask for any further appropriation that he was assured that the last appropriation was sufficient. I cannot say how the matter will end though I think it very probable that no appropriation will be made for this purpose at the present session.

I was much pleased to learn that you have been studying the flora of Japan in connection with the subject you mention. It is not the gift of any one individual to be equally well developed in every direction and though our friend Agassiz is a man of generous

Smithsonian Institution
May 18th 1859

My Dear Professor

Your note of the 16th and the accompanying letter have just been received and I hasten to reply by the return mail.

You need not trouble yourself on account of the Report on Birds. If it cannot be finished in part or in whole in 1860 it may be completed in 1861 or 62. I shall not state that it will be printed in 1860 as I had intended to do in the next Report to Congress.

I cannot say what will be the fate of the remaining portions of the Exploring Expedition Reports. Mr Pearce is much displeased with the Capt: who induced him

to ask for the completion of the work a sum declared at the time sufficient but which is now probably deficient by upwards of forty thousand dolls.

I doubt whether any appropriation will be made for the work this session. The dominant feeling is that of retrenchment. The Treasury of the nation is empty and at the end of the year will probably if possible be in a worse condition.

I will see Mr Pearce this evening after lecture and then give him your letter.

I dined yesterday at Bache's with Judge Lowrie and was pleased to learn that he is a relation of your good wife. I think I had been informed of the fact before but it had passed out of my mind. I have met him a few times and have found him a very agreeable gentleman.

Professor Cook is now in the midst of his course of lectures on chemistry and is giving excellent satisfaction. The Room is very nightly crowded to its almost capacity. He is one of the very best popular lecturers on chemistry I have ever heard. The lectures are well arranged well illustrated and well delivered.

I have not of late heard anything of Dr Torrey. all his difficulties have however passed over. There is pending before congress a motion to cut down the appropriation for the N.Y. mint which if it passes may affect him some.

Ever as ever
Your friend
Joseph Henry

Dr. A. Gray

Smithsonian Inst
Oct 22nd 1859

My Dear Sir

I am much obliged to you for your kind efforts relative to the memoirs so long delayed by Professor Agassiz. I have received a letter from him in which he promises to prepare the papers immediately but says nothing of the supplement.

He brings a request from two European savants that the Smithsonian Institution will publish these memoirs but on this point I am not very

and endeavouring to apply the principles of vegetable and animal distribution to the phenomena of the increase of population. I am confident that this subject has not of late years been properly discussed the approbrium heaped upon Malthus has deterred later writers from adopting his theory the principles of which though often objected to have never been disproved

I see that at the forthcoming book of your friend Darwin is alluded to by Dr Sardeson in his address at the meeting of the British association

I will consider your offer

P.S.

Yours truly
Joseph Henry

clear as to which course we ought to adopt in such cases; on the one hand we wish to make the Institution as catholic as possible on the other there is so much greater want of the means of publication in this country than in Europe that I do not think it prudent to encourage the presentation of papers from the other side of the Atlantic.

I am glad to learn that you have got information as to the Lithographic Stones and shall be pleased to hear that you have secured them by purchase. I presume he will charge for them the usual price and you can draw on us for the amount.

I have run over Buckle's History of Civilization and find it a suggestive but very unsafe work. His knowledge of science is of the most superficial kind and his deductions from facts frequently unphilosophical. The work is however suggestive and will awaken thought and discussion. I have given considerable attention to some points on which we conversed and been

Smithsonian Inst
Nov 5th 1859

My Dear Dr

Commodore Rodgers has just called to inquire whether we can publish the papers now in your possession relative to the botany of Hongkong and I have informed him that the articles can be put to press immediately. It will form a part of the 12th volume of our contributions but it may be distributed to botanists in advance of the publication of the entire volume.

Professor Agassiz has written to request that we will publish an extended memoir from Valenciennes the celebrated French Naturalist but I am not clear as to the propriety of encouraging the presentation of papers from abroad unless they pertain in some way to matters connected with this country. On the one hand we wish

to be as liberal as possible and on the other to make the best use of our funds and for this purpose have adopted the policy of doing nothing with the Smithsonian money which can as well be done by other means. Now since it is to be supposed that there are more abundant resources in the richly endowed establishments of Europe for publication than in the United States it appears to me that we ought to hesitate to encourage foreign contributions so long as there is more matter in this country than we can give to the world.

Give me your views on this point with kind regard to Mrs Gray I am as ever truly

your friend &c

Joseph Henry

Dr. A. Gray

Smithsonian Institution
Jany 6th 1860

My Dear Dr

We have no desire to change our printer at the north although we shall give Dr Brewer permission to have his paper on Eggs printed at any office he may prefer provided the work be well done at the same price

We shall probably have a large demand for your paper and therefore shall require a larger Edition one of less than 1700 copies will not suffice. You will therefore order this number to be struck off.

I am much obliged to you for the suggestions as to the stereotyping of our papers and shall give the suggestion due consideration

We are just now experiencing a remarkable term of cold weather The thermometer during almost every night this week has been down to-

near the zero point of the scale

It would give Mrs H and myself much pleasure to see Mrs Gray and yourself at our house this winter. We can give you much more comfortable quarters than we did when you were last in this city. Send Mrs Gray on with Professor Felton and his daughter and then come for her yourself—

Bring with you a few drawings and give us a course of lectures on trees or any other botanical subject. The more genial climate of this place will be much more favourable to the health of your good wife than an exposure to the Boreal Regions of Cambridge.

I remain as ever very
Truly your friend
Joseph Henry

Dr. A. Gray
Cambridge

Smithsonian Inst.
Jany 19th 1860

My Dear Sir

I am very sorry to learn from your letter just received that our much esteemed friend Mrs Gray thinks she cannot come on with Professor Fitton. But I hope she may yet be induced to change her mind on this point. We are now having very pleasant weather in Washington and I am sure that between our family and that of Judge Loring she would much enjoy her visit.

It is expected that you will put immediately to press the paper on Botany

I shall take into serious consideration your repeated

recommendation relative to the Electro-typing of our memoirs

I sent for a copy of Darwin's book as soon as I learned that it was announced in England but was informed by the Athletons that it had not been published. I read with much interest the notice of the work which appeared in the Athenæum and was some what pleased to learn from this that the author had connected his speculations with the theory of Malthus and had gone into a line of speculation on which I had entered.

Peirce is now giving us a short course of lectures on Natural Mathematics and on Comets. He is very much imbued with the views of Agassiz. You will find some very interesting facts on the subject in a prize essay in one of the last volumes of the Transactions of the Royal agricultural society of England. The substance of which is that by breeding from a selection of stock with for example short legs, the offspring in the course of time become all short legged and form a permanent variety - the stability of which is in proportion to the length of the time the process of selection has been continued.

We shall be able to send

to send your package of books to California and to receive in return any thing you correspondent may desire to present to you.

I remain very truly your friend

Joseph Henry

Dr. A. Gray
Cambridge.

Smithsonian Inst.
April 17th 1860

My Dear Dr

Mrs Gray arrived here on Saturday and appeared much better than I expected to see her. She called at our house on Sunday afternoon and I expected her and the whole party at the Institution yesterday but owing to the rain they did not come out. I shall see Mrs G this evening if not during the day. I regret that she did not come directly to our house but hope she and your sister will make us a visit on their return from the South.

Dr. Bache writes to ask me why you go so strongly against the Hayes expedition? He think there are a number of interesting problems to be solved by an expedition in the direction towards the geographical pole which would repay in some degree the labour of the expedition. I am however not well pleased with Dr Hayes for putting my name in the pamphlet in connection with a subscription of 1000 dolls. I informed

him that if he could secure the outfit the Smithsonian Institution would furnish him with a set of magnetic and meteorological instruments. He has endeavoured to explain the mistake and has promised to correct it in any subsequent publication which may be made.

Mrs. Gray informs me that there is in Cambridge and at the academy quite a mass relative to Darwin. I have looked over the article in the North American and think it childish in those parts on which my eye rested. The writer may perhaps have made some points which I have not seen. One copy of the Review is now in the hands of Professor Baxter when he returns it I will give the article a careful perusal.

While I have been engaged in writing this letter a gentleman has brought in a phial containing a small quantity of a yellow substance of which I send you one half and which he calls the Californian yeast plant. The specimen I send comes from North Carolina and is used in that country for the production of ginger beer. For this purpose a quantity of water sweetened with molasses is put into a suitable vessel with a quantity of ginger to which is added a quantity of the yellow substance. In the course of 12 or 18 hours according to the temperature the beer is produced while at the same time the plant has increased in the bottom of the vessel and may be thus propagated indefinitely. It is stated in the newspapers that persons have died after drinking freely for some time of the beer from the growth of the plant in the stomachs or intestines. You are probably acquainted with all the facts relative to this article; but should you not - as I think there will worthy of investigation. Will the sweetened water commence to ferment sooner with the addition of the plant than without it. If so the fact will be important for the theory of fermentation.

I have just been into the house and learn from Mrs. Henry and the girls that they have just returned from a call on Mrs. Gray and have learned that the party have gone to Mount Vernon. The weather to-day is very fine: yesterday it was quite unpleasant. We shall expect to have this company with us on Wednesday (tomorrow)

I am just now much hurried with the business of the Institution and with getting out our several publications. I remain very truly your friend

Joseph Henry,

Dr. A. Gray
Cambridge.

Smithsonian Institution
Aug. 14th 1860

My Dear Dr

I have received an application from Dr. Torrey for a set of duplicates of the Breckenridge ferns to be presented to Botanists to assist him in the preparation of an important work on the subject; and I write to request that if you think this disposition of the duplicate specimens a proper one, that you will send the collection which is now in your possession to the Dr. All we reserve is a full set for the Smithsonian Museum and that the duplicates may be disposed of in the best manner for the advancement of science.

I regret that I did not meet you at the meeting of the association at Newport. I wished to have

[some

conversation with you on the operations of the Institution in regard to natural history. Prof. Agassiz complained to me that we were doing injury to the cause of the advance of this branch of knowledge by the encouragement we were giving to young men to devote themselves to description natural history, instead of applying themselves to the higher study of the laws of structure and the philosophy of life.

You know I wish to give such a direction to the operations and influence of the Institution as will best advance general science, and I am desirous of obtaining definite ideas as to how this may be accomplished in the department of natural history. I failed to obtain from Prof. Agassiz a clear exposition of his views, although he appeared to be impressed with the idea of the necessity of a change.

The following are the questions to be answered in relation to the subject as it presents itself to me.

1 Is it important to make collections of duplicates in natural history?

2 Is it important that objects in natural history should be described in order that they may be identified? and if so:

3 What plan ought to be adopted to do this in the best manner?

4 Is there at the present time a system of classification for animals similar to that for plants, founded on natural affinities, which would be generally adopted by naturalists?

5 Ought the Institution to encourage young naturalists to devote themselves to the description of species? or to throw impediments in their way by refusing free access to the Specimens?

6 Finally, how can the Institution most effectually promote Natural History? I remain very truly

Dr. A. Gray

Your Joseph Henry

Smithsonian Inst
Dec 5th 1860

My Dear Professor

When I prepared the letter of instruction for Dr Torrey I had mislaid the notes you furnished me and inserted from memory the names of the several institutions to be first supplied. I shall however write to the Dr. and request him to place St Petersburgh before Berlin.

I am glad to learn that you have found all the stones containing the drawings for the Report on Trees and I shall be pleased to honor your draft for the cost of those you have purchased from Mr Bradford as soon as it is presented. I agree with you in thinking it proper to have all the stones insured

We are desirous to do as much as our means will permit in the way of assisting the valuable botanical explorations of Mr Wright but we cannot at present advance the 90 dollars from the appropriation of the present year although we may perhaps do it from that of the next provided there be any money in the treasury of the US from which the annual payments to this Institution can be made.

The Government for the present has stopped payment and we are unable at this time to draw the 2000 dollars due us for the charge of the Museum for the last half year. We hope however that some arrangements may be made by Congress by which the present condition of affairs may be changed for the better

I remain as ever
Truly yours &c
Joseph Henry

Dr. A. Gray
Cambridge
Mass.

My Dear Dr. (1) Washington Dec 7th 1860

The good people of the north do not appear to believe in the fact of the danger in which we are now placed. I think it more than probable that our Union is doomed to suffer the fate of all governments. The struggle of life must produce its effects with us as it has with all the world of past history. Every year the number of persons who adopt politics as a profession is increasing; the class must therefore deteriorate in talents, acquirements, and morality. The struggle for office must constantly increase in intensity, and as under our organization the number of offices cannot be changed the tendency will be to separate us into several governments each with a president and a corps of subordinates

Condensation

If the north will suffer the negro question to remain undisturbed the whole matter will in due time be settled by the law of population and the conflict of Races. ~~which~~ Labour from the north, as it is sharpened by the increase of laborers, must be gradually extended into the south until it is stopped by the heat of the sun.

There are parts of our country which cannot be worked by the white man and this must be cultivated by the negro or not at all. I have little hope that the black man can ever be civilized unless by selection in the course of geological periods, but I would make

make the experiment on a grand scale and expand millions under the direction of the colonization society in establishing an empire in Africa. The rulers might be the half bloods which we could constantly furnish for many years to come.

I do not think the Negro can ever exist in close approximation with the white man, except in a state of slavery. The struggle of life must be most severe at the lowest point of the scale and the Negro has neither the mental nor physical power, in our climate, to continue long the contest.

May we hope to have a few

lectures from you this winter on trees and the pleasure of a visit from Mrs. Gray?

I am much gratified to learn that our friend Dr. Torrey has made so pleasant an arrangement with Columbia College. In the present aspect of political affairs no position connected with the government can be considered permanent.

This communication was intended as an accompaniment to my official letter of yesterday but was accidentally omitted in mailing the other. I remain as ever

Truly Your friend

Dr. A. Gray. Joseph Henry

Smithsonian Institution
April 29th 1861

My Dear Dr.

In answer to your letter of the 26th just received I write to say that we shall be pleased to obtain the package you mention as soon as the city is again in a proper connection with the north, by means of the express. We can at present transmit small packages at a cost of four times that of the usual charge.

For nearly a week we were in a state of isolation, cut off in every direction from the outside barbarians; with no other intelligence than that of threatened invasions from various quarters. We experienced however no bodily fear although I felt at

given. We have more than ten times the number of politicians and consequently while the number of the offices of the general government remain comparatively the same the "struggle" for office has become ten times more fierce.

This is one cause of the frequent disruption and must tend unless checked to farther dismemberment. Three confederacies will give many three times as many offices for hungry politicians. There at present are 100 thousand applicants for office and but a small part of these will be applied - the remainder or rather the great majority will turn against the party now in power and endeavour by all means in their power to cripple the administration. I have not time to develope my views but must close with saying that you have not sent me a copy of your edition of Darwin and the request that you will put my kind regards in Mrs Gray's volume and

Yours truly
Joseph Henry

at one time somewhat anxious that Mrs. N. and the girls should leave, but they refused to go without me and therefore remained until they could not get away even had they desired to do so.

The city was at one time in considerable danger of an attack. The secession flags could be seen from the high tower of the Institution waving over the adjacent portions of Virginia while war was raging in Baltimore. But now that there are nearly 20 thousand troops at hand ready for action there is no fear of an invasion for the present. I think it probable however, from all I can learn, that an attack will be made as soon as Davis can collect what he may consider a sufficient force, unless congress makes some arrangement with the existence of the southern confederacy is officially acknowledged.

I would like to have a good long talk with you on the present condition of our country and its future prospects. In consider the subject properly it would be necessary for us to elevate ourselves above the excitement of the present hour and view the facts from a unselfish and unprejudiced position.

I have come to the conclusion that our union as a whole cannot be permanent, and that it will be far better to separate peacefully than to deluge the country with blood, and then in the end be as far from a harmonious union as we now are. I think the south will be more harmonious and better enabled to amend the constitution (when alone) than with the south. We have become too large. We have ten times as many people as we had at the beginning of the government, and ten times the number of bad

Smithsonian Institution
July 12th 1861

My Dear Dr

I intend to leave Washington with my family for some place in the mountainous part of Penna. as soon after Congress adjourns as I can get away. From present appearance the law-makers of the land will not remain in session beyond the present month. The hot weather and the fact that they get no additional pay, for the session will not tend to keep them long in this city.

As there will probably be no inspection of Light-Houses this season I do not think I shall have the pleasure of seeing you this summer

unless it be in a more southern latitude than that of Cambridge.

Are you not desirous to visit the army and give Mrs. Gray an opportunity of seeing Washington in her present martial character? We shall endeavour to make your visit as pleasant and as profitable as the times will allow.

We have become habituated to the pride and circumstance of glorious war and are scarcely satisfied with the daily papers unless they give us an account of a skirmish in which a number of human beings are hurried into Eternity. The warlike spirit may perhaps be referred to an outcrop of the transmitted habits of our barbarous progenitors which has been dormant for some time and now called forth by the events of the day.

This war will probably produce some remarkable changes in the condition and character of our country. The negroes in all the conquered states will probably be liberated and in that case left by themselves to carry on the battle of life with the whites they will like the Indians be driven to the wall and in time go out of existance. The negroes now living in New England are merely retained on the principle of natural selection the stronger and more intellectual continuing the battle a little longer than their less persistent brethren. But I cannot go into this subject with my pen and must therefore defer it until we can have a full vocal discussion.

You have been unusually sparing of your letters for the last year, you have not informed me as to your operations and scarcely mentioned Mrs. Gray. Dr Torrey gave us a very pleasant visit at the time of the coming in of the new administration but I have scarcely heard from him since. I do not think there has been any attempt to molest him in his position in the assay office and if there were any I do not think it would be successful. His chance is a very reasonable

room and is not disposed to make more changes than is unavoidable.

I am writing this in my office otherwise Mrs Henry and the girls would join me in kind regards to Mrs. Gray.

I remain as ever truly
Your friend & servt.
Joseph Henry

Dr. A. Gray
Cambridge Mass.

Smithsonian Institution,
Washington, July 12, 1861.

Dear Sir:

We find on consulting our books that the bill, of Rice and Rendall for paper, which you enclosed to us a few days ago was paid on the 31st of January.

Notwithstanding the disturbed political condition of the country, we are going on in the usual way, with the exception of curtailing our operations. On account of the impossibility of collecting the interest on some of the bonds in which our extra funds are invested, our annual income will be diminished by at least 3500 dollars below the estimate at the beginning of the present year.

Besides this we are informed this morning, from our Banker, who has presented our requisition for a half-year's income of the fund of the Institution, that Government intends to pay only Treasury notes. This will be another cause of diminution of income, unless I can prevail on the Secretary of the Treasury

to pay us in specie.

On account of this condition of our finances we are anxious that our next volume should be as little expensive as possible and we have therefore written to Professor Agassiz to urge him to finish the manuscript of the paper, of which we have had the plates so long on hand. We have not how-ever as yet heard anything from him in reply.

For a similar reason we would be plea-sed if you could furnish us with a number of your Memoir on the Forest Trees; provided the addition-al plates would not make too large a draft on our treasury.

Our invoices of presentations for the world abroad have been shipped, and most of our business for the year posted up.

I remain,

Very Respectfully,

Your Obedt. Servt.

Joseph Henry

Secretary S. I.

Prof. Asa Gray,
Cambridge
Mass.

Washington Aug 13th 1861

My Dear Sir

Your very acceptable letter of the 9th has just been received and as I intend to leave this city on Thursday I shall make the enquiry as to the whereabouts of Capt Rogers to day by calling at the house of his brother in law General Meigs.

Had I received your letter a few days ago, before the departure of those of whom I could make inquiry I would have been able to give you some information as to the state of the appropriation for the North Pacific expedition. It is possible however that you may obtain the information desired from Mr Stevens who has gone North and is probably at this time at his Father's in Cambridge.

I leave Washington for about

five or six weeks to make a tour in the Coal Regions of Penn^a and to visit Princeton New-York and perhaps Albany. The Nancy and our girls are going for a week or two to York-Springs and thence to Germantown where I intend to join them on my return.

I sincerely regret that I shall not have an opportunity to have a long talk with you this summer and I must therefore insist that you bring Mrs. Gray to us in the Autumn or early winter. The climate of your delightful summer residence is too severe for her in the beginning of winter or spring while Washington at those seasons is usually mild and pleasant.

I have given considerable attention to the study of history, government and political economy since we last met and I would be gratified to have an opportunity to discuss some of the points with you.

If I have wandered too far from the general line of previous studies you are the cause and must be held responsible for the evils which may result from such excursions into new paths.

Our city is just now in apparently a very peaceful condition. A great change has taken place since Gen. McClellan took command and our streets are now as orderly as those of Cambridge!

I had a letter yesterday from Dr. Torrey he is getting on very pleasantly at the Point but has suffered so

account of the war — who has not? The answer is all except the rascally contractors who have cheated the government and swindled the soldiers. Their exposure is yet to come.

We had a very pleasant visit from Professor Horsford who staid with us about a week while he was engaged in the good work of introducing his bread into the use of the army.

The city is somewhat excited this morning by the arrest and confinement of our late minister to France. I fear the arrest will produce an unfavorable state of feeling in Maryland or rather augment that which now exists. I presume however that Gen. Scott has good reason for ordering the act. — I shall close this letter after I have obtained the information relative to Capt. Rogers. — I learn that Capt R. has gone to take charge of the marine operations on the Mississippi. With kind regards to Mrs G. I remain very truly yours

Joseph Henry

Washington May 22d 1862

My Dear Dr

We have had little cross fordum for a long time past. I know however that the world is moving smoothly with you & dear excellent friend Mrs. Gray. Our household are in good condition but would have been better had we been favored with a visit from Mrs G and yourself.

All the affairs of the Institution are now in a quiet condition although a few dark clouds appeared in our horizon during the winter.

The Museum is now in good condition and is a source of great attraction to the immense number of visitors who flock to the national capital. I am just now considerably interested in the subject of archeology and have issued circulars for the collection of Indian implements to be with the collections of the exploring expeditions. Those of the National Institute

others we have received from Denmark, and those presented to the Institution, we have now quite an interesting series to illustrate the several stages in the progress of elementary arts.

From the appearance of the war we may entertain hope that it will be shortly be brought to a close. The difficult question will then remain as to what is to be done in regard to the negro. I am warmly in favour of colonization – of trying the experiment on a grand scale – of founding and supporting, for years to come, an empire in Africa which will be so attractive to the negro that under the repulsive influence of caste in this country he will be voluntarily impelled in that direction.

With kind regards to Mrs Gray I am as ever truly your Friend

Joseph Henry

Dr A. Gray

Smithsonian Institution

May 22nd 1862

My Dear Dr

I send you a note and a specimen from one of our correspondents with the request that you will furnish him with some remarks relative to the subject.

What do you say as to going on with the Report on Forest Trees? Congress has just established an agricultural Department – which might perhaps be inclined to assist in defraying the expenses of the work.

I remain as ever truly

Yours &c

Joseph Henry

Dr A. Gray
Cambridge

Smithsonian ~~Institution~~

April 15th 1863

My Dear Dr.

I am glad to learn by your letter of the 10th that Dr. Torrey is on the mending hand. He left Washington in a feeble condition and I presume has been kept under by the bad weather of the backward spring. I trust however he will overcome on the opening of warm weather and hope he may long be spared to his family and friends. We can scarcely afford to see this like again

I send you with this note a copy of the law of Congress establishing the national academy, but can give you no information as to the plan of organization which will be proposed. I have made no enquiries in regard to it and have received no definite information.

The subject of an academy was discussed about a month before

commit to paper. Cannot we meet somewhere during the summer?

With kind regards to Mrs Gray I remain truly your friend & servt.

Joseph Henry

Dr. A. Gray.

the action of congress by Dave's Bache and myself when we came to the conclusion that it would be impossible to obtain the passage of a law authorizing such an institution, and that if established it would give rise to so much bad feeling that it would be production of little good. Instead of an academy it was concluded to ask the appointment by the navy Department of a permanent commission to which all questions of a scientific character presented to the navy department should be referred.

This commission was appointed and has been in active operation for nearly two months. It has occupied nearly all my time not devoted to the Institution and more than I could well spare. It has done good service and can scarcely be improved upon by the acts of the academy.

I shall attend the meeting of the academy and do what I can to give it a proper direction I put but little faith in appropriations of congress. On the first application for an appropriation the friends of those who have been left out will make war upon the establishment.

I shall be much disappointed in not meeting you in New York since I have a number of subjects on which I wish to confer with you and which I cannot well

Smithsonian Inst.n
Nov 7th 1863

My Dear Dr.

I have put off from day to day to inform you of the safe arrival of caroline and myself in Washington. After lingering a few days on the way, in order to give Sarah Frost an opportunity of driving off the malaria, we reached home just three weeks ago to day and found all things at the Institution in the usual condition, and the city, though crowded with people, apparently in a healthful state.

Mrs. Henry and our other daughters have not yet got back, but we hope to see them this morning. The air

Do not fail to send her on either by the express line or by some other trustworthy conveyance. You must not forget that you owe us several long visits and that we shall not be satisfied until you have paid us to the last item.

We had a delightful visit at Cambridge, pleasant and profitable at the time it was enjoyed, and will be gratifying and improving in the recollection.

Did you see Professor Lowell in regard to the lectures? Shall I write him an official letter on the subject?

With kind regard to our much esteemed friend Mrs. Gray I

Remain as ever
Your friend
Joseph Henry

Dr. A. Gray
Harvard Coll.

P.S. Caroline will write to Mrs Gray as soon as her mother comes home. She is now confined in her private attempt at housekeeping.

of Wilkesbarre was found so agreeable to Helen that they concluded to remain until the prospect of cold weather should drive them home. They were now in Phil.da and report that Helen is much better, but since the departure of William so unexpectedly, I feel that all our holds on life are by a very feeble grasp.

We have just had a very pleasant visit from Dr. Lowry. He came on Tuesday night and left yesterday morning. He is apparently quite well and much occupied as chairman of the committee on the subject of the prevention of counterfeiting the currency.

I shall be obliged to see that he gets the full pay for his expenses. He should include the extra wear and tear of clothes as well as hotel cost of board &c, but he is too modest to take proper care of himself. The Government can well afford to hold him entirely free of logs while he is doing that which may save hundreds of thousands of dollars.

Washington is overflowing with people and a hanging up place can scarcely be obtained for money, to say nothing of love. We have however a small room in which we hope to put Mrs. Gray and from which, and a warm atmosphere, she may look out on the busy world around without fear of molestation or of cold.

Smithsonian Institution
Dec. 9th 1864

My Dear Dr.

The decision of Mrs. Gray has given our house-hold much pleasure; whoever may be with us at the time of the inauguration she will have the best accommodation we can offer. Do not let her change her mind in regard to this matter; for we shall anticipate her visit with much interest, and would be sadly disappointed were our expectations not realized.

I am glad to learn that you still approve of your first suggestion, as to the method of finishing the report on forest trees. I am very anxious that it should be completed as

soon as possible, and in order to proceed with it, as rapidly as it can be properly advanced, I would defer the completion of other works now in progress.

I am making arrangements for the accommodation of any share of the members of the National Academy at the next meeting, and wish to know, as early as may be, whether we are to have the pleasure of your company.

I remain very truly
your friend
Joseph Henry

Dr. A. Gray

I am obliged to keep a sharp eye on the Smithsonian expenditures unless we curtail some of our operations we shall go behind hand during the present year –

Give my warmest regards to Mrs Gray and urge her to come on as soon as she can – She will be the pet of all our family and be allowed to be as naughty or as good as she pleases. We have purchased a white horse which though not very much in the way of display is very well in that of going a head. With this Mrs. G. shall have a ride as often as she may think fit to take one.

Helen is slowly improving though she is still far from being strong

Truly your friend

Joseph Henry

Dr A. Gray

Smithsonian Inst.n
Feby 26th 1864

My Dear Sir

Accompanying this note I send you an epistle which has remained in my portfolio for a long time.

Although the news which it contains may like that of the poet be much older than your ale; still I trust you will accept it as an evidence of the fact that I had not entirely forgotten Mrs. Gray and yourself whatever may long silence to the contrary may have appeared

[to indicate

We had a call a few days ago from Governor Washburn who informed us that Mrs Gray had been quite unwell but was better. We requested him to urge you to bring her on to the south as soon as her health would permit her to travel.

The weather in Washington is generally in the spring quite pleasant and I doubt not that she will find a residence with us until the season has been fully established very beneficial.

Since the date of the accompanying epistle Dr Lorry and myself have had a very agreeable reunion in Philadelphia as commissioners to attend the annual assay of the U.S. mint. The Dr was accompanied by Herbert who also appeared to have a good time. Mrs. Harry accompanied me and we took advantage of the opportunity to visit Princeton.

I have nothing new beyond what you have seen in the news papers. We are still under a dark cloud and many of the more reflecting members of Congress are very anxious as to our financial affairs

and how he may yet be induced to change his mind.

Do not fail when you come on to put a few lectures into your trunk;—those on the large trees of California and other giants of the forest would be very acceptable.

Mrs. Henry and all our family are delighted with the prospect of having a good long visit from Mrs. Gray. I need not say that we shall endeavour to make her as comfortable as possible and I doubt not that she will improve under the more mild climate of Washington in the early spring.

I and Henry has just this minute left the house for

Smithsonian Institution
January 22nd 1864

My Dear Dr

Since the receipt of your interesting communication of the 12th of Dec. I have been so pressed with business that I have not been able to keep up with my correspondence. Besides the current business of the Institution I have been one of a Commission which has made upwards of 170 Reports to the Government and have conducted an extensive series of experiments on the subject of oils.

The meeting of the Academy went off, on the whole, quite smoothly. The reports of the committees on subjects pertaining to operations of the United States exhibited a

considerable amount of valuable labour of the kind much wanted by the government. A number of papers of minor importance was presented, but nothing of special novelty. Most of the time of the session was expended in discussing the articles of the Constitution and By-Laws and receiving the Reports of the committees.

The meetings were held in the Capitol in a room, the use of which was granted by the Vice President.

If the members will all attend and resolve to do all in their power to support the establishment on just and unselfish principles the academy will do much good both in the way of advancing science and assisting the government.

Professor Agassiz gave a course of three lectures at the Institution on the subject of the Glaciers and has gone to the West to give a course of about 20 lectures at different cities. He left this city in much better spirits than when he came.

I was much disappointed with the decission of Mr Lowell

Smithsonian Inst.
Dec 22d 1864.

My Dear Dr.

We shall be very glad to see Mrs Gray and yourself at the time mentioned in your note of the 12th inst. and to receive from you the lectures suggested.

The time of the meeting of the National Academy is drawing nigh, but from present appearances the number in attendance will be small. The pressure of the times is so hard on salary men that they can ill afford the expense of a journey to Washington.

Mrs Henry and Caroline have for nearly two weeks

had been almost constantly from home in attendance on a fair for the benefit of the orphan asylum of this city. Helen has not been able to take an active part in the management of the fair, but has been a liberal contributor with her needle and drawing pencil.

Mary is still in Phila. improving herself in the art of sculpture: we hope to see her at home on Tuesday next.

Tell Mrs Gray that we are the owners of an old white horse which Mr. Stanley considers a model animal, not so much on account of his physical as his moral qualities. He is attached in accordance with the time honored maxim "handsome is that handsome." With this animal and an old, but safe carriage, Mrs Gray can visit Under Abraham and all the other lions of this city. We expect some other friends on the occasion of the inauguration and look forward to a good time.

We are having a term of cold weather the thermometer has been falling all day and is now down to 26° which with a high wind from the N.W. gives blue noses in this latitude. The minimum of temperature will reach you in Cambridge probably some hours later.

I am as ever
truly your friend
Joseph Henry

Prof. A. Gray.

does not appear possible that we can much longer stand the expenditure of upwards of two millions of dollars daily. If we could bring the war to a close within the next six months we might then be able to weather the storm but if the strife continues longer than this the result as to our finance will I fear be very disastrous

I am very glad to learn that there is a prospect of a desirable disposition of your collection of plants. The present is a favourable time for raising money but you must have a care as to the

manner in which it is invested.

Please inform Mrs Gray that Caroline will give her a long letter in the course of a day or two. Since our return from the north the young lady has been so much occupied with various engagements that she has had off from day to day her letter to Mrs Gray and on this account I know has had many twinges of conscience.

I have much to say which I cannot write and which I shall reserve for your ear when you come on.

With kind regards to Mrs Gray I remain as ever truly your

Your friend

Joseph Henry

Dr A. Gray
Cambridge
Mass.

Smithsonian Inst.n
April 13th 1865

My dear Dr

Accompanying this note we send you a letter for Mr Wright which we hope will answer his purpose. We shall be much gratified to learn that Mrs Gray has returned improved in physical condition by her southern excursion. I say in physical condition because she needs no improvement in her mental and moral character.

We were much disappointed in the shortness of her visit. We supposed when she came on that it was settled she was to remain with us until the spring weather had been entirely established

I did intend to start for New York this morning but the authorities of the city have recommended a general illumination and I have thought it best to remain to superintend that of our end of the Smithsonian building.

We are all highly rejoiced with the surrender of Lee and the prospect of a steady and favourable termination of the war.

We are making preparation to commence the repair of the towers of the Smithsonian building. The rooms in them are most called for on account of the want of office accomodation.

Give my kind regards to Mrs G. and to Margaret Torrey if she is still with you. I remain as ever truly yours in Joseph Henry

Dr. A. Gray

at Cambridge and under this impression we did not make as much exertion to take her out as we would have done had we been assured of her early departure.

I have just called on the Sec McCulloch the new Secretary of the Treasury in behalf of Dr. Torrey and I found him as I thought I should very favorably inclined to give the Dr. any indulgence in his power. He said he would not hesitate to give the Dr. any permission of absence he might require but that he wished to do more — to give him some mission on the part of the Government which might entitle him to payment of expenses. I suggested a visit to California to which the Secretary replied that he thought had such an agent to that region but if there was any information remaining which might be of value to the Government he would send the Dr.

I start for New-York tomorrow morning to be absent from Washington about a week. I shall confer with Dr Barnard and Mr Dunning as to the Dr's mission and see the Secretary on the subject when I return.

I have found it impossible to go on to Boston this spring and have made arrangements by which the business on which I was to go will be conducted by me together

has all the money derived from the original bequest untouched in the treasury of the U.S. — seventy five thousand dollars in Indiana bonds and thirty thousand in the hands of the Treasurer. Besides these items the bonds of Virginia and Tennessee owned by the Institution are quoted at about half their par value. I believe that I mentioned to you when in Cambridge that there are 25 thousand dollars of the estate of Smithson still in England which was left by Mr. Rush as the principal of an annuity granted to the mother of the nephew of Smithson. The annuitant died about three years ago and a power of attorney was sent last year to collect the money. The minor officers of the crown however are throwing all possible difficulties in the way of procuring the money and I fear a greater part of the sum will be absorbed in litigation. The whole estate was granted without hesitation to Mr. Rush and it does not appear well in the present state of feeling between the two countries to throw any obstacles at this late day

in the way of supposing the remainder to be brought over. I intend to consult Lord Lyons on the subject and endeavour to induce him to use his influence in the adjustment of the difficulty.

From the statement I have given you it appears that our financial affairs are still in a favourable condition and this would really be the case could we depend with certainty on the future of the public credit but it

New York after giving us a visit of about two weeks. She came on with her father and has I think had a pleasant time. She has kept us continually in a laughing condition. Though very eccentric she has a kind and generous heart with much good sense.

Dr. Lowry will visit this city again in the course of a few weeks. He is chairman of the committee on preventing the counterfeiting of the currency & has given much time and thought to the subject.

The first meeting of the Board of Regents of the Institution for the session of 1864 was held yesterday at which I gave a general account of the condition of the funds.

The Institution is free of debt.

was present and expressed his approbation of the sentiments I had advanced. He is coming to Washington and will visit the Smithsonian. I am informed that Mr Peabody is to visit this city in the course of the autumn or winter and as I am to open his Institute in Baltimore, I shall have an excuse for calling on him and shall not fail to speak on the subject of your letter, I can do this with the more freedom since I have no fear

S I Oct 31st 1866

My Dear Dr

I am glad to learn from your letter of the 27th received by the mail of yesterday that Mrs. Gray has recovered, and I hope she will continue in good condition during the winter, and be prepared to take advantage of the mild climate of Washington to help her through the severe weather of the spring.

I am also much pleased to learn that Professor A. and yourself have again come together. I am sure he is a happier man on this account

and that you are none the less comfortable. I hope in future he may be guided by a little more of your wisdom and a little less by that which has of late years ~~been his undoubted~~ directed him.

I dined with Mr Peabody last Thursday on the occasion of the opening of his Institution in Baltimore. The dinner was a private one given by the Trustees to Mr. Peabody. I had little opportunity to talk with him, but embraced the opportunity to say that I had lately visited you and had been highly gratified with what he had done for Cambridge in the line of ethnology. To this he appeared much pleased. I also took advantage of the occasion of being called on for a speech to say how much good could be done by assisting men of science in their investigations.

His Nephew, Professor Marsh,

and is as usual hard at work. His wife is at a private Hospital in New-York awaiting the proper time for an operation.

She has been a great sufferer, and he a most attentive and affectionate husband.

Give my kind regards to Mrs. Gray and the two young ladies and remain for yourself the assurance that I am as ever truly your friend

Joseph Henry

Dr. A. Gray

project of endowment to which I wish to direct his attention. I cannot say what will be the result. While he is a man of noble purposes, and desires to do good, I think he would all things being equal, prefer to perform those acts which will give the most renown. In what way could public acknowledgments be best made to him in the case under consideration?

I am alone in the east wing of the Smithsonian

busily engaged every moment I can spare from my duties in the Institution preparing my notes for my lectures in Baltimore. I very reluctantly consented to deliver them, but I found that I could not get off. I hope I shall be of some service in giving the munificent endowment of Mr Peabody a proper direction. It now amounts to one million of dollars and ought not only to be a blessing to the city of Baltimore but also to the whole country.

Mrs. Henry, Helen, and Caroline are in Philadelphia. Henry is in New York. I expect them home the latter part of the present week.

We had a very rough time on the sound the night we left Boston; but arrived in good time and in good condition in New York next morning.

Professor Bond has returned

after these lectures were given I had much to prepare for the meetings of the Board of Regents while I had on hand a large amount of work relative to the examination of the methods to be employed in the inspection of spirits for the collection of the revenue.

We have almost entirely a new Board of Regents, who at the commencement of the session were not well informed as to the character and values of the operations of the Institution, and were somewhat inclined to changes. I had therefore some anxiety as to the course matters might take but fortunately all things have

Washington March 8th 1869

My Dear Dr.

I am sorry to inform you that I was absent in attendance on the meeting of the mint in Philadelphia when Mr Peabody visited this city. I regret this because I lost the opportunity to speak with him in regard to the affair in which you are interested as well as other matters. I now however to have an opportunity to confer with him before he leaves the country through the agency of his nephew Professor Marsh who is very favorably impressed with my views as to the conduct of the Peabody Institute of Baltimore

Commodore John Rogers, as you probably know, has now charge of the Boston Navy yard and I would suggest that he is fully worthy both by regard to patriotism and science of an election as a member of the American academy. I am sure he would take much interest in the meetings and be indeed to take part in the discussions of the questions brought before the academy. He is a man of much reflection and has collected a large store of observation in various parts of the world.

His wife was Miss Ann Dodge, and old and valued friend of our family whom Mrs. Gray and yourself would find an intelligent and interesting acquaintance.

I have had a very busy time since my visit to you last autumn. On my return to Washington I found it impossible to get off from giving the opening course of lectures at the Peabody Institute and I was obliged to prepare four lectures, which for want of practice, for twenty years, cost me no small amount of labor

be surprised when he comes to reflect on the facts of this appointment. He had no idea of such a result when he came on. Had he not taken it, the survey would have gone into the hands of a gentleman of administrative ability, but of no pretensions to science, and would have taken the first step towards the overtaxing of partizan politics which has already swallowed the Patent Office, the Mint, and the Agricultural Department.

When are we to expect Mrs. Gray? The winter in Cambridge at this time must be very trying while that of Washington is just beginning to be very pleasant.

With kind regards to Mr. Gray I remain as ever yours truly

Joseph Henry

Dr. A. Gray

given as I wished, and the Institution to day is in a more prosperous condition than it even was before. Congress has authorized us to increase our capital by savings or otherwise, until it amounts to one million of dollars and the Board of Regents has directed me to sell stock and treasury notes of which we have possession and thereby increase our capital at once to 650,000 dollars. after doing this we shall still have on hand enough to reconstruct the building without impeding our operations.

You have been very fortunate in all our money operations and rather ~~stumbled into them~~ increase than

diminished our funds notwithstanding the great outlay on account of the building.

The transfer of the Library has also been a fortunate operation since it has not only relieved us of an expence of several thousand dollars annually, but has awakened a spirit of pride in the Library of Congress which will serve to make it a collection of books worthy the Capital of the Nation: One hundred thousand dollars have been appropriated to purchase the Library of Mr. Force and already the proposition has been suggested to erect a separate building for the exclusive use of the Library.

The transfer of our Library has thus not only relieved the funds of the friends of Mr. Leavitt, as to the violation of the law of congress but has also served to bring about what I have always contended for the establishment and support of a large Library by the general government.

In time a similar result will be produced in regard to the museum.

You will probably much surprised to learn that Prince had been appointed superintendent of the coast survey and I think that Prince himself will

This addition to the Congress library will require an additional assistant Librarian who will be appointed on the nomination of the Institution with special reference to the care of the Smithsonian books. Although if all things were equal I would prefer to retain our library within our own building yet in the actual condition of affairs I think the transfer will be beneficial not only to the Institution but also to the public.

The mere covering of the building and the restoration of the towers will cost at least 100,000 dollars and still leave the wings and connecting ranges in a combustible condition. In the present state of the finances of the country I see no prospect of an appropriation from Congress and unless we can get rid of a part of burthen a large portion of our income must be absorbed in brick and mortar and the full realization of the plan for which I have so long laboured be abandoned

Yr. Dr. Gray Cambridge

Smithsonian Institution

My Dear Dr

Feby 28th 1866 –

I need scarcely say that I am well pleased with what you have done in regard to the plants which have been intrusted to your care, and that we shall be ready to pay any expenses which may have been incurred as soon as the accounts are rendered.

I would be glad if you could find time to give me for my annual Report an additional statement of what you have previously done relative to the same plants in order that I may present to the Regents a connected history of the whole matter. I am giving my Report at the several meetings of the Board, in parts, and if you can favour me with the required statement within the course of two or three weeks it will be in time.

I am at present in frequent communication with the Members of the Committee of the Library

of Congress and shall not fail to procure what information I can obtain, in relation to the points mentioned in your letter.

We are discussing with a committee of the Library of Congress the proposition of the transfer of the care of the library of the Institution to the superintendent of the Congressional library. At the last session an appropriation was made of 100,000 dollars to enlarge the space of the library of Congress and the accomodation thus provided is sufficient for our books and the annual increase of both libraries during the next fifteen years.

The object of the transfer on the part of the Institution is to relieve the Smithsonian fund of the expence of a librarian, of binding and cataloging the books, and above all, of the cost of a new apartment for the rapidly increasing number of volumes. The wing and connecting range in which the books are now deposited are not fire proof, and are therefore not only unsafe, but cannot be heated in winter. Besides this the shelves are filled to overflowing and we shall require a larger, as well as a more safe place of deposit for our valuable collection. The conditions on which the deposit will be made in the library of Congress are in effect as follows.

1 The books are to be placed by themselves in the new part of the library.

2 The Institution is to have the same use of them that it now has.

3 The library of Congress to be open the whole year round to the Institution and the public for reference.

4 The Institution to have the same use of the books of the library of Congress as the members of Congress have.

5 The books of the Institution to be bound by the public binder.

6 If the Institution should at any time desire to withdraw its books it can do so on paying to the Government the cost of binding.

Smithsonian Institn

July 8th 1868

My Dear Dr:

The first intimation that I had of your going abroad was from Whitney who informed me that he had hired your house for a year. I immediately commenced a letter, but was interrupted before I had time to finish it.

We were very sorry that Mrs Gray could not come to us and most sincerely hope that her residence abroad will be beneficial. I think you have adopted the wisest course in this as you have in all previous epochs of your life.

sciences as connected with our present civilization, and have suggested that if the Government is to be benefitted by the operations of the Academy it must make provision for the annual meeting of the body and the more frequent assembling of its Committees in Washgn. I have said very little in regard to the publication of the memoirs, since the 1st volume contains but five papers containing in 342 pages, though the number was unlimited by law.

I very reluctantly accepted the office of President and I was principally induced to do so at the earnest solicitation of Mrs. Bache, who since her husband was the first President, and because his fortune after

I am very anxious to have a long conversation with you and will endeavour to so arrange my affairs so as to meet you either in New York or Cambridge: from which of these two ports do you sail?

I am a little surprised that you ask me what you shall do with the Eulogy on Bache since I thought you had given it to Dr Gould. You will please however return it to me since it will save the labour of a copyist. Sabine has adopted it as the account of the life of Bache in his annual address ascribing the authorship to myself. He has also sent me a copy of the 1st volume of the great scientific index which I think will be of great importance to American savants in giving a conspicuous reference to their contributions: for example no less than six volumes are devoted to Bache's contributions, and several papers are enumerated of which I had lost sight. This volume includes the first three letters of the alphabet. The origin of the work, in the preface is very liberally ascribed to a suggestion of my own in a letter addressed to the British Association.

I have just presented to Congress the report of the National Academy for last year, and have embraced the occasion in this to give some views in regard to the importance of abstract

her death will be under the care of the Academy, is exceedingly anxious that it should be perpetuated.

I introduced a resolution at the last meeting to abolish the itinerary character of the Academy and to have an annual session in Washington in the month of May. I mentioned the fact in my report that I had no part in the organization of the Academy but since Congress has seen fit to establish an institution of this kind I thought it my duty to give it all the aid and direction in my power. Thus far all the assistance it has afforded Government has been

through the labor of a few persons principally connected with the government, residing in Washington and New-York and unless Congress makes provision for the meetings of members from a distance, it will receive no more benefit from the Academy than what it could have obtained from a commissioner casually appointed. I am somewhat delicately situated in regards to the Academy. I honestly desire to render it of use in way of advancing the science and reputation of our country, and am far from desiring that it should expire in my arms; but how to preserve its life and to render it useful is a different problem, and on this point I desire some confidential confabulation with you, whom I have always found a wise and just man. The affairs of the Institution are now in a very prosperous condition: the new Regents are all well disposed: even Wade takes an active interest in our affairs and fully appreciates the spirit of the establishment.

With kind regards to Mrs Gray, I remain very truly your friend &c

Joseph Henry

Dr A. Gray
Cambridge Mass

report which is still in the hands of the binder, I regret that I am not able to get you a copy; but send herewith a portion of the proof from which the extract might be made.

With kind regards to Mrs Gray

As ever, your friend

Joseph Henry

Prof. Asa Gray
Cambridge

Smithsonian Inst.
October 5 1867

My Dear Dr.

Since I left Cambridge I have been continuously employed from early morning till late at night. I spent three days in New York in actually directing the operations of a distillery in one of the most noisome portions of the city; there hastened here where I found all the contractors urgent for money and a pile of correspondence on my table which with incessant labor I have not yet been able to fully dispose of. The Revenue Department on the one hand was urgent for a report of the investigations on Spirit Meters and on the

ter the Light House Board asking for an account of my late investigations on oil. This Report I have finished and submitted and am now considering a programme of experiments on Fog Signals which are to take place as soon as the weather clears up

I have begun the Eulogy on Bache but cannot finish it at present for I begin to fear that I shall break down for owing to excitement of mind and annoyance caused by mosquitoes and flies I have not slept more than four hours a night during the past two weeks. I have concluded to start the [redacted] Philadelphia, to rest there over sunday and then to go on to New York where I shall meet my wife on Monday I regret very much that I am unable to fulfil my promise but I feel that I have tasked my powers to the utmost during the last two weeks.

We shall not want any copies of Bunkum's Address as we have received a large number for distribution from London, but in its republication in Silliman's Journal I think it would be well to make a few extracts from my last

Smithsonian Institution

December 10th 1869.

My dear Dr.:

I am much gratified to learn that you have returned in safety, and I hope that Mrs. Gray and yourself have been physically and mentally much improved by your extended tour in the old world. It would give Mrs. Henry, and myself much pleasure to have a visit from Mrs. Gray and yourself: we would take great interest in going over with her the incidents of your travels and she will find Washington a much more genial climate than that of Cambridge at this season of the year.

I wish to confer with you on various

points in regards to the present and future of the Institution, and this I would do more freely and fully in conversation, than in writing. You will see by the report for 1868, of which I send you an copy, that all our affairs are still in a prosperous condition. Our financial matters are so arranged that our capital, with the exception of the Virginia stock, is now so invested that hereafter nothing, but the interest can be expended. Just at this time however we may suffer some diminution of our income on account of the fall in the price of gold without a corresponding reduction in the rate of printing and other operations.

I think also from the report you will be led to infer that there has been no diminution in the activity of the Institution since you left the country, and that it is still fulfilling its mission in the way of increasing and diffusing knowledge. I have not however during the present year enjoyed my usual state of health. I was last summer seized with a diarrhoea resulting perhaps from over-work and the malarious influence from proximity to the Washington canal, and on getting rid of this I was attacked with a cough which assumed the form of a chronic bronchitis

After, however, a short visit to Savannah Georgia, I have returned much improved and am again on the mending hand.

In view of my own health and the changes to which all things are subjected I have been especially anxious to complete as soon as possible the enterprise of the Institution in which we have embarked; and for this purpose have employed a number of persons to work up the meteorological data we have collected during the past twenty years. We have just finished a very interesting discussion of the rain-fall of the different regions of the United States which is now in press.

It will be illustrated by charts and woodcuts, and will form one of the most important additions to the meteorology of this continent which has yet appeared. We are now occupied with the temperature and winds and are about commencing a new epoch in our connection with the medical department of the army as to all the elements of meteorology of this country.

I need scarcely say in this connexion that I am also desirous to have the report on forest trees finished as early as possible and in regard to this I would submit for your consideration a suggestion which has occurred to me. You will see by the report for

that we have turned over to the Commissioner of Agriculture, Sen. Lapham, the herbarium of the Dept., subject to certain conditions, and the idea has also presented itself, that the report on forest trees might also be transferred to him. He will be able from his ample appropriation to advance all the money that might be required to defray the expense of assistants, and to remunerate the Dept. for the advance it has already made. I have spoken on the subject to Sen. Lapham with whom I am on excellent terms and he has manifested a ready acquiescence in the proposition. I would

much prefer that the original plan should be carried out, but in view of the speedy completion of the work and the better remuneration of those who may be engaged on it I am willing to adopt the course suggested. The statistics of the lumber of the United States and perhaps of Canada, should be obtained and arrangements made for preparing specimens suitable to test the relative strength of woods of different kinds and from different localities.

I was informed last year while on a visit to Williamsport Pa that at the rate at which pine trees are now being cut off, the whole supply will be

exhausted in the course of ten or fifteen years. Much attention has of late been directed to the rearing of forest trees of more rapid growth, and I am sure that a full report on this subject would be an exceedingly acceptable gift to the productive economy as well as to the science of the country.

I am as ever
truly your friend
Joseph Henry

Dr Asa Gray
Cambridge

P.S. your kind letter of the 10th has come to hand since this letter was written

J. H.

Smithsonian Institution
March 22nd 1890

My Dear Professor

General Capron has referred your letter of the 19th Feby to me; and I am pleased to learn from it that you are disposed to push on the arrangements for finishing the Report on Forest trees.

I have been informed that Dr Engelmann; though a good botanist, is too much occupied with professional business to be able to give much attention to the investigations required for the report. I learn however that he has completed the study of some classes of Forest trees, and what he has done may perhaps be obtained for the work, while his services in preparing other parts might be secured. It appears to me that if you could get some young man of the proper character, who would work under your direction the desired results would be the soonest and best attained, but on this point, as on many others, I defer to your judgment.

I think the work could be made to pay the cost of its production if judiciously put on sale.

I hope you will find time to give this matter the necessary thought as well as to favor us with a visit. The weather for a few days past has been delightful, and we shall in all probability, from this time forth, have such air as Mrs Gray would be benefitted in breathing.

The National academy meets in this city on the 12th of next month. I have re-

-newed the motion, which was lost two years ago, to have but one session a year, and that in Washington. The propriety of this was evident at the last meeting in Northampton, where not more than one fourth of the members were present. The legacy of Dr Bache, amounting in all to about 50.000 dollars, will tend to preserve the existence of the Academy and enable it to accomplish something for science.

You have probably learned that two so-cieties have been organized in opposition to the National Academy; one in New York under the name of the National Institute, and the other in Washington with the title of the Am-erican Union Academy of Arts, Literature, and Sciences. The first was incorporated by the State legislature at Albany, two years ago but as yet has done nothing more than the making up of a programme of what is intended to be done. I was elected as the president of one of the Academies of which the Institute is composed; but gave no other attention to the matter than that of offering the advice that from the many men of princely fortunes in New-York, a fund of one million Dollars should be obtained for scien-tific research, accompanying this advice with the statement that, without such a motive power, nothing of importance could be accomplished.

The other establishment has lately been organized in Washington. It is composed of the judges of the various courts, lawyers, and other persons not necessarily connected with science. Dr Draper of New-York is the President, and a part of its programme is the uniting of all the scientific and literary societies of the country under it as the great head. Will the American Academy of Arts and Sciences, or the Ameri-can Philosophical Society, consent to such an ar-rangement? It has been surmised that this organi-zation has an eye to the Smithsonian funds, af-ter, if not before, I take my departure. Be this as it may, I fear it will be made a political engine like the old National Institute, for the advancing of private interests. I was much surprised that Draper consented to accept the Presidency; he was however unjustly left out of the list of the mem-bers of the National Academy.

We are much in want of a local society for uniting all the men of science in this city in one organization, and this may perhaps be done through the National Academy, although the manner of accomplishing the project is not quite clear to my mind.

The Board of Regents, at their last meeting adopted a resolution, declaring that I be requested to take a vacation of six months to visit Europe, for the benefit of my health and the advantage of the Institution, and that two thousand dollars be appropriated to defray ~~the~~ expense. I have not yet definitely concluded to accept this liberal offer, as there are some matters, at present, connected with the Institution, which require my especial attention. I should not think of it, were it not that my daughter Mary, who has been confined to her room for two months, may be benefitted by the voyage.

I am at present very anxious as to the future of the Institution. Through the funds

at present are in a very favorable condition, I fear that the income from them will in time be entirely absorbed in local objects; or fall under a political influence. To prevent the latter event, nothing should be asked from Congress, while on the other hand the keeping of the museum and the expenditures on the building are constantly absorbing more and more of our means. Congress al-lows us four thousand dollars, ($4.000), ~~annually for~~ keeping the museum, while the actual cost last year was fifteen thousand, besides the interest on one hundred thousand, the cost of the reconstruction of that part of the building devoted to the museum; the whole expenditure on the edifice, since the fire, has been one hundred and forty four thousand dollars, and before the whole is finished and rendered fire proof, at least seventy five thousand dollars more will be required.

The proper plan is to induce Congress to make a liberal appropriation for a museum worthy of the Nation, and leave the Smithsonian fund to be expended in the more direct method of advancing science. The Regents of the Institution might take charge of such an establishment, and give the present building for the purpose, with the exception of one of the wings which would be abundantly sufficient for the transaction of the Smithsonian business.

With kind regards to Mrs Gray I remain as ever

Yours truly

Joseph Henry

Dr. A. Gray

Cambridge Mass.

Smithsonian Inst.n
March 28th 1870.

My Dear Dr.

Many thanks for your letter fraught with words of kindness, and of wisdom. It was received by the mail of Saturday and I now embrace the opportunity, while waiting for my breakfast to answer one part of it, mainly that which relates to Mrs. Gray. Let her and your niece come together. You shall be entirely alone after Tuesday, and will be delighted to see them. The weather is now becoming settled, and I can from certain meteorological indications assure them as to a good time. I am writing this in a room without fire and am in a comfortable temperature –

You have a little horse and a modest carriage with which the ladies can daily take an airing

its next session in april, commencing on the 12th. I shall make a move towards bringing about the plan you suggest –

Tiron is in favour of something of the same kind. It will however be opposed by Gibbs and Gould who have thus far considered themselves the essential elements of the society.

as ever truly yours

Joseph Henry

Dr. A. Gray

The cars between New-York and Washington are furnished with separate apartments and do not change during the passage. Congress is now in session and an hour or two spent in the capitol would serve to amuse if not to instruct. Mrs. Henry would join me in presenting undersigned but unfortunately the good lady is still in bed.

I shall not fail to sound the commissioner as to what he can do in regard to the appropriation for the Report. He is well disposed, but somewhat timid; and indeed is obliged to be cautious, since he holds his office by the slight tenure of a political appointment made by President Johnson. If however the work is once taken in hand it will be carried on whoever may have charge of the Department.

The national academy holds its

Smithsonian Inst'n

May 29th 1870.

My Dear Dr:

After having wound up my affairs as far as possible before starting for Europe I have commenced to devote the last hours of Saturday night to a communion with you. The proposition that I should visit Europe was so unexpected, and my labours so multifarious and incessant during the first half of the year that I have been taxed beyond my strength and have had a slight return of the bronchial affection with which I was afflicted last year. I am however encouraged by the physicians to hope that the sea voyage and change of air will act beneficially, and as I do not intend to overdo myself by too many engagements I hope to avoid the dangers to which the traveller is exposed. My daughter Mary, who is also an invalid, accompanies me. The manner in which the announcement of my departure has been received in the city of Washington and by the public generally has been very gratifying to myself and my family. The President, the Board of Regents, and the State Department, have

without solicitation of mine, furnished me with documents commending me to the special attention of all the Representatives of our Government abroad. The Bremen Line of Steamers offered me a free passage both ways for myself; while the Cunard Line in connection with the New-York Chamber of Commerce have presented me with free tickets for Mary and myself both ways across the Atlantic.

I think the Institution itself has never been regarded in a more favorable light by Congress than at the present; and I indulge the hope that I shall live to see the day when a liberal appropriation will be made for the support of a museum worthy of the Government without encroaching on the Smithsonian fund. The Institution may continue to take charge of the museum or the latter may be placed entirely under other direction. My special object is to keep the Smithsonian fund entirely free from the control of politics, and in order to do this it is necessary that no appropriation should be asked from Congress for the operations of the Institution, while it may be asked ~~for~~, with propriety ~~for~~ taking care of the National Museum. The actual cost of the museum last year, without including our own explorations was $15000. This does not include the interest on $140,000 which have been expended on the building since the fire, almost entirely on account of the museum; while we received from Congress for keeping the museum but $4000. On the one hand with so small an appropriation, and without encroaching on the Smithsonian fund a museum worthy of the National Capital cannot be supported; while on the other if we continually petition Congress for an appropriation for the support of the Smithsonian museum we continually brings the Institution under the influence of Congress and will finally end in the Institution's being obliged to furnish places for partisans as the reward for political service. The transfer of the Library and the Herbarium have produced good results. The Library of Congress is now the first in the country in regard to the size of its collection and is worthy to be called the National Library; While the Smithsonian fund has been relieved of the support of the plants, Botany has been the gainer by the labors of Dr.

Parry at the seat of Government. Every transfer of this kind while it does not diminish the usefulness of the collections, increases the power of the Institution to do more for the advancement of knowledge, — to distribute more books and specimens, make more researches and by the returns to enlarge, not only the collections in this city but those in all other parts of the country. Mr Corcoran is just about to open his new gallery of art and this will obviate the necessity of establishing another of a similar character by the Smithsonian Instn. It will be one of my objects abroad to solicit, through the influence of the Institution specimens of sculpture in ~~particular~~ plaster for the Corcoran Gallery as well as to ~~hand~~ turn over to it on my return all the specimens we have accumulated in this line. The more we give away the richer we are, and if Congress makes the appropriation we have asked for of $25,000. for finishing the large room in the upper story we shall be able to make a very grand display with what remains.

I have dwelt long upon this subject because

I have an idea that you do not fully approve of this part of my policy; and I should regret that after all you have done, with your counsel and your pen, for the Institution, and myself, there should be the slightest shade of difference of opinion between us - I am sure there would be none if we could have a free and full discussion of the subject.

Professor Baird, who at one time, was opposed to these views now professes to be in entire agreement with them. If the museum were to be wholly separated from the Inst^on I would use, all the influence I may have, to procure the appointment of Prof. Baird as Director or if a separate appropriation were made for the care of the museum I would give the whole in charge to Professor Baird. This I cannot do while the funds of the Smithsonian are devoted to the museum. You may recollect that we started with the plan of separate departments and with different heads; but this produced the Lawett embroglio

under was abolished by the Regents. The whole was then put under the immediate charge of the Secretary with such assistants as he might choose to employ; and a special act was passed forbidding any letters to be written on business connected with the Institn unless under the special direction of the Secretary. After the Smith emute I stated to Professor Baird, that if he would render me all the assistance I might require of him, in carrying out my views of the policy of the Institn I would grant him every facility which the Institn could afford to prosecute any branch of Natural History he might desire to cultivate, but that I could not without being derelict to the duties devolved upon me and regardless of the experience of the past, give him any share of the management of the Institution. To this he fully and unconditionally agreed. The course which I have adopted has given and gives me an amount of labor not surpassed by any one in any public position in the country. Baird is now I think thoroughly imbued with my views and I trust with the most important fact of all in the management of a public trust that the policy pursued must involve an entire abnegation of all personal considerations as to the interest of the agents.

I regret that I shall not have the opportunity of seeing you before I sail, to talk over the past and speculate on the future. I have a regard for you which from long and friendly intercourse has grown into something stronger than ordinary friendship and it is with feelings of dissatisfaction that I have learned you have changed your physical appearance by cultivating a beard. This which may possibly improve your appearance in the eyes of some cannot have the same effect in mine. It will forever as long as it is worn change to me a face which from long association has become a source of pleasure for me to look upon. I doubt not that Dr Torrey shares this feeling with me though I have not spoken with him on the subject. Indeed the question may be asked whether a man over the age of 45 has a moral right to so change his appearance that his friends cannot recognize him. He surely ought to have the full consent of his wife. What says Mrs Gray to the metamorphosis?

We all regret that Mrs Gray did not give us the long spring visit we all looked for. The weather has been delightful, and I am sure she would have enjoyed herself and added much to our pleasure.

I commenced this letter with the intention of giving you an account of the feeling of the Commissioner of Agriculture as to the Report on Forest Trees. This has varied with the prospects of the Government appropriation. At the first of the session this was very poor and a spirit of retrenchment prevailed to an immense extent, but this has given way to a more liberal feeling and while the Commissioner concluded a few weeks ago to give up all attempts in the way of doing anything for the report this year he now thinks something may be done at this Congress to secure an appropriation for commencing the work. I wish therefore you would enter in upon a correspondence with him in regard to the work and give him as definite an estimate as you can furnish as to the time of completion and the annual cost of the Report.

With kind regards to Mrs Gray

I remain as ever truly your friend

Joseph Henry

Dr A Gray
Cambridge Mass.

P.S. A letter addressed to the care of
William Wesley, 81 Fleet Street, London
will reach me J. H.

Portsmouth Bank is still at work
Portland or at some other point on
the coast, busily employed with
his fish answers.

All the affairs of the Institution
are still in a favorable condition,
Congress at the last session appro-
priated 15 thousand dollars
for the care of the museum, and
the same sum for the improvement
of the building.

I am informed by Mr. Blake, who
saw you at the work, that Professor
Tyndall is to be your guest while
he remains in Boston. I intended
to go on to New-York to meet him on
his arrival, but was prevented by
my engagement with Sir Frederic
Arrow. I have an honorary Mr. Blake
to assist in the arrangement of his lectures.
Give the love of Mrs Henry and Olive to
you, and join me in the wish that we shall see
him and you early soon. Truly yours
Jos. Henry

Smithsonian Institution
Oct. 10th 1872

My dear Dr Gray.

I enclose a letter from a gentleman
of this city who has devoted a considerable
sum of money to found an annual
prize for an original essay on some medi-
cal subject. If you know the whereabout
of the person alluded to on the letter please
send it to him; you will find enclosed
the necessary stamps.

I regret that I could not visit you
before I came from the north. I was
prevented doing so by an arrangement
made with Sir Frederic Arrow to meet
him on the coast of Maine, and to ac-
company him along our coasts to examine
our light-house system. After showing
him some of our light houses and fog signals
on the coast of Maine I took him through
the sound in one of our light-house steamers

to New-York and afterwards sent him in the same vessel, to Albany. From the last named place he went thence Lake Champlain to Canada, thence on the Lakes to Niagara & Detroit; after this he went to Chicago and thence came to Washington by the way of Pittsburg. He left Washington yesterday for New-York to sail in the Russia on the 15th. He returns to England I think well satisfied with the attention he has received, and the information he has obtained.

I found him an exceedingly agreeable gentleman excellently well informed on Light-House matters and well qualified to profitably appreciate our improvements.

I have read your address before the American Association. It is an admirable production rich in valuable facts and satisfactory in an ingenious theory. It must prove an important point in the general history of society. You must have greatly injoyed your visit to the western coast. What an idea the journey gives of the extent of the country and of the magnitude of the working institution of the Rail-Road! It is one of the wonders of the world. Sunday on the lookout we over the Sierra Nevada. I felt like "assuming the godlike affecting to rock and seeming to shake the spheres." The power of man over the obstacles of nature are here strikingly exhibited.

My family have not all returned to Washington. Mrs. Henry and Helen came home yesterday. Henry and Carlisle are in New-York. Lib expects to

of making an annual appropriation for the full support of the national museum. At the session which has just closed it appropriated upwards of $40.000 for the care of the museum the fitting up the rooms and the beginning of heating arrangements.

Of course you will either bring on Mrs. Gray or come on to escort her home and I shall then have an opportunity of having a long congratulation with you relative to the past present and future. Do not disappoint me in this!

Truly your friend
Joseph Henry

Dr. A. Gray
Cambridge.

Smithsonian Institution,
Washington, D.C. March 7th 1873

My Dear Dr Gray

I write in behalf of my family, and merely to say that we shall expect to see Mrs. Gray at our house as soon as the weather moderates sufficiently to allow of her safe coming. We have had an awful winter; nothing equal to it in severity has been experienced in this city for more than twenty years. We are however cherishing the hope that the intensely cold term which has so materially affected the festivities of the inauguration and which is now gradually fagging off, will be the last of the kind during the present season

what even may be the condition of the weather Mrs Gray will be in a more favourable climate in Washington than in Cambridge during the spring and I therefore must urge you to send or bring her on as the weather will permit.

Dr. Newberry of Columbia College called on us on Tuesday last with a message of kind regards from Dr. Torrey whom he saw the day before. Dr. N. thinks Dr. Torrey is in a very bad condition, and that it is very doubtful as to whether he will ever again be able to leave his room. We had a letter however a few days before Dr Newberry's visit which gave a much more favourable account of the Dr's condition - it was from one of his daughters. Dear good Dr. Torrey overflowing with good will to men may he yet be long spared to the world. But when ever he may make his exit it will be with the general sentiment that he has performed an admirable part in the great drama of life.

My family are all in good condition and are now enjoying the quiet after the bustle of a very busy season in the way of giving and receiving visits.

All the appurtenances of the institution are in good condition Congress has at length come into the measure which I have so long advocated

Dr. Henry, What do you intend to do with the sketch you are preparing? I must give an account of his death to the national academy at its meeting next week, and a committee some one to pronounce a eulogy upon him at the next session.

His life was indeed a beautiful one. It does honor to refined humanity and no one but yourself can do that justice to it which shall make it effective in the improvement of the moral condition of the youth of our country.

I hope in a week or two to have an opportunity of a long talk with you relative to the past the present and the future. I remain as ever truly

Yours &c

Joseph Henry

Dr A. Gray Cambridge

Smithsonian Inst.n

April 7th 1873

My Dear Dr

Mrs. Gray arrived at the Washington Depot within a minute of the time the train was due, namely at 5h 35m P.M. nearly three fourths of an hour before sun set. I was present to meet her and was so fortunate as to take my stand on the platform immediately opposite the point at which she came out of the cars.

At the first glance, as she came out, I did not know her, but thought she was some young lady I had seen before; the moment she spoke I recognized her voice. She is indeed looking very well and I trust she will return to Cambridge entirely cured of the lameness of her foot.

She had quite a pleasant and comfortable

side in the compartment aux
and appeared not in the least
fatigued. She gave us a great
treat last night by an account
of your voyage on the Nile and
we have only to regret that
she did not bring with her the
photographs and paper rubbings
which she collected in her
excursions.

We have had a very severe
winter - the coldest on the average
for more than twenty years. The
spring has also been late although
the weather now appears to be coming
settled and we entertain the
hope of an opportunity to enjoy rid-
ding on the improved streets of
Washington. We have a strong horse
and a tolerably good looking carriage
in which we propose to give Mrs
Gray an airing every day the
weather is favorable

Mrs. Gray read to us the
letter from Herbert Torrey's wife
with which we were all impressed
as the production of a woman of
good feeling, good taste and
good judgement. I have also
received an excellent letter from
her as well as one from Herbert
from which I am assured that
they will endeavour to the utmost
to properly discharge the duties which
devolve upon them.

Mrs. Gray informs me that you
are making notes as to the life of

Rye Beach
Sept. 10th 1873

My Dear Dr Gray

We have concluded to tax your hospitality with our whole party on Monday night. Mamma and Caroline will depart for Boston on Tuesday morning to visit a friend in that city while Mrs. Henry Helen and myself will remain with you until Thursday morning when we shall take our flight to for a more southern clime

I am obliged to be in Washington on the 15th in order to be prepared for an important meeting of the Light-House Board on the 17th of this month.

My family and myself have had a delightful time at this place and I have made a very interesting series of experiments on fog signals.

With kind regards to Mrs Gray I remain as ever

Truly your friend

Joseph Henry

Smithsonian Inst.n
Jan.y 17th 1874

My Dear Sir

You have probably seen by the newspapers, that you have been elected to fill the vacancy in the Board of Regents occasioned by the death of Professor Agassiz.

I hope you will not, for a moment, entertain the idea of declining the appointment since it is of the highest importance that none but men of high character should

to that effect offered by Mr Garfield was not as usual immediately passed, but referred to the committee on Education and Labour which committee struck off the name of Stewart and put in its place that of President Coppée of the Lehigh University. I know Coppée and do not anticipate any difficulty on account of his appointment although it indicates the danger to which the Institution is liable in the appointment of improper men. Truly yours friend

Joseph Henry

Prof. A. Gray Cam.br

be in the board of regency.

We should be glad to see you at the first meeting of the session, but if you cannot come on at this time you can defer your attendance until March when you are to bring on Mrs Gray to give us her annual visit.

We shall have several meetings during Jan.y and Feb.y to settle the accounts and present the reports and after these one in March or April to dispose of any other business which may require the action of the board.

We have lost from the board two of our most important members namely General Garfield and Judge Poland from the House. We shall be appointed in their places Judge Hoar of Mass. and Hon Mr Hazelton of Wis.

At a meeting of the board previous to the action of Congress yourself, Professor Dana, and A. T. Stewart were recommended to fill vacancies in the board other than members of congress. The resolution to

and only yielded on pressing solicitation.

The chief Justice has expressed a warm interest in the affairs of the Institution and will I trust act as his ~~his~~ predecessors have done to strengthen the hands of the Secretary.

Our large room is now furnished with cases and we shall soon begin to furnish them with articles of ethnology in which I shall make a grand display.

With kind regard to Mrs Gray I remain as ever truly yours &c &c

Joseph Henry

Dr. A. Gray

Smithsonian Institution,
Washington, D.C. March 4th 1874

My Dear Dr

We are all very sorry to learn that Mrs. Gray has met with an accident which confines her to her bed. I was about to write to you to send her on to spend the present month with us, and you to come for her about the first of April. I beg to urge this proposition as soon as she is able to travel. We can hold the next meeting of the Board of Regents at any time to suit your convenience. I wish to have another meeting in order to elect the new Chief Justice

as the chancellor of the Board and to finish up the business of the session and if you will inform me as to the time which will be most convenient to you I will make arrangements accordingly.

All our affairs are in a favourable condition although congress is at present in a state of excitement in regard to the state of the finances, yet I think we shall get our appropriation at least of 15000 dollars for the case of the museum.

What think you of the action of Pierce in resigning the Director-ship of the coast survey, resigning without giving the academy an opportunity to nominate his successor? He first resigned from the Light House Board and this too was done without giving me an intimation as to his intention. He is a man of genius, but a child in the every day business of life.

Dodge has been appointed to the charge of the observatory, and will probably end his days in that position. It was with considerable difficulty the appointment was obtained for him. The President was opposed to his appointment

month and let you know the result next week

I hope you will be able to induce Mrs Gray to come with you. Washington will be in its best days. My family will be much gratified with a visit from her and I am sure she will have a good time

The Parson girls appear to be enjoying themselves very much. They are well qualified to call forth kind attentions from all who can appreciate female excellence. Truly yours &c

Joseph Henry

Smithsonian Inst'n
April 3rd 1874

My Dear Dr Gray

Your letter of the 31st ultimo has just come to hand, and I hasten to say in reply that we shall make arrangements for putting to press immediately the Botanical Index. We have put off the printing of this until the payment of the bill would come into the next half year, since on account of the failure of the First National Bank, we are short of funds at present. Mr Trautwein can send on the manu-

complete as soon as it is ready for the press.

We shall expect you to be present at the meeting of the Board on the 25 and shall call the members together at 12 o'clock of that day. But will you not be too fatigued to attend after riding all night and would it not be better for you to come on the day before?

The meetings of the Board are usually held at night on account of obtaining a better attendance; but as Saturday is a broken day with the members of Congress it has been thought best to attempt to have a meeting in the day time, in order to give the Regents an opportunity to see the museum and exchange rooms.

It is possible however that the Chief Justice cannot attend in the day time and in that case we shall postpone the meeting until Monday evening the 27th. I shall write to the Chief Justice immediately to this

Smithsonian April 14th/74

My Dear Dr Gray

Many thanks for your valuable suggestion as to the name of the national academy, which I shall present to some of the influential members for consideration. It will require an act of Congress to make the change which could however be readily obtained.

The meeting of the Board of Regents has finally been fixed for Monday the 27th at 10 o'clock a.m. The Chief Justice informed us that he could not attend on Saturday the 25th the time previously suggested.

I hope you will still conclude to come, on Friday, that we may have you longer with us and

that Mrs Gray will come with you. The weather is becoming quite pleasant in this city.

The Daughters of Professor Parsons are still with us and are apparently enjoying Washington life. They have won golden opinions from all who have formed their acquaintance and are very nice girls.

It is generally thought that the inflation bill will become a law unless the President puts his veto upon it. It will be a disgrace to our government and a fraud of the most important character on the real capital and honest industry of the country.

Truly your friend
Joseph Harvey

Smithsonian Inst.n
June 15th 1875

My Dear Dr Gray

Your note which reached us on sunday morning gave Mrs Henry and myself a pang of sorrow more intense than any thing of the kind we have experienced for many a day and scarcely a moment has passed since the reception of the sad intelligence in which the condition of Mrs. Winlock and her children has not been vividly before us.

What can be done for them have they relatives or property to fall back upon? I fear not! How sad and momentous the change in the condition of Mrs. W.

his ~~[illegible]~~ friends speak of him with affectionate regard.

We are all in good condition. A 20 journey of two weeks at the light house depot station Island has much improved my physical condition.

Professor Baird leaves the Institution tomorrow for Wood's Holl to go on with his researches relative to fish culture.

With kind regards to Mrs Gray I remain as ever truly yours &c

Joseph Henry

P.S This letter was written at the time of its date when I was about to leave the city and by accident was not mailed. I found it in looking over my papers

I leave for the summer on monday. my family will join me at Surry city in about a week. In sympathies with Mrs Gray and yourself in your sorrows.

J. H

from that of a well provided happy wife to that of penniless widowhood with a family of helpless children to support!

How impossible it is for us to realize our tenure of life. To day busily engaged in what we consider of the most important character. Tomorrow suddenly called from among the living and rendered oblivious to all they hold of value. What shadows we are and what shadows we pursue!

It is well that we do not realize our condition as to life. If we did so, our efforts to labour in the world would be paralyzed and all our thoughts absorbed in the contemplation of the "inevitable hour"

Another matter intrudes itself unbidden on our thoughts. Who is to be the successor of Professor Winlock in the charge of the Observatory? I cannot but hope that the choice may fall on Gould. He has suffered much and I think has been softened by tribulation.

The Secretary of the Treasury asked me yesterday to name a successor to the Professor in the boiler commission. He spoke in warm terms of Winlock and expressed deep sympathy with his family in regard to his death.

He was truly a good man and the news of his death has given a painful shock to all who knew him. From his connection with the Naval academy he had a wide acquaintance and all

Dictated

SMITHSONIAN INSTITUTION,

WASHINGTON, Jan: 12th 1876

My Dear Doctor Gray:=

The first meeting of the Board of Regents will be on the 19th Inst., but as the Accounts will hardly be ready by that time, having only just now succeeded in drawing our interest and selling the gold, we shall adjourn, without transacting any special business, until the 26th when we shall expect you to be present.

The meeting of the 26th will be one of importance and matters may be discussed which will have an influence on the future history of the establishment. The great increase in the

number of specimens in the Museum, consequent on the Centennial Exposition, will necessitate a much larger building for their accommodation than the present Smithsonian edifice, and consequently the following questions will arise;

Should this building be an extension of the present Smithsonian edifice or a separate one; or one in connection with the Library of Congress. If the new building be an extension of the present one ought not Congress to pay at least half the cost of the present edifice, say $300.000, and take the whole for the uses of the Government! The Smithsonian, after depositing $200.000 of this sum as an increase of the permanent fund would devote the remaining $100.000 to the erection of a building sufficient for all the wants of the establishment, supplied with a Chemical and physical and a biological laboratory and apartments for carrying on the Exchange System.

In view of the great extension to which the Museum is destined, and the magnitude of the appropriations which it will require annually, and the continued appeals to Congress for these appropriations, and the danger of merging the Smithson Bequest in a Government establishment, the question is, is not an entire separation between the Institution and the Museum advisable! There is, moreover,

danger that in the continued asso-
ciation the Institution will fall
under ~~the~~ immediate Congressional di-
rection. We have already been called on
by the Secretary of the Interior to furnish
a list of the names, salaries, places of
birth, states from which appointed, &c, of
all the Museum employes.

You are a wise man and are well fitted
by knowledge and judgment to deliberate on
questions of this kind, and from the interest
you take in the Institution I need scarcely ask
you to give ~~them~~ your special
attention.

Very truly Yours, &c,

Joseph Henry

Dr. Asa Gray -
Cambridge,
Mass.

Smithsonian Nov 6th 1876

My Dear Dr Gray

Your kind letter of last month came to the Institution while I was absent, and has since been mislaid. I hope therefore that you will excuse the delay of my answer.

I need scarcely say that I shall be delighted to receive a copy of your book; first because I am interested in the subject of which it treats, and second because it is will come from you, and I trust will contain your autograph.

I had on Saturday last at the meeting of the visitors to the asylum for the insane a serious talk with the Rev. Dr. Newman of the metropolitan methodist church of this city on the subject of Darwinism which he had represented on the previous sunday as an absurdity so apparent that it was hardly necessary to refute it. He appeared much surprised to find that I differed from

him, and that much could be said in favour of the hypothesis. I finally could not refrain from telling him that the clergymen who rushed into the conflict against Darwinism did injury, as a general rule, to the cause of truth and the interest of christianity. I denied the charge against it of a tendency to atheism and asserted on the contrary that it gave higher views of the power and wisdom of the creator. He gave profound attention to what I said and did not attempt an answer.

My family have all returned home after a longer absence from washington than ever before since we came to this city. They had a first rate time in Cambridge. Mrs. Henry wouldn't consent to turn her face homewards until she had seen Mrs. Gray. I had to regret that I could not accompany her. I was called to attend an important meeting of the Lighthouse Board at Staten Island

all the operations of the Institution are going on as usual. We have published the 20th and 21st volumes of the contributions to Knowledge; the annual Report is in the hands of the binder and will be ready for delivery in the course of a few days.

The conditions of the centennial exhibit I fear are not quite as favourable. It will I fear be somewhat embarrassed by the failure of congress to make the usual appropriation for the support of the museum. The hope however is entertained that a deficiency appropriation will be granted for bring back the specimens, and for making the duplicates into sets for distribution to colleges and academies.

I have not changed my mind as to the propriety of the separation of the national museum and the Institution although I do not intend to urge immediate action unless there is a prospect of

success. I think it highly probable that if the connection continues and large appropriations are called for by the Institution for the support of the museum the former will be in danger of falling into difficulties, and of finally becoming merged in a great establishment with a politician at its head.

I have had a very busy year but thanks to a kind Providence I am in a good condition of health. I spent the month of July at the Centennial, two weeks on an excursion to Buffalo to attend the meeting of the American association - three weeks at Block Island and two weeks at the Lighthouse Depot Staten Island and a week in Philadelphia in attendance on the meetings of the National Academy. I am now busily occupied in bringing up the affairs of the Institution and making preparation for the meeting of the

Board of Regents Our financial condition will indicate continued prosperity. We have received from the First National Bank the remainder of the sum which was in its possession when it stopped payment. Owing however to the failure of Congress to make more than half the usual appropriation for the museum we have not got back to the Smithsonian fund what was advanced for the museum and the centennial.

The armoury building has been fitted up for the reception of the extraordinaries from the centennial and will furnish a very convenient receptacle. Congress granted 4500 dollars for its improvement.

The project has been somewhat discouraged to bring the contents of the

government building to Washington as a perpetual exhibition. This proposition involves the idea of a separation of the museum and the Institution on the keeping up by the ~~pro~~ latter of a separate establishment or in other words of throwing the present building on the hands of the Institution since the several Bureaus will scarcely consent to place their articles in charge of the Institution. How matters will crystalize I am unable to say. I desire of course to do what is for the best affairs as to benefit the Institution while the public good is hitherto cared for.

I would we were together for a while that I might have the advantage of your wiser suggestions. Do not fail to arrange your affairs so as to be with us for long time and above all do not fail to bring dear Gray with you. She will be greatly pleased to see the new President

I have just returned from a dinner at the Johns Hopkins University given to Professor Sylvester

SMITHSONIAN INSTITUTION,
Washington, D. C., ... 187

It was a very interesting occasion and gave me an opportunity to become acquainted with what has been done in the way of the development of the establishment.

I think the University has made a very good beginning. It has been very sparing of its funds in the way of building. It has purchased two brick houses adjoining each other, and converted them into one with all the studies offices laboratories and lecture rooms necessary for the most extended instruction.

Twenty fellows have been appointed with salaries sufficient for a comfortable support. A mathematical journal is about to be established under the charge of Professor Sylvester which it is thought will concentrate the mathematical talents of the country and attract materials from abroad.

I highly approve of the course which

had thus far been taken under the direction of President Gilman who I think is an excellent organizer and with whom I am on terms of very friendly relations.

The establishment of the university will have an important bearing on the scientific character of this city since the Professors and the fellows can easily attend the meetings of the Philosophical Society of Washington and the force of the two cities may thus be united.

Much anxiety is felt in this city as to the result of the election. Great suffering has been inflicted on a large number of citizens by the failure of the government to make the usual appropriations and the consequent discharge of a large number of clerks. Should Tilden be elected a still larger number will be discharged. Otherwise Tilden is thought to be a man of intellect and that he will, if elected, use manage our affairs for the best interests of the country.

Sorry Russell resigned to stay here. Same as ever. Family & Company sorry he is gone.

museum. The appropriation of 25,000 dollars has been asked for the next fiscal year which will probably be granted.

We have learned from Mrs. Gray that you all reached home in good condition and I hope you will not have lost any working time by your visit; but that the vacation will have given you the power of more intense application.

We were in a state of collapse after you left — the light of the house had departed with Mrs. Gray and the charming nieces. You were all missed in Washington. The papers announced your departure and at the Smithsonian was hung with black a dark cloud hung over it.

Joseph Henry

Smithsonian Inst.n
Feb.y 15th 1877.

My Dear Dr. Gray

After your departure the memorial to congress was prepared and sent to both houses. It was read and favourably received and the prospect is that the appropriation of 250 thousand dollars will be granted.

Senator Morrill has taken the matter warmly in hand, but he strongly objects to having the two buildings connected, and especially to having the new building put in the rear of the present edifice. He insists on its being on a line with the latter either to the east or west and this arrangement I think on reflection ~~I think~~ will tend

to solve our difficulties. If the two buildings are separated all the specimens belonging to the museum may be removed from the Smithsonian edifice and accommodation made for the signal service operations and the display of the objects of the Educational Department; Government paying the Institution a rent for the space occupied. I am the more inclined to this arrangement since it will be very difficult to disassociate the Institution from the present building with which it has been so long connected.

I called on the chief Justice after you left and in conversation he said that on inquiries as to what had been said in regard to the separation he had come to my opinion and desired to be further informed as to my views on the subject.

Baird is of course much interested in having the two buildings united, but has given up the idea of placing the new one in the rear. An insuperable objection to the connection of the two edifices is the crowding of the structures and the interference with the carriage ways.

The appropriation of a deficiency of 20,000 dollars has passed the house and will meet with no opposition in the Senate - this will pay for the transportation of all the specimens from the centennial and clear off other debts of the

unanimously and would have passed the House could it have been brought before that body without the consent of two thirds of the members.

The decision of the U. S. Supreme Court that the money lent to the centennial must be returned, will have an favourable effect on the question of the grant for the building.

There will be a change in the Board of Regents at the next session - in a new member from the Senate, in the place of Mr. Stevenson - in the new vice President and in three members from the House

Smithsonian Inst.n
Oct 11th 1877.

My Dear Dr. Gray

In answer to your inquiry of the 8th just received I have to say that we forwarded to Germany yesterday 13 boxes of books and can send a package for you as soon as it is received in Washington.

Do not forget to direct it clearly, and to put your own name on the cover!

We are just now much occupied in insulating all parts of the building from each other to prevent the spread of fire. We have been stimulated to this by the late accident at

the Patent office and the investigations which have been instigated by the government as to the safety of the public buildings in this city.

I am pleased to be able to inform you that all the offices of the Institution are in a favorable condition. The system of exchange has been extended beyond that of any previous year: the additions to the museum have continued as in times before the centennial.

We have made the drawings of Habel's paper prepared for the engraver, but not without considerable trouble. We were obliged to bring him to Washington, and keep him in the Institution for nearly three months. He has given us a large amount of manuscript which will require much revision and condensation before being put to press.

The President has promised to recommend the petition of the Board of Regents to Congress in his annual message, if not in his extra one. The prospect is good as to its being granted since the proposition as to the new building passed the Senate

I had an opportunity of making observations on sound in connection with Fog Signals which are important additions to those I formerly made, and which tend to establish the theory I adopted.

I hope you will make arrangements to stand with Mrs. Gray a longer time with us than you did last season. We shall want your influence with Congress as well as your counsel in the meetings of the Board

Truly yours, Joseph Henry

Perhaps one of the members from the House may be reappointed — the Clergyman from Buffalo.

I think Congress as a whole will be favorably disposed to the Institution. Randall will probably be elected Speaker and he has always been friendly.

I have endeavoured during the present year to keep down the expense of conducting the operations of the Institution, and hope to be able to present a good balance at the next meeting of the Board of Regents.

The question of the separation of the museum remains in the same state it was in

last winter. The time of urging it may perhaps not have yet arrived; but I think it proper to put it before the the Regents and the public generally.

I am glad to learn from the letter of Mrs. Gray that you have had a good time in your excursion in the Rocky mountain regions with your friend Dr. Shepley. You must have looked into the operations of nature with double power and obtained many of her secrets never before known to mean

I am glad to know that you made the acquaintance of our friend General Bidwell a gentleman of admirable character, of large means and a liberal heart.

I have also had a good time during the past summer and have returned with a store of health which I hope will last during the winter.

My family have returned with the exception of Helen who is still in Branford. She and Mrs Henry as well as Caroline have been detained from home on account of repairing and painting in the house

Stephen Alexander
Letter of Prof Henry

Princeton, N.J.
Wednesday evening, Dec 4, 1878

My dear Dr. Gray:

It is a great pleasure to me to receive any thing with your signature.

Your of 2d inst reached me this morning.

I tried in vain, to have the date of Prof. Henry's birth set right, when I was present at the time of his funeral. But it was the decided impression that the Cyclopædias must be right. And I have good reason to think that that catalogue had undergone the revision of the Professor himself.

One proof for you, is the careful mention of my coöperation with him in the experiment to ascertain the relative temperature of the solar spots, when compared with other portions of the suns surface.

This was the earliest experiment of that sort. There must be some account of it in the Proceedings of the American Philosophical society, or else (not so likely) in Silliman's journal. The image of the spot to be experimented on was projected in a dark chamber, beyond the eye-piece of a telescope (by Utschneider & Fraunhofer),

I did not even succeed in having the coffin-plate tell the truth

But I had learned years ago, the date (as to the year) of Prof. Henry's birth, and compared his age with my own. The difference was so that it was not likely I would forget.

But to set all convincingly right, I wrote to the friend who had charge of the professor's Life Assurance; and his investigation brought out the same result with that which I had insisted on.

Prof. Henry was born in 1799. That is certain. The statements, in addition, say in Dec. of that year. Some of the documents in your possession, I believe, mention the day

1878 in May (was it not)
1799 in Dec
79 – years (and not 81)

The documents sent to you by Rev Dr. Maclean afford a great deal of information; and are reliable as guides

One of the best catalogues of Prof. Henry's Scientific Papers I is that in the Index Volume of The Biblical Repository & Princeton Review from 1825 to 1878 inclusive.

with an enthusiasm
and zeal rarely less than
that which he mani-
fested when he was
engaged in his magnetic
investigations. He noted
every 10th oscillation of
the needle calling it out
distinctly, while I noted
the times by chronometer
in seconds and parts thereof;
the chronometer having had
its error and rate previ-
ously ascertained by myself.
The investigation was Prof
Henry's own. It was made
at Albany on an eminence
which has since been
dug down and built over.
The needle was not swung
in vacuo. An attempt
to exhaust such an ap-
paratus afterward, here

I projected the image
of the spot ~~on~~ upon the
end of the thermo-electric
pile; while Prof Henry
read off the indication
of the needle. Then ~~ex~~
also the bright neighboring portion
of the sun's disc was
tried in the same way.
The experimental in-
vestigation was made
at the instigation of
Prof. Henry.

In our observations to
determine the difference
of longitude between Phil-
adelphia and Princeton
we had the coöperation of
the late Prof. A. Dallas Bache
and Mr Coffy (the "storm-king")
Two of us faced inward
as respected the line

between the two places and two others outward, and every second during a full hour ~~[illegible]~~ as given by an astronomical mean time clock was audibly called off, by one or the other alternately, of two relay observers (The same clock is ticking steadily beside me as I write this; going unconcernedly on, though three of the four observers mentioned are dead)

The observations resulted in a survey. The difference of longitude, so determined agreed within about 2 seconds of time with that indicated by the Coast-survey. You will find the results of my comparison of the time somewhere in the Proceedings of the American Philosophical Society, late about 1835

Almost none of the accounts of Prof. Henry's experiments say any thing about those on the magnetic intensity. He had obtained from Hansteen a needle which had been vibrated in Norway by Hansteen himself. It was my privilege to cooperate with him in the observations which he made with this. Prof. Henry engaged in them

as an experimenter, lest it might be supposed that the mercury had merely been transferred by an adhesion (after the fashion of capillary attraction) to the outside of the tube, he proved that by dissolving the tube. (A case as scrupulous as that of Sears C. Walker when he annealed the tube before his making the pendulum-experiment.)

Prof. Henry previous to his engagement as Private Tutor in Gen. Van Rensselaer's family, taught for a little while a district school.

You know that he learned, before that, a silversmith's trade; or at least some part of it. This under Providence

at Princeton, resulted in the breaking off of the upright tube; so that the experiment could not then be tried. Prof. Loomis was I think then about to be the experimenter. The experiments which here spoken of, were made in 1832. (See Silliman's Journal, probably, or else the Proceedings of the American Philosophical Society.)

Prof. Henry co-operated with me in the observation of the annular eclipse of 1838. The ring was visible here — narrow on one side. Between the cusps after the ring broke was visible a little prominence

like those which have been so conspicuous in total eclipses. In Prof. Henry's telescope this ray must more conspicuous than in my own. It had a red screen: and we used the instruments interchangeably, marking that question which distinctly (see Proceedings again)

Prof. Henry insisted that the color of these protuberances seen in total eclipses was subjective. He made some experiments at Washington with burning coal exposed to bright sunshine to prove the same. I saw the prominences in Iowa in 1869 and they showed different tints under a variation of circumstances during the brief 3 minutes of totality

In Prof Cameron's Reminiscences I think, or else in the catalogue I have referred to, you will find a description of Prof. Henry's experiments which resulted in a detection of the transmission of molecular mercury through a tube of lead acting as a syphon (voice was about to thick) I exhibited the tube initiated with the mercury frequently to successive classes when I succeeded Prof. Henry here for a time. I allude to the experiments with it especially because they indicate quite as perfectly as any thing else (I think) Prof. Henry's thoroughness and scrupulous care as

I may ~~dear~~ not always hold that steadily before me the loss of my guide, my counsellor friend for some 60 years; my more than brother. But the consciousness of that loss comes over me unbidden sometimes as a cloud — a cloud though, with a light beyond it.

My very kind regards to Mrs Gray as well as yourself, ~~as well as to yourself~~.

I remain
yours faithfully
and very sincerely
Stephen Alexander

P.S. Entre nous — I do not think the ~~family~~ will be altogether pleased with the appointment of Prof. Newcomb as the Mnemonicalis of Prof. Henry, for the National Academy

way the source of much of his facility in combining apparatus and experimenting. He had a small workshop for a while, and in it (a mere boy) I received my first lesson in magnetism: small pieces of iron being made to erect themselves on a piece of paper, when a magnet was passed beneath it; and the inquisitive boy looked below the paper to see how the ends of the iron had been mechanically moved; but was told that magnetism did it.

The earliest public experiment of Prof. Henry was probably that in which he exhibited to the Albany Institute

the effect of the sudden setting free of forcibly condensed air, in freezing the jet of water from a soda-fount (see Trans actions of the Albany Institute vol I)

For a full account of Prof. Henry's Magnetic Experiments see Silliman's Journal and also the Smithsonian Report for 1857 under the head of Proceedings of the Regents; in which the whole of what we may term the Moral matter is exhibited; ~~and~~ as well as the progress of Electro-Magnetism up to date

I was deeply moved on the receipt of my brother's last Report (that for 1877); I considered it perhaps the best that he ever made. I requested Dr. Harlan to refer you to certain portions of it — characteristically clear, and deeply conscientious to the last as to the fulfilment of the purposes of the great Inst; and summing up almost at a glance the great results of the Secretary's own plans

Thus my dear Dr. Gray I have tried to comply with your request. Perhaps I have been more the less interesting to you because I have sometimes been almost conversational.

Princeton, N.J.
Thursday, Dec. 5, 1878

My dear Dr. Gray:

In the letter which I sent to you this morning, I neglected to call your attention to Prof Henry's induction with regard to "power"; which complete in some respects the generalizations of Laplace and Sir J. Herschel. I have looked in some of the Smithsonian Reports, but have not as yet found the matter noted in them.

The date of the proposed communication on the subject must I think have

been not far from 1858.
In 1859 he spoke of the
matter in a criticism
on somebody, no matter
who, who had committed
a plagarism with re-
gard to it.

Please examine the
Smithsonian Reports
throughout, some papers
which escape us now may
be found, and look
also in the Biblical
Repository catalogue of
the Professor's papers; and
the Proceedings of the
American Phil. Society.
I think they have an
Index Number

I remain
yours very sincerely
Stephen Alexander

I do not think that Professor Bush
must, in the Proceedings of the American
Antiquarian Society for the advancement of Science

FROM WASHINGTON.

[Correspondence of the New York Express.]

The Smithsonian Institute.

WASHINGTON, Feb. 8.

We understand that there is a settled determination on the part of the Secretary of the Smithsonian Institution in conducting the affairs of that institution to carry out his own views, without regard to what may be the policy the regents or others connected with the Institution desire to see pursued.

The Board of Regents years ago, passed a resolution that the funds of the institution should be divided between the library and the prosecution of scientific researches in different departments of science, purchase of the philosophical apparatus, &c. And up to the present time the funds of the institution have been expended according to the policy then adopted by the Board of Regents.

Now I am told, the Secretary, Prof. Henry, is pursuing a course, the design of which is to narrow the usefulness of the institution, and confine its operations simply to the increase of knowledge, publishing the results of scientific labors in books to be distributed only in libraries and among institutions of learning. The library of the institution he regards as a useless appendage, and the building of no earthly use, and all the officers about the building except himself and those immediately under him as useless fungi; their labors of no advantage to the world The building he would like to see sold to the Government for Government purposes. Lectures are not in the design of the institution; and lecturers are only employed in order to please the people about Washington, and prevent too much outcry against the institution. The question may be asked, whether if the lectures are worth being paid for to please the people of Washington, they are not equally worth being published for the instruction of the people at large. I understand that Prof. Henry does not regard the lectures delivered at the institution worth reporting; and the proprietors of the papers here seem to take the same view of it that he does, for since the organization of the institution I have no recollection of seeing a single lecture reported in full for any of the papers here.

It is the impression of the people that the Smithsonian institution was designed to diffuse as well as to increase knowledge; and in their opinion the lectures delivered before the public of Washington ought to be published to be read by the many; and that if they are not worth publishing, the money of the institution ought not to be employed in paying for them.

The contest between Prof. Henry, and his policy, of only increasing knowledge, and the other party who go also for diffusing it, has waxed so warm and each party has taken such a decided stand that it must end either in the withdrawal of Prof. Henry from the institution altogether or the changing of the character of the institution, the abolishment of the library and librarian and other offices of the institution who now have a voice in regard to the mode in which the funds should be appropriated. In our opinion the true interests of the institution require the immediate resignation or removal of Prof. Henry.

(Because our regular correspondent writes this, we publish it,—but for the profound learning, pure character, and high qualifications of Professor Henry, we have unshaken convictions. His letter shows a state of opinion in Washington that it may be interesting to know.)—EDS.

Facts in the history of the electro-magnetic telegraph

1 I was the first to magnetize a horse shoe of soft iron at a distance by transmitting a current through a long wire interposed between the battery and the magnet

2 I showed that in order to produce this effect with little or no loss of power ~~than~~ a compound battery must be used instead of a single one

3 I also showed that when a compound battery ~~was~~ is employed the coil around the magnet must consist of one long wire and when a single battery is employed several short wires must be used

These facts are given in my first paper on electro magnetism published in Silliman's journal for 1831 They are the facts on which Mr Morse has based his telegraph but his assistant Mr Vail in his publication relative to the history of the telegraph has neglected to give me any credit for them