1847

1. FROM LOUIS AGASSIZ 1

Cambridge the 2 Jan. 1847.A

Prof. Henry in Washington

My dear Sir,

As I happen to be in Cambridge at the receiptB of a letter from Dr Torrey2 explaining to Dr Gray3 your views about the Smithsonian Institute4 I can not help writing a few lines to you to congratulate you and your country upon the prospect of a well established national scientific Institute. I think your view of printing Transactions of approved, valuable memoirs is especially important, as nothing will put the Institute on a higher level among scientific men, than such a publication, which will undoubtedly rise ^ raise ^ it more in the estimation of foreigners than any palace in which it could be established. Besides the publication of such transactions would at once supply you with the most convenient means for securing the published Transactions of all scientific societies in Europe;5 and I have little doubt that the value of the Memoirs you will receive in exchange ^ for ^ of yours will partly repay the expense of printing and engraving your illustrations. Annual Reports of the state of things in science and arts I consider also as of first rate importance; but they should be printed in a more pocketable form, then the original Transactions, which necessarely require the 4° forme on account of the plates. I know too well the deficiencies and advantages of our european scientific institutions (as) not to consider with you helping scientific men in their original researches, where they can make no money by them, as a duty ^ of ^ to any liberal government or large scientific Institution;6 but there is a difficulty in doing it by permanent appointments of the men. The best plan is to help them as long they are at work, but not give them sinecures for doing nothing.7 The case is quite different with teachers, who have their every day's business to perform and must be permanent in their position.

I understand that you do not wish to have the charge of Natural history specime[n]s and such things. Pray let me insist upon the necessity of having them. I have seen the Collection of the Expl. Exp. and I can testify that I have seen no where larger and better collections arising from a single Journey round the world.8 The naturalists of that expedition who have had the charge of making these collections deserve the greatest credit; especially twoC departments stand above all praise.9 Now I consider that it would be very creditable to Your Institution if these collections where properly arranged according the actual state of our knowledge,10 ^ which ^ what is nowhere the case in our ancient Museums, which have been successively enlarged, without being ever rearranged and adapted to the newer views of the subject.11

As You contemplate also the introduction of a large library, let me remind you of the difficulties I have seen ^ arising ^ D everywhere with us, from the mere fact that they attempted to unite ^ the books of ^ D all departments in one library. Incessant quarrels about the increase of this or that branch are unavoidable; whilst limiting yourself to Sciences and arts you could at once establish your library on the most respectable footing, by having from the beginning every thing which is published in theseE departments and leaving for the future to supply the books of past times and of mere historical value.12

Excuse my liberty in adressing you so freely upon a subject upon which my opinion has not been asked; but I feel so much interest in the prospect of a truly scientific national Institute, established in a contry where everyF thing is done in a highly liberal way, that I thought it allowed to one who has spend his whole live in the devotion to science, to introduce a few remarks upon the subject.

Beleive me, My dear Sir, most sincerely Yours

J L Agassiz

Henry Papers, Smithsonian Archives. Enclosed in Doc. 2. Interlineations and parentheses, possibly written by someone other than Agassiz, are in pencil except as noted.

- 1 An eminent Swiss-born naturalist, Agassiz was currently delivering a course of lectures at Boston's Lowell Institute. He was soon to become professor of natural history at Harvard University's Lawrence Scientific School. Henry Papers, 6:530n.
- 2 Professor of chemistry and botany at the New York College of Physicians and Surgeons, and professor of chemistry and natural history at Princeton, John Torrey was one of Henry's closest friends. Henry Papers, 1:159n.
- 3 Asa Gray, Fisher Professor of Natural History at Harvard, was another of Henry's close friends. Henry Papers, 2:281n.
- 4 While Torrey's letter has not been found, its summary of Henry's plans presumably resembled that which Henry had provided in other recent letters, such as those to Gideon Hawley and James H. Coffin; see Henry Papers, 6:610-615 and 623-625.
- 5 As early as 1694, the Royal Library of France began trading duplicate volumes for foreign materials; other European libraries and, after 1846, the Library of Congress, also relied on international exchanges to build up their holdings. Leading learned societies adopted a similar approach, exchanging their transactions with other societies. In the United States, the American Philosophical Society, the American Academy of Arts and Sciences, and the Academy of Natural Sciences of Philadelphia all

Storia dell'elettricità- Lettere di Henry 02-Gennaio-1847

sent their transactions to foreign societies.

An international exchange of the Smithsonian's publications did not figure in Henry's earliest ideas for the Smithsonian (for which see Henry Papers, 6:493-501, 607-609, 611-619, 623-625). However, it was included--perhaps owing to Agassiz's prompting--in the revised report issued by the committee of organization and approved by the Board of Regents on January 25, 1847, which formed the basis for Henry's "Programme of Organization."

George H. Boehmer, "History of the Smithsonian Exchanges," Smithsonian Report for 1881, pp. 703-810, especially pp. 703-711; A. Hunter Dupree, "The National Pattern of American Learned Societies, 1769-1863," in The Pursuit of Knowledge in the Early American Republic, ed. Alexandra Oleson and Sanborn C. Brown (Baltimore, 1976), p. 24; Patsy A. Gerstner, "The Academy of Natural Sciences of Philadelphia, 1812-1850," in Oleson and Brown, pp. 178-179; Murphy D. Smith, Oak from an Acorn: A History of the American Philosophical Society Library, 1770-1803 (Wilmington, Delaware, 1976), pp. 12-13, 36-39, 42-43; Rhees, Documents (1879), p. 939; Rhees, Documents (1901), p. 434.

6Agassiz spoke from personal experience on the value of financial assistance for those engaged in original research. While at work on his Recherches sur les poissons fossiles (Neuchâtel, 1833-1844), he received support from scientific institutions, governments, and private individuals, including some £240 from the Geological Society of London and the British Association for the Advancement of Science, and several research grants from the Prussian government. Such assistance also enabled Agassiz to provide means for his personal artist, Joseph Dinkel, whom he had hired to make illustrations of specimens in museum collections. Edward Lurie, Louis Agassiz: A Life in Science (1960; Chicago, 1966), pp. 90-91.

7 In September 1846, in his earliest statement on the organization of the Smithsonian, Henry had proposed the creation of a corps of researchers, the elected members of which would receive support for their research from the institution. By December 1846 he had abandoned this idea, instead proposing that the institution would pay for original memoirs and award premiums to the authors of the best submissions. Henry Papers, 6:496-497, 613-614, 623-624.

8 Agassiz was referring to the voluminous natural history collections gathered by the United States Exploring Expedition, which, together with an assortment of other scientific, art, and ethnological specimens belonging to the government, were housed in a gallery of the Patent Office known as the "National Gallery." The act establishing the Smithsonian stated that these collections should be turned over to the institution after a building had been erected to contain them. Fearful that the expense of housing and caring for the collections would drain so much of the income from the Smithsonian fund that nothing would be left for other programs, Henry was deeply opposed to the plan of having the institution take charge of them. See Henry Papers, 6:466-467, 471, 604, 608, 611-612.

9 During a visit to Washington in October 1846, Agassiz saw the exploring expedition collections at the Patent Office. Their richness impressed him; "in some departments," he wrote, "the collection at Washington surpasses in beauty and number of specimens all that I have seen." He singled out for particular praise the work done by the expedition's chief zoologist, Charles Pickering (Henry Papers, 3:106n), and its geologist, James Dwight Dana (Henry Papers, 3:126n). Elizabeth Cary Agassiz, Louis Agassiz: His Life and Correspondence, 2 vols. (Boston, 1885), 2:420-421 (quotation on p. 420).

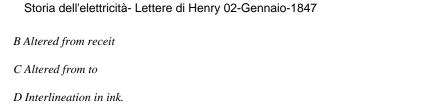
10 Section 5 of the act establishing the Smithsonian had termed the collections at the Patent Office "the national cabinet of curiosities." This was an apt characterization. While some of the exploring expedition collections had been scientifically arranged--notably the small mammals and fishes--others, including the insects, birds, quadrupeds, and plants, were still awaiting arrangement. Section 6 of the act directed the Smithsonian to see that these collections were "arranged in such order, and so classed, as best [to] facilitate the examination and study of them." Douglas E. Evelyn, "The National Gallery at the Patent Office," in Magnificent Voyagers: The U.S. Exploring Expedition, 1838-1842, ed. Herman J. Viola and Carolyn Margolis (Washington, 1985), pp. 226-241, especially pp. 237, 239.

11 Agassiz's assessment was overly harsh. Curators at leading European museums who hoped to rearrange their collections confronted problems such as the weight of tradition, backlogs of existing specimens and the continual infusion of new accessions, and shortages of space. Still, some efforts were being made, particularly by enterprising curators who took advantage of opportunities as they arose. At the British Museum, for example, John Edward Gray (Henry Papers, 3:229n), since 1840 keeper of the zoological department, used the occasion of the removal of the collections to a new building in 1845 to make changes in their arrangement. Reflecting current interests in "the ancestry of living forms," Gray took fossil shells--formerly under the care of the mineralogical department--and arranged them in a series with contemporary specimens. Albert E. Gunther, A Century of Zoology at the British Museum through the Lives of Two Keepers, 1815-1914 (Kent, England, 1975), pp. 98-100 (quotation on p. 100); Gunther, The Founders of Science at the British Museum, 1753-1900 (Suffolk, England, 1980), pp. 83, 87-91.

After failing to convince Henry that the Smithsonian should take custody of the exploring expedition collections, Agassiz adopted a new course: he began lobbying for the policies which he felt the institution should follow in collecting and arranging its own museum specimens. He urged the institution to pursue two approaches. First, it should assemble a large collection of living and fossil shells which could be used to study the influence of climate upon organisms during different eras. Second, it should assemble developmental series of common animals, such as the cat or the pig, from the embryo to the adult. "Taking care that such series be put up in the Smithsonian Institution," Agassiz wrote, "would at once give to the collections of that establishment the stamp of a true progressive scientific museum." "Communication from Professor Agassiz, Relative to the Formation of a Museum," Smithsonian Report for 1849, pp. 24-26 (quotation on p. 25).

12 Henry firmly rejected the idea that the Smithsonian bequest should be used to create a national library and instead favored using only a portion of the income to establish a small working library. See Henry Papers, 6:471, 498, 565n, 612, 624.

A Moved from end of letter.



E Altered from this

 $F\,Altered,\,possibly\,from\,\,everaye$

2. FROM ASA GRAY

Cambridge. January 4, 1847. A

My Dear Sir

On Saturday I had a letter1 from our friend Dr. Torrey which contained some account of your views on the plans proper to be pursued in regard to the Smithsonian Institute.

Let me say, hastily that I think they will in the highest degree approve themselves to the real men of science in the country &throughout the world. The idea of 'Memoirs accepted & published by the Smithsonian Institute' is admirable, and would do great good. So is that of Reports, like the German Jahresberichten.2 It seems to me too that a general library is nearly an impossibility,--at least, B if attempted, it would aborb all your funds in the purchase & care of books and the erection of buildings;--while a special library of Science & Arts--taken in the most extensive meaning--is attainable, falls into your general plan well, and would be of real utility. I think you are wrong, however, if I understand you to go against a National Cabinet, or Museum. That you should have, and the Expl. Exped. Collections as the Cnucleus.D But surely you may insist that the Government should not whelm you with a present, that will absorb all the income of your foundation to provide for and take care of. I think you would have a right to insist that the Government who impose upon you this charge should provide a building for their reception. You might then properly assume the curatorship, which would be well provided for by one or two such subord subordinates as Breckenridge 3 (who has now charge of the live plants) with a single well-qualified curator, like Pickering.

I read a part of Dr T.' letter to Agassiz, who was with me when it came. His approval of those E views was so hearty that I asked him to put them on paper, which he did at once--in the form of the letter I enclose.4 I thought the opinion of a person so highly qualified to give one on such a subject would be of some weight. F

I had a conversation with Pickering, who was much gratified when I told him that you would strenuously endeavor to prevent the absorption of large funds in buildings,--impoverishing yourselves with grandeur. (At Boston, we are experiencing the good effects of the late Mr. Lowell's wise provision on this subject.-- A copy of his will, establishing the Lowell Institute, Pickering thought that, if you could stave off all appointments and all pledges or encouragements there to, you would do well, while a contrary course would soon swamp the whole. But I need not mention this, as I am sure that you have already formed a decided opinion on this subject.

I shall take the liberty to confer with Prof. Peirce6 in reference to your views, as far as expressed in Dr Torrey's letter. I am sure he will approve them as decidedly as I do.

On your return from Washi[ng]ton,H can you not make us a visit. When you can, come direc[t]H to my house, where I need not say you will be a mos[t]H welcome guest and confer a great favor by coming.

Yours ever

A Gray

Henry Papers, Smithsonian Archives.

1 Not found.

2 Gray may have had in mind Friedrich Link's Jahresbericht über die Arbeiten für physiologische Botanik, which he reviewed in 1844 for Silliman's Journal (47:205), praising its "almost indispensable summaries." Henry was familiar with other

foreign-language reports of this kind, such as the Jahres-Bericht über die Fortschritte der physischen Wissenschaften, commenced in 1821 by Jöns Jacob Berzelius (Henry Papers, 2:189), which had carried notices of his own publications (see

Henry Papers, 5:29, 133-134). Henry referred specifically to Berzelius's reports in the explanation of his "Programme of Organization," terming it "a desideratum in the English language" for the Smithsonian to publish its own series, "posting up all the

discoveries in science from time to time, and giving a well digested account of all the important changes in the different branches

of knowledge" (Smithsonian Report for 1847, p. 182). For his earlier thinking along this line, see Henry Papers, 6:499, 501,

614n.

3 William Dunlop Brackenridge (1810-1893), assistant botanist on the United States Exploring Expedition, and later author of

its report on ferns, was now tending the botanical collections in a greenhouse near the Patent Office. Gray and other naturalists

regarded him more as a gardener than a botanist. Elliott, Dictionary; Richard H. Eyde, "Expedition Botany:

The Making of a

New Profession"; Douglas E. Evelyn, "The National Gallery at the Patent Office," both in Magnificent Voyagers: The U.S.

Exploring Expedition, 1838-1842, ed. Herman J. Viola and Carolyn Margolis (Washington, 1985), pp. 28, 33, 234, 236, 238.

4 Doc. 1.

- 5 Under the terms of his will, John Lowell, Jr., established a trust--amounting to some \$250,000--to support a program of lectures. He clearly stipulated that none of this fund was to be expended on a building or for any other program that might detract from his intended purpose. See Henry Papers, 4:297.
- 6 Benjamin Peirce, Perkins Professor of Mathematics and Astronomy at Harvard University. Henry Papers, 5:306.
- A Altered from 1846
- B Altered from lesst
- C Altered from thg
- D Altered from germ
- E Altered from your
- F A two-centimeter break separates this paragraph from the following in the original.
- G Altered from ussful
- H Paper torn.

3. TO HARRIET HENRY

[January 6, 1847] A New York Wednesday 11 o'clock PM.

My dear H.

I have been much engaged all day in calling on persons and studying the plan which has been adopted by the Regents for the Smithsonian.1 You may recollect that Bache2 informed me that the plan of young Renwick3 had been adopted with the direction that he should cut it down.4 This plan will make a beautiful building the only objection is the cost. I fear with all the cutting down it will cost nearly 200 thousand--I may perhaps succeed in getting it down to 170.5 I visited with young Renwick Grace church which he has just finished this is the most beautiful sample of the GothicB I have seen in this country.6 The remainder of the day was spent with Dr Torrey Mr Redfield7 and Prof Loomis8--the last two gentlemen have adopted my vews relative to the smithsonian very warmly-- Mr Loomis is to give a paper for the first no. of the Proceedings or as they are to be called Smithsonian Contributions.9 Also I have reason to beleive that Mr Galletan will also furnish a paper on on Ethnography10-- I have not yet seen James Alexander11 nor called on Mr Furness.12 I purpose calling on these gentlemen tomorrow. I stopped at Stewards the candy makers13 and have promised to meet Dr Torrey there at dinner tomorrow. I intend if I can get through with my engagements to s[t]art for home in the evening train.14 If I should not arrive you need not however be uneasy as it is possible that I may not get away.

Kiss the children for me and believe that I remain as ever

Yours

Family Correspondence, Henry Papers, Smithsonian Archives.

- 1 Henry traveled to northern New Jersey and New York City "to confer with gentlemen of learning and intelligence on the practicability of the plans I had submitted" for the Smithsonian. While in New York he also attended a meeting of the New-York Historical Society. Henry to Harriet Henry, [January 5, 1847], Family Correspondence, Henry Papers, Smithsonian Archives; quotation from Henry's reminiscences, beginning "By the advice of my friend Bache," n.d., n.p., Folder "Smithsonian Institution Miscellaneous Notes and Papers," Box 30, Henry Papers, Smithsonian Archives.
- 2 Alexander Dallas Bache, superintendent of the Coast Survey, a Smithsonian regent, and one of Henry's closest friends. Henry Papers, 2:108.
- 3 James Renwick, Jr. (1818-1895), the son of James Renwick, Sr. (Henry Papers, 1:59), professor of natural philosophy and experimental chemistry at New York's Columbia College, was a civil engineer and self-trained architect whose commissions included numerous churches and public buildings. His early designs--including those for the Smithsonian Institution Building--were marked by their use of the Gothic and Romanesque Revival styles. DAB.
- 4 At its meeting of November 30, 1846, the building committee of the Board of Regents reported that it had selected two of the thirteen designs submitted for the Smithsonian Building. Both were Renwick's: one was Gothic, the other Norman. The building committee preferred the latter plan. The board filed the committee's report and did not take up the matter again until January 20, 1847.
- The regents' minutes from November 30 through January 20 do not indicate that Renwick was directed to "cut down" his plan (that is, to trim it back from three stories to two). He may have been advised to do so, however, by the chairman of the building committee, Robert Dale Owen, representative from Indiana (Henry Papers, 6:465n, 470). On January 1, Owen told Isaiah Rogers, another architect who had submitted a plan, that the regents "had selected Mr. Renwick's plan and that he [Renwick] was going to set about revising his plan and reducing the thing to the sum proposed." Renwick's revised plan showed a somewhat less ornate, two-story building. [North View] [South View] [Floor Plan] Rhees, Journals, pp. 7-21; Henry Papers, 6:607n; Kenneth Hafertepe, America's Castle: The Evolution of the Smithsonian Building and Its Institution, 1840-1878 (Washington, 1984), pp. 18-21, 27-38, 47-57, 62-65 (quotation on p. 55); Cynthia R. Field, introduction to Robert Dale Owen, Hints on Public Architecture (1849; New York, 1978).
- 5 Henry's estimate of \$200,000 was close to the amount stipulated for the Smithsonian Building, \$205,050, under the contract which the building committee signed on March 20, 1847. Cost overruns put the actual expenditure at \$313,753 as of 1855, the year in which the building was considered "finished." Rhees, Journals, pp. 626-627, 711.
- 6 This was the second Grace Episcopal Church, Renwick's first major commission. Begun in 1843, it was consecrated in March 1846. While some observers commented unfavorably upon the church's interior and steeple, most shared Henry's opinion. Hafertepe, pp. 32-34; William Rhinelander Stewart, Grace Church and Old New York (New York, 1924), pp. 156-165, 422, 426-427.
- 7 William C. Redfield, a New York City transportation engineer, was a pioneer in the development of American meteorology. Henry Papers, 2:456.
- 8 Elias Loomis, professor of mathematics and natural philosophy at New York University, was influential in the development not only of American meteorology, but also of American astronomy. Henry Papers, 3:362-363.
- 9 Loomis did not submit a memoir for the Smithsonian Contributions to Knowledge until the late 1850s. He did prepare a

"Report on the Meteorology of the United States," which appeared in the Smithsonian Report for 1847, pp. 193-207 (see Doc. 41).

10 Swiss-born Abraham Alfonse Albert Gallatin (1761-1849) was near the end of a distinguished career that included service as a United States senator and representative from Pennsylvania, as secretary of the treasury under Thomas Jefferson, as minister to Russia, France, and England, and as president of the National Bank of New York. Gallatin's interest in ethnography led him, in the 1820s, to begin work on a theory to explain the differential development of Native American civilizations. His "Synopsis of the Indian Tribes of North America" appeared in the American Antiquarian Society Transactions, 1832, 2:1-422. In 1842 he helped found the American Ethnological Society and became its first president, holding the office until his death.

Gallatin was among the individuals in New York whom Henry called on to discuss his plans for the Smithsonian. As Henry later recalled, Gallatin endorsed his plans, terming them "the best he had heard," agreeing that the Smithsonian fund should not be expended "on books collections and other objects of a merely local tendancy." According to Henry, Gallatin

also promised if his health would permit to prepare an article for the first no of the Transactions on the subject of the application of the Languages of some of the Indian tribes east and west of our continent.

Gallatin planned to edit and republish part of the report of Horatio Hale (1817-1896, DAB), an ethnologist on the United States Exploring Expedition, which dealt with the languages of Pacific Northwest tribes. His essay never became a Smithsonian Contribution, instead appearing as "Hale's Indians of North-West America, and Vocabularies of North America with an Introduction by Albert Gallatin," American Ethnological Society Transactions, 1848, 2:xxiii-clxxxviii, 1-130.

DAB; Robert E. Bieder, Science Encounters the Indian, 1820-1880: The Early Years of American Ethnology (Norman, Oklahoma, 1986), pp. 16-54; Jacob W. Gruber, "Horatio Hale and the Development of American Anthropology," APS Proceedings, 1967, 111:5-37, especially pp. 9-10; quotation from Henry, "By the advice of my friend Bache," cited above.

11 James Waddel Alexander, a Presbyterian clergyman and close friend of Henry's, since 1844 had served as pastor of the Duane Street Church in New York City. Henry Papers, 2:177; 6:337.

12 Possibly William P. Furniss (d. 1871), a Wall Street real-estate broker and one of the city's wealthiest residents. He may have been the father of Robert L. P. Furniss of New York City, who boarded with the Henrys during his freshman year at Princeton. New York City Directory, 1845; Moses Y. Beach, Wealth and Biography of the Wealthy Citizens of New York City . . . , 6th ed. (New York, 1845), p. 11; Catalogue of the Officers and Students of the College of New Jersey, 1845-1846 (Princeton, 1846), p. 16.

13 Stewart & Bussing, a confectionery, made "steam refined loaf sugar candies of superior quality." New York City Directory, 1849-1850.

14 Henry returned to Princeton on January 7 or 8, leaving for Washington on January 9. Henry to Eben N. Horsford, January 8, 1847, Henry Papers, Smithsonian Archives.

A From internal evidence.

B Altered from Gothick

4. TO HARRIET HENRY

[January 16-17, 1847] A Washington Saturday night ½ past 9 o'clock

My dear H.

I have just got settled in a very suny room in the St Charles Hotel1 and before I go to bed I must devote a few moments to you. After due consultation it was concluded that it was best for me for the present to take lodgings at a Hotel rather ^ than ^ at ^ a ^ private house on account of the Persons I would be obliged to see until after the meeting of the board of Regents. The room I now occupy is much plasanter than the one I had at the other Hotel on my former visit.2 I dined this afternoon at Mr. Bache's with Mr. Owen3 and Mr Ingersol.4 We had quite a pleasantB party and after dinner I remained with Bache until within a few mintes. I have very little news I have been so much engaged in lectioneering for the Smithsonian and with Mr. Owen in the preparation of his report to the Regents5 that I have heard or seen but little. The Regents meet on Wednesday next when the important affair of the building will be descided. Such are the conditions of things that I fear it will be impossible for me to prevent a large expenditure in the way of a building. This must be the case unless the Smithsonian affair be returned to congress and there the fear of its friends is that instead of an amendment the whole matter will be thrown over board on account of the war.6 The Regents are all, who are on the ground, in favour of my plans but they think themselves tied up relative to the building and hope that they will be able to get farther assistance from Congress since the act of this body obliges them to put up the building.

I have been so much occupied that I have not had time before this evening to be home sick but I now feel that I would be much gratifed to have you and our little ones around me; not that your company would not have been a source of comfort and pleasure to me continually since we parted but I feel just now particularly in want of you.

I have been at Bache's continually since I came to Washington and have been treated by Mr and Mrs B with their usual hospitality and kindness. Also I have been treated by marked attention by almost every person with whom I have come into communication since I came to washington.

I am very anxious to hear from home it appears instead of five days since we parted? almost as many weeks-- How did you get home and how did you find all the little ons and Poor Aunt Louisa.8 Perhaps your letter has miscarried so that in your second you must recapitulate what you said in your first. The passage over the chesapeak has been stopped up with ice so that for several mails there has been no intelligence from the north an[d]C to this I have attributed the long delay of y[our]C letter. I have nothing new--you can lea[rn]C more about Washington by looking at the papers than by residing in the city. I found to day in passing through the rotunda that the new picture of Vanderlin--the landing of Columbus had been put up in its pannel.D It is a very beautiful picture and leaves but one pannel of the rotunday unfilled.9 It is I think one of the best of the group and with the exception of the landing of the pilgrims10 the best. Among the many letters I have received lately is one from our old acquaintance Prof Jager dated EatownE N.J. asking from me no less a favour than that of procuring for him the situation of a Foreign charge defair--the one to France on the whole he would prefer but if this cannot be had he will take the one to Belgium or some other place11 very I am a man of much more consequence than I though of.F

Sunday evening 9 o'clock your letter of Friday12 the first I have received has just come to hand. It has given me a melancholy pleasure. I am happy to learn that you had so pleasant a time in getting home--the faces of Mrs & Mr Green13 must have given you pleasure indeed. Poor Louisa & Stephen how sad is their condition and yet their is much in their case to be thankful for. I am glad to learn that the children are all well. Tell Will that he must write to me and I will answer his letter.14 Tell Mary that I would like to receive a communication from her new desk if for nothing else to see how well she can write from it. Let the letter contain a piece of paper with something on it from Helen and also from Puss.15 I have attended Dr Smiths church16 to day. IG went with Mr & Mrs Stansbury17 who are my next door nabours their room and mine is only seperated by a partition. Mrs Stansbury is a very pleasant and apparently good woman and I sat in her room for some time after church to day. This letter will start early in the morning--I did not get it into the mail last night & hence it has remained until to night.

I shall go to bed very soon after taking this down to the letter bag but not until I have commended you and our dear little ones to the protection of that kind providence which has been so bountiful to us--which has caused us to rejoice while others have mourned. Adieu my dear little Wife and be assured that while life remains you & our dear littleH ones will be the first & last objects of my affection.I

J-H-.

Family Correspondence, Henry Papers, Smithsonian Archives.

- 1 Located near the Capitol, this hotel was popular among members of the Senate and southern visitors. James Goode, Capital Losses: A Cultural History of Washington's Destroyed Buildings (Washington, 1979), pp. 164-165.
- 2 The National Hotel. Henry Papers, 3:134; 6:591.
- 3 Robert Dale Owen.
- 4 Most likely Joseph Reed Ingersoll, representative from Pennsylvania from 1841 to 1849, and a trustee of the University of Pennsylvania. His brother, Charles Jared Ingersoll, was also a representative from Pennsylvania during the same period. Henry Papers, 6:19
- 5 Owen's "Report of the Organization Committee of the Smithsonian Institution" was presented to the Board of Regents on January 25, 1847. This was a heavily revised version of the original report, presented to the regents on December 1, 1846,

which, along with several resolutions introduced at the meeting of December 4, had been referred back to the committee of organization on December 21 (see Henry Papers, 6:557n-558n). While the revised report still appeared under Owen's name, it bore Henry's extensive input, similar in form to comments he had previously expressed in letters to Alexander Dallas Bache, Gideon Hawley, and James Henry Coffin, among others (for which see Henry Papers, 6:493-500, 610-615, and 623-624).

In contrast to the original, which dealt almost entirely with how the Smithsonian could diffuse knowledge, the revised report, reflecting Henry's strong convictions, made clear that the institution's mission was a dual one:

"For the increase and diffusion of knowledge among men" were the words of Smithson's will--words used by a man accustomed to the strict nomenclature of exact science. They inform us, that a plan of organization, to carry into effect the intention of the testator, must embrace two objects; one, the calling forth of new knowledge by original research; and the other, the dissemination of knowledge already in existence.

The revised report struck much more of a balance between these two objects than did the original, fully describing how the Smithsonian should support research. Three resolutions embodied Henry's ideas for increasing and diffusing knowledge: premiums for publications and the Smithsonian Contributions to Knowledge; appropriations for original research; and periodic reports on the progress of knowledge in various branches. Two other resolutions appended to the report embraced elements from resolutions which had been introduced but not adopted on December 4; they called for popular lectures and the publication of tracts of general interest.

Adopted by the board on January 26, the revised report constituted the working plan of organization for the institution. (The regents adopted two additional resolutions at this meeting and another at the meeting of the twenty-eighth, relating to the "great compromise" between advocates of a large library and supporters of Henry's research-oriented programs; see below, Doc. 10.) It formed the basis for Henry's "Programme of Organization," adopted in December 1847.

Report of the Organization Committee of the Smithsonian Institution (Washington, 1847), reprinted in Rhees, Documents (1879), pp. 930-943 (quotation on pp. 930-931); Rhees, Journals, pp. 12-14, 19, 24-26.

6 At the regents' meeting of December 5, 1846, Bache moved that Smithsonian chancellor George M. Dallas should appoint a committee of three members "to procure the introduction, if they deem it expedient, of a bill amendatory of the act establishing this institution" (Rhees, Journals, p. 15). The motion carried; Robert Dale Owen, William Jervis Hough (Henry Papers, 6:470), and George Evans (Henry Papers, 6:470) were named to this committee. (Hough was a representative from New York; Evans was a senator from Maine.) From Bache's (and Henry's) standpoint, the possibility that the act which had established the institution might be amended had much to recommend it. At the very least, Congress could specify a ceiling on the amount to be expended on a Smithsonian building or buildings. (On the provision for a building, see Henry Papers, 6:467-468.) Other possibilities presented themselves: Congress might relieve the Smithsonian of the burden of taking custody of the government's collections; it might agree to bear the cost of erecting the building, thereby reserving all of the accrued interest on the Smithson bequest for the actual operations of the institution; or it might replace the programs specified in the charter (a library, a museum, a chemical laboratory, an art gallery, and lectures), with measures closer to Henry's ideas for increasing knowledge.

On the other hand, recommitting the act was also fraught with risks. The bill had cleared the House of Representatives in April 1846 by a narrow margin (85 yeas, 76 nays), and a reservoir of distrust lingered against the institution. Among its most vociferous opponents was Andrew Johnson of Tennessee, who attacked the "legal fiction" of a loan by the institution to the government at six percent interest. In fact, the federal government had invested the Smithsonian fund in state bonds on which the states had then defaulted and the government was spending the money out of its general revenues. Johnson saw this as egregious at a time when the nation was at war with Mexico. Indeed, on January 2, 1847, he had offered a resolution calling on the secretary of the treasury to report "as to the propriety of suspending" the act which established the Smithsonian "for the present, or during the existing war with the republic of Mexico, and thereby avoid borrowing, or taxing coffee and tea the sum of \$242,129"; the resolution did not carry. Andrew Johnson, "Resolution on Appropriations for the Smithsonian Institution," January 2, 1847, in The Papers of Andrew Johnson, ed. Leroy P. Graf and Ralph W. Hoskins (Knoxville, Tennessee, 1967), 1:349.

As members of Congress, Owen, Hough, and Evans were doubtless familiar with the hostile views of Johnson and others. Rather than try to have the original act itself amended, they drafted a bill which would have enabled the institution to purchase, for \$35,000, the lot and unfinished building housing Washington's City Hall. Under this plan, the institution could either complete the building or tear it down and erect a new one (presumably with monies appropriated by Congress). Evans presented the bill to the Senate on February 15, 1847, and it was referred to the Committee on the District of Columbia. A week later, however, the Washington Common Council overwhelmingly rejected the plan. The regents' committee thereupon dropped its efforts to pass the bill in Congress and, so far as can be determined from the minutes, abandoned any further attempts to amend the original legislation.

Rhees, Journals, pp. 15, 36-38; Rhees, Documents (1901), 1:438-439.

7 That is, in Philadelphia, to which point Harriet Henry had accompanied her husband on his return to Washington. See below, Doc. 6.

8 Louisa Meads Alexander, the wife of Stephen Alexander, was near death after a long illness. Henry Papers, 2:15n; 6:591.

9 John Vanderlyn's Landing of Columbus at the Island of Guanahani, West Indies, October 12, 1492, was hung in the

Capitol rotunda on January 15, 1847, the seventh painting so installed. Art in the United States Capitol (Washington, 1976), pp. 134, 140.

10 Robert W. Weir's Embarkation of the Pilgrims at Delft Haven, Holland, 22 July 1620, installed in 1843. Henry first saw this painting when he visited Washington in July 1846. Henry Papers, 6:447-448; Art in the United States Capitol, p. 136.

11 Benedict Jaeger, an entomologist and former professor of modern languages and lecturer on natural history at Princeton, was now apparently connected with an academy in Eatontown, New Jersey. His letter of December 27, 1846, is in the Henry Papers, Smithsonian Archives. He never received the diplomatic posts he sought. Henry Papers, 2:55n-56n; J. Thomas and T. Baldwin, eds., A Complete Pronouncing Gazetteer, or Geographical Dictionary of the World, 2 vols. (Philadelphia, 1858), s.v. "Eatontown."

12 Not found.

13 Presumably James Sproat Green, a Princeton trustee and its professor of jurisprudence, and his wife, the former Isabella McCulloch, who were old family friends. Henry Papers, 1:440; Hageman, Princeton, 1:318.

14 See below, Doc. 12.

15 "Puss" was the Henrys' nickname for their youngest daughter, Caroline. The letter Henry requested has not been found, but see his replies to Helen Henry, January 30, 1847, and to Mary Henry, January 31, 1847, Family Correspondence, Henry Papers, Smithsonian Archives.

16 John Cross Smith (1803-1878), who attended Princeton Theological Seminary during the mid-1820s, in 1839 became pastor of the Fourth Presbyterian Church in Washington. Edward Howell Roberts, Biographical Catalogue of the Princeton Theological Seminary, 1815-1932 (Princeton, 1933), p. 46; Washington City Directory, 1843.

17 Arthur Joseph Stansbury, formerly a trustee of the Albany Academy and pastor of the First Presbyterian Church of Albany, now worked as a congressional reporter and illustrator for the National Intelligencer. In 1803 he married Susanna Brown (1784-1852), a descendant of a founder of Providence Plantation. Henry Papers, 1:40; 2:443-444; Andrew J. Cosentino and Henry H. Glassie, The Capital Image: Painters in Washington, 1800-1915 (Washington, 1983), p. 273; Frederick Howard Wines, comp., The Descendants of John Stansbury of Leominster (Springfield, Illinois, 1895), pp. 10-11.

A From the postmark and internal evidence.

B Altered from plessant

C Paper torn.

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F Henry left a 12.5-centimeter space between this paragraph and the next for the address.

G Remainder written in left margin, beginning on first page.

H Altered from littles

I Altered from attentions

5. TO HARRIET HENRY

[January 18, 1847]A Washington Monday night 1/2 past 9 o'clock

My dear H

I have been very busy all day in the affairs of the Smithsonian. Governor CassB was this day appointed to fill the vacancy occasioned by the death of Judge Pennebacker.1 I called thisC evening to pay my respects to the new Regent and to induct him into my views. He was however not at home and I am to call again tomorrow morning. All things at present look pretty fair for the Smithsonian but I cannot say how matters will go the only thing in the way is the great building. I am to dine tomorrow with Mr Ingersol of Phild Mr Joseph Ingersol who takes a lively interest in my plans2 and will advocate them to the extent of his abilities in the house and am to meet atD his table Mr Rush one of the Regents whom I have not yet seen.3 Mr Ingersol has agreed to induct Mr Rush into my views previous to our meeting.4 Bache has been quite sick to day and yesterday; confined to his room with ^ a ^ severe toothache. He had two teeth extracted this evening and is now better. This is a wonderful place for bustle the city is full of strangers—the Hotels are overflowing—among the crowd I caught sight of an old acquaintance whom I have not seen before for 20 years or nearly that time. I allude to George ClintonE son of Governor Clinton.5 I saw him ^ but ^ for a moment and did not speak to him.

I have just been interrupted by by Mr Owen who has called to show me the plan of the building as cut down by Young Renwick it is certainly beautiful but will cost in its present state 202 thousand dollars. I hope however to see the wings cut off and then it will probably cost 150 thousand. Among the articles of Smithson in the patent office is a bronse medal of himself which I propose to have engraved as the embellishment of the transactions. I do not recollect to have informed you that there is a large case of articles which constitute the Personal Effects of Smithson-- His knives forks spoons plate &c.6 If the Regents do not go beyond 150 thousand in the building the Institution will get along very well with the remainder of the surplus of interest.7

This has been a very disagreeable drizzly day almost every person is complaining of colds--I have not got entirely rid of my cough but it is better than it was when I left Phild I am quite snugly situated in a very cheerful and comfortable room and were you and our little ones with me I should be quite happy. I fear however you would scarsly enjoy yourself away from Louisa and Stephen at this time.

I shall expect a letter from you by the mail of tomorrow. I hoped to receive one to night but was disappointed. I do not recollect to have mentioned that among the members of the House I find William Campbell8 the nephew of Dr Campbell9 the biographer of MrsF Dr Grant10,G he is quite attentive and polite to me on account of his old uncle. I wish I could look inH upon you this evening an see that you are all well--that I could cover Hellen and see that Mary & Will.I are well tucked in. I must however be content with doing this in magination. Kiss the children for me and receive the assurance that I am and always shall be during life only yours.

PP Tell Will. that I expect now that I am away that he will take charge of the affairs of the family as much as possible and that he will be very industrious in the prosecution of his studies every month at this period of his life is of great value to him if properly improved. He must now lay in a store of learning which may serve to make him a man of importance in future life. He will soon be grown up and I hope he will realize the wishes of his father and mother inregard to him. Mary I have no doubt will endeavour to add to the happiness of her mother by doing in all cases what is right and proper and in helping to take charge of the little one11 who is about to be deprived of herJ mother and to experience a loss which ^ she ^ will never be able fully to realize. Helen and Carry will also I am sure be good children and continue to be as they have ever been a source of happiness and comfort to their parents.

I hope Sam12 is attentive and steady-- He must not be allowed to be out at nights now that I am away. I would say more but that my paper is full love to Grandmother13 Stephen Louisa and Charlotte.14Family Correspondence, Henry Papers, Smithsonian Archives.

- 1 Lewis Cass (1782-1866), former governor of Michigan, secretary of war, and minister to France, in 1844 was elected to the Senate. He was appointed a Smithsonian regent in place of Isaac Samuels Pennybacker (Henry Papers, 6:470), senator from Virginia, who died on January 12, 1847. Under section 3 of the act establishing the Smithsonian Institution, any vacancy created by the death or resignation of a regent who was a member of Congress was to be filled in the same manner as a vacancy in a congressional committee, namely, by election of the whole House or Senate or by appointment of the presiding officer. Acting in his capacity as president of the Senate, Vice-President George M. Dallas appointed Cass a regent. He served a single term. DAB; Goode, Smithsonian, p. 85; Rhees, Documents (1901), pp. 430, 436-437.
- 2 Remarks which Ingersoll made in April 1846 during the House debates over the Smithson bequest indicate why he may have been receptive to Henry's plans. He firmly believed that the bequest should not be used to establish a great national library in Washington, but rather, in keeping with Smithson's intent, to "cover general ground, in which all objects of science (if possible) should be included." (At the same time, he also shared Robert Dale Owen's hope that at least part of the bequest might be used for a normal school and a lecture series.) Rhees, Documents (1901), pp. 352-353 (quotation on p. 353).
- 3 Richard Rush, former attorney general, secretary of state, minister to England, and secretary of the treasury, had, as a special commissioner, secured the Smithson bequest for the United States. He missed the regents' meetings of December 21 and 23, 1846, the first which Henry attended as Smithsonian secretary. Henry Papers, 6:470; Rhees, Journals, pp. 18, 19.
- 4 In 1838, asked to give his opinion on the application of Smithson's bequest, Rush had suggested that it be used to sponsor lectures on government and law; that the Smithsonian should have its own press; and that it should publish international scientific communications. By 1844, however, he had shifted his views, urging that the bequest be used to revitalize the National Institute for the Promotion of Science; along that line, he supported the candidacy of Francis Markoe, Jr. (Henry Papers, 6:482n), the

institute's corresponding secretary, for the Smithsonian secretaryship. Rhees, Documents (1879), pp. 849-856; Rush, "Smithson Bequest," Third Bulletin of the Proceedings of the National Institute for the Promotion of Science, Washington, D.C., February, 1842, to February, 1845; Also, Proceedings of the Meeting of April, 1844 (Washington, 1845), pp. 455-460; Henry Papers, 6:482-485, 551-552, 554.

5 George W. Clinton, the son of former New York governor DeWitt Clinton (Henry Papers, 1:9n), in 1826 had accompanied Henry on a boating tour of the recently opened Erie Canal. Henry Papers, 1:74n.

6 Some of Smithson's personal effects--including papers and manuscripts, clothing, several boxes of kitchenware and crockery, mineral collections, and philosophical apparatus--had been turned over to Rush, who shipped them to New York in 1838. They remained at the New York Customs House until 1841, when they were transferred to the National Institute in Washington at its request. With the exception of the clothing, which was donated to an orphan asylum, Smithson's effects were displayed with the National Institute's collections in the "National Gallery" of the Patent Office Building until they were moved to the Smithsonian Building in 1858. Although the 1865 fire in the building destroyed much of the collection, some manuscripts and books escaped the fire and survive today in the James Smithson Collection in the Smithsonian Archives and in the Special Collections Department of the Smithsonian Institution Libraries.

The bronze medallion to which Henry referred became the source for the institution's official seal, as well as for an engraving of Smithson "to be printed on the title page of the books published by the Smithsonian," and is in the National Numismatic Collection of the National Museum of American History.

William J. Rhees, James Smithson and His Bequest, 1880, Smithsonian Miscellaneous Collections, vol. 21 (Washington, 1881), pp. 13-17; Smithsonian Report for 1865, pp. 16-17; Rhees, Journals, p. 462 (quotation).

7 The act had authorized the regents to spend up to \$242,129--the accrued simple interest on the fund--on the building. Any amount not spent on construction could be applied to other Smithsonian activities.

8 William W. Campbell (1806-1881), a lawyer who graduated from Union College, in 1844 was elected to a single term as a representative from New York. DAB; BDAC.

9 William Campbell (d. 1844), a New York surgeon, state government official, and regent of the state university, had been a long-time acquaintance of Henry's. Henry Papers, 1:100n.

10 Judith S. Lathrop Campbell, William Campbell's adopted daughter, was the second wife of Asahel Grant (Henry Papers, 3:50n), a physician and missionary. Henry referred to William W. Campbell's biography, A Memoir of Mrs. Judith S. Grant, Late Missionary to Persia (New York, 1844).

11 Presumably Charlotte Meads Alexander, the youngest daughter of Stephen and Louisa Alexander. Henry Papers, 5:377n.

12 Sam Parker, Henry's domestic worker and former laboratory assistant. Henry Papers, 4:452.

13 Maria Alexander, Henry's mother-in-law. Henry Papers, 1:230n.

14 Charlotte Meads, Louisa Alexander's sister. Henry Papers, 2:15n.

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6. TO HARRIET HENRY

[January 19, 1847]A Washington Tuesday night 20 minutes past 9 oclock

My Dear H

I have just returned from dining with Mr Joseph Ingersol and as I am in duty and affection bound I commence to pay my willing nighly tribute to you. We had a most plesant little party consisting of Mr Seaton the mayor of Washington, 1 Mr Rush Mr Bache Mr Ingersol and my-self. Mr Rush is an admirable talker full of anecdotesB and remenisences of characters and things in England and this country. Mr Seaton has long lived in Washington and is familiar with the history of all political men in the country-- The object of the party was to make me more intimately acquainted with the two gentlemen I have named and to enable Mr Ingersol to impress them with my plans or to give me an opportunity of presenting them with the scheme myself. General Cass has been elected to fill the vacancy occassioned by the death of Judge Pennybacker. I have seen him and am to meet him tomorrow moring inorder to impress him with my views of the plan of organization. Mr Rush has fully adopted my plan and will I have no doubt second all my movements. Tomorrow is the beginning of the session of the smithson Board and the results of this meeting will I am sure be of great importance to the future usefulness of the Institution. I expect should my plans be carried that some attacks will be made from 'by 'those who wish to make a library on the one hand and by those who wish to use the money for the war on the other. I called at the Vice Presidents to go with him to the Presidents but was a little behind my appointment he had already gone2--the appointment was not definite and he will take me tomorrow evening on the occasion of the public Lavee.3 The Vice President said that he though it propper that I should have a seperate and private Introduction.C You will see by my letter that I am full of business but you must not think that amidst all this bustle and stir I forget those who are at home. The last hours of the day are spent in spirit with you and our dear children after finishing this letter I shall go to bed and after my prayers my last thoughts will be of you-- Just before I began to wite I stepped into Mr Stansburrys4 room he I found busily engaged in making up his reports--he is a man of great talents after spending the day in the house5 from eleven oclock until four he comes homeD and writes out the reports for the next day's paper which occupies him frequently until one or two o'clock in the morning. I expected to receive a letter to day but have been again disappointed. It is a week to day since we parted in Phild but it appears a month and I have had but one letter6 in that time. I suppose that you are much engaged with Louisa and the children-- I am glad to learn that you have engaged the Miliner7 or rather the [?Meuilanner] to put your person in good condition for though I love you independently of all outward adorments yet I am well pleased to see you properly dressed. I meet every day with a great number of our old graduates -- they are all well pleased apparently to see me and I am much gratified with their attention. The library of congress is the place to see most of the strangers of literary taste and also the ladies of the city. It is almost constantly thronged with visitors and loungers.8 It contains about 40 thousand vol. many of which are good works but among the number are not a few of questionable character in the novel line.

Remember me to Grandmother Uncle Stephen Louisa Will Marrie Helen Puss, Sam & all the other members of the family. I beg my dear little wife that you will be careful of your health though you give poor Louisa all the comfort you can in the way of attendance and I suppose she will want you much there do not attempt to do too much-- Your sick headaches with you being obliged so frequently to take medicine alarms me when I think of it. I fear your health will give way and I have frequently accused myself of late and particularly of thinking more of my own health than of yours. Adue good night Dearest.Family Correspondence, Henry Papers, Smithsonian Archives.

- 1 William Winston Seaton, who, by virtue of his office, was a Smithsonian regent, was also a prominent newspaper publisher. Henry Papers, 6:470.
- 2 President James K. Polk and his family customarily held an informal gathering at the White House on Tuesday evenings, to which visitors were welcome to come without an invitation. Vice-President Dallas and Richard Rush were among those who attended on the nineteenth. Milo Milton Quaife, ed., The Diary of James K. Polk during His Presidency, 1845 to 1849, 4 vols. (Chicago, 1910), 2:342; Charles G. Sellers, James K. Polk: Continentalist, 1843-1846 (Princeton, 1966), p. 307.
- 3 The presidential bi-weekly Wednesday evening "levees" (public receptions) were among "the capital's principal occasions for political gossip." Polk described the reception of January 20 in his diary:

Public notice having been previously given, my drawing room was open. All the parlours were brilliantly lighted up. The Marine Band were stationed in the large Hall. About 8 O'Clock P.M. the company began to assemble. All the parlours including the East Room were filled with ladies & gentlemen. The Foreign Corps, members of the Cabinet, of the Supreme Court of the U.S., members of Congress, citizens, & strangers were present. Though the snow was falling & it was a cold night it was a numerous and brilliant assembly. The Company retired between 11 and 12 O'Clock.

Sellers, pp. 307-308 (quotation on p. 308); Quaife, 2:344.

- 4 Arthur Joseph Stansbury.
- 5 That is, the House of Representatives.
- 6 Not found.
- 7 Identified as a "Miss Skillman." See Henry Papers, 7:315.
- 8 Opened in 1818, the room in the Capitol which housed the Library of Congress became a gathering place whose "books and

pictures [provided] an excuse for the meeting there of persons of both sexes." Relocated to more spacious quarters in the Capitol in 1824, the library remained a popular meeting place, as Henry's remark indicates. Wilhelmus Bogart Bryan, A History of the National Capital, 2 vols. (New York, 1914-1916), 2:41-42 (quotation on p. 42). See also Henry Papers, 6:447.

A From internal evidence.

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7. TO HARRIET HENRY

Washington Jany 20th[-21] 1847

My dear H

I write this evening with very little to communicate except the old story which I hope and trust you will not soon get tired of--Love and constancy-- We have made but little progess in organization of the smithsonian to day though the Regents met for that purpose. The attendanceA though good was not complete several of the Board were absent Mr Choat the great Library man1 whom I have not yet seen and Mr Hawley2 who has not yet got on and I think will probably not be here.3 There is quite a tempest among the Architects and variousB articles have appeared in the papers relative to the choise of the plan for the building. The Board agreed to suffer each architect to be heard tomorrow in succession and I presume we shall then have quite a series of lectures on the esthetic.4 I can say with MrC Lyle though I am an admirer of good building yet I do not choose to be its victime.5

There will probably be considerableD warm discussion on the subject of the bulding to morrow. I think I informed you that Gen Cass had been chosen in the place of Judge Pennebacker. I called this morning on the General and presented to him my views with which I appearedE much impressed and expressed himself strongly against a great expenditure for a library or a buildingF but more particularly against the building.

Judge Breese6 (the cousin of Mrs Robey of Albany7 whom you may recollect) goesG strongly against the building and will probably be pitted against Mr Seaton the mayor of the city so that the probability is that the building though large and expensive will be less by nearly a half than that at first contemplated. There is a great gathering at the Presidents this evening and during the day I though of going but the weather is so stormy with a fall of snow that I concluded not to venture out.

Another day has passed and still no letter has come you must begin to think that I am so filled with the affairs of the Smithsonian that I can have no room in my attention to receive the contents of a short letter from you or one of the children--Where is the letter which I have been expecting from a new desk the christmas present desk of a young lady who is said very much to resembleH in face at least her Father. Shurely it must have been detained by the way perhaps blocked up with the ice in the chesapeakI--and also where lingers the epistle which is to inform me of all the tricks of the little old horse push and his sable attendant Sam.

I wish I could look in upon you if but for a few minutes just now the hand of the watch points to ½ past eleven and I suppose all the inmates of our house are buried in slumbers with perhaps one exception--one a little woman revolving in her mind the past the present and the future is too much occupied with anxiety, fears, perhaps sorrow for the condition of poor Louisa and the distress of Stephen.

Thursday Evening

My dear H

It was so late last night before I finished my letter that I did not take it down to be put into the office--your letter of no date8 on note paper informing me of the low state of Louisa was received to day. It is the second I have had since I left home. I suppose you are so much occupied with attendance on Louisa that your time is all absorbed. I wish I could be with you but I fear I shall be unable to leave Washington for some days to come. The Board met again to day but without doing any thing more than ^ to ^ give a hearing to the architects. Poor Louisa I hope she will receive strength to support her through the brief span of time she has to remain. How uncertain are all things of Earth we live amoung the dying and yet do not realize as we should do that we are mortal--that as Louisa now is inreference to her hold on life so we must shurely and shortly be. The auful change awaits us all. Let the fact be constantly before our minds not to lessen our interest in the affairs of this life but to render us less anxious as to the events of this world whether they turn out for our advantage or not or how long we may be permitted to remain on Earth. Let us put our trust more fully than ever in HimJ who will order all things for the best who put full reliance on Him.

Poor Stephen I fear the blow will fall heavily on him but he is not one who will mourn without hope and I trust the event when it comes will not be unexpected nor the effect such as he will not be able to be sustained under. I beg you my dear little Wife that you will in this trying season be careful of your health. Though I know you will be anxious to do all you can to mitigate the pain of LouisaK and to comfort Stephen. I fear you willL not be moderate or have a proper regard for your self-- I beg my Dear H. that you will be mindful of your duty to your children and that you have a husband to whom life would be worthless were you to be taken from him. I have been anxious about you sinc I left you in Phild Kiss the children for me. Give my Love and kind regards to Louisa. Tell her she has my most erenest praye for fath to sustain her in the hours of tryalM and that she must throw herself entirely on the merits of her saviour put full reliance on him. The saints are impure in the sight of the Righteous JudgeN before whom all must appear and and none can plead their own goodness. They can only be saved through the merits of a Saviour. Adieu.

From as ever only yours.

Family Correspondence, Henry Papers, Smithsonian Archives.

1 Rufus Choate, former Whig senator from Massachusetts and one of six citizen members of the Smithsonian Board of Regents, led its "library faction," which advocated using Smithson's bequest to build a national library at Washington. Henry Papers, 6:465, 565n, 566.

- 2 Gideon Hawley, superintendent for public instruction for New York and another citizen member of the Board of Regents, had known Henry since his Albany days. Henry Papers, 1:50; 6:470.
- 3 Regents who were present at the January 20 meeting included Vice-President George M. Dallas, chancellor of the Smithsonian; Alexander Dallas Bache; William W. Seaton; Robert Dale Owen; Richard Rush; Lewis Cass; George Evans; William J. Hough; Sidney Breese (Henry Papers, 6:470), Democratic senator from Illinois; and Henry Washington Hilliard (Henry Papers, 6:470), Whig representative from Alabama. In addition to those named by Henry, regents who did not attend included Roger B. Taney (Henry Papers, 6:470), chief justice of the Supreme Court, and two citizen regents: Joseph Gilbert Totten (Henry Papers, 4:320), chief of the Army Corps of Engineers, and William Campbell Preston (Henry Papers, 6:470), former senator from South Carolina and now president of South Carolina College. Rhees, Journals, p. 20.
- 4 Architects ostensibly had been given until December 25, 1846, to submit proposals for the Smithsonian Building to the Board of Regents; however, word spread that the building committee had, on November 30, endorsed James Renwick's two designs. A storm of protest ensued, with some architects charging that the competition was rigged from the start. To stem the controversy, at the January 20 meeting the regents approved a resolution offered by William Seaton, that the board would meet at ten the next morning to hear comments or receive more information from any architects who had submitted plans. These presentations occupied the board for several days.

Rhees, Journals, pp. 20-24; Kenneth Hafertepe, America's Castle: The Evolution of the Smithsonian Building and Its Institution, 1840-1878 (Washington, 1984), pp. 37-61; Cynthia R. Field, introduction to Robert Dale Owen, Hints on Public Architecture (1849; New York, 1978), pp. [5]-[6].

5 Henry was paraphrasing criticisms made by the renowned British geologist, Sir Charles Lyell (Henry Papers, 2:135n), over the costly ornamentation of buildings for Philadelphia's Girard College and London's University College. If the trustees of these institutions instead had expended funds for learning, Lyell wrote,

None would then grudge the fluted column, the swelling dome, and the stately portico; and literature and science would continue to be the patrons of architecture, without being its victims.

Lyell contrasted these institutions with the Lowell Institute, whose benefactor, John Lowell, Jr., had insisted that "not a single dollar should be spent in brick and mortar." Henry was deeply impressed by Lyell's comments; he often paraphrased them in support of his argument that the Smithson bequest should not be used to erect an ornate Smithsonian building. Lyell, Travels in North America, in the Years 1841-2, 2 vols. (New York, 1845), 1:89-92 (quotations on pp. 89, 91); Henry Papers, 6:586, 608

6 Sidney Breese had been a judge of the Illinois Supreme Court prior to his election to the Senate. BDAC.

7 Margaret Breese (1803 or 1804-1832), the daughter of Samuel Sidney Breese of Skenandoa (or Sconandoa), near Albany, New York, was the wife of Joseph Roby, Jr., an Albany hardware merchant. Daily Albany Argus, April 3, 1832; Henry Papers, 2:151n.

8 Not found.

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8. TO HARRIET HENRY

Washington Saturday night Jany [23] 1847A

My Dear H

I was much gratified to day in receiving a package of little letters1 from the little girls. I was agreably surprised to find one from Helen and another from Harriet.2 Tell the young ladies that they gave me much pleasure and that when I get a little more time I will answer ^ the ^ letters. This will not take very much trouble provided my letter to each3 resembles those I received for though the chirography was some what various yet the news contained in each was remarkable the same. The letter fromB Puss was fortunately accompaned by a translation which enabled me make out its meaning. Will's letter was not containd in the package but I presume it will be fourth comming.4 I am quite anxious to hear something about Louisa but nothing was mentioned relative to her in the letters. I presume from this that she is about the same-- I am still very busy about the Smithsonian the Regents have met every day since wednesday but they have been constantly engaged in examing plans of buildings and on monday will probably decide on a plan the feaver was high to day for a large building but the consideration of the subject was posponed until tomorrow I should say monday. I am not very certain as to the result. I found on myC return that there was so much feeling on the subject of a building that with Bache I concluded reluctantly that it was best on the whole to give way a little and suffer an appropriation of 150 thousand if we could not get less; on this consideration I ceased to make any farther effort against the building and the consequence was that to day the indication seamed to be that the sum appropriated would be 200 thousand.

I have therefore been engaged this afternoon in renewing my efforts to allay the feever and I think with some effect. I felt at first some what depressed but after some conversation with Judge Breeze and JudgeD Tawney (Judge of the supreme court of the US) who are warmly with me I felt quite cheered. I have not suffered any of the affairs to perplex or annoyE me. I have resolved to first study carefully what is my duty and then to do it fearlessly relying on a conscience voidF of offense for justification of my acts leaving the result to the direction of a kind providence.

I wish very much I could be with you if it were only until tomorrow morning. My cough has almost entirely left me the weather has been plesant to day and I think there is a prospect of its beingG considerably warmer. I left Bache this afternoon quite down in the mouth about the smithsonian.5 I do not feel myself ver[y]H much troubled. If after having done all in our power to direct the affair in the proper channel I leave the result to Providen beleving that the failure is for the best in the long run or it would not be permitted to take place.

Give my love to Louisa if she be still in the world to Stephen Grandmother all the children ^ & ^ Charlotte Meads and receive for yourself the assurance that I am as ever most sincerely your own--H-

Family Correspondence, Henry Papers, Smithsonian Archives.

- 1 Not found.
- 2 Henry meant to write "Mary."
- 3 Henry to Helen Henry, January 30, 1847, and to Mary Henry, January 31, 1847, Family Correspondence, Henry Papers, Smithsonian Archives.
- 4 William Henry to Joseph Henry, [January 29, 1847] (dated "Friday," with a file note of "February 1847"), Family Correspondence, Henry Papers, Smithsonian Archives.
- 5 Perhaps a pun: Bache had two teeth pulled a few days earlier.
- A From internal evidence and the postmark (January 25).
- B Altered from for
- C Altered from mis
- D Initial parenthesis deleted.
- E Altered from anoy
- F Altered from p
- G Altered from beang
- H Paper torn.

9. FROM GEORGE WASHINGTON SMITH 1

Philadelphia Jany 26th 1847

My Dear friend

A Committee of the Am-- Philosophical Society has been appointed to enquire in to the circumstances of the destruction of the Thomas P. Cope--a packet of this port destroyed by lightning at sea,2 having no conductor up at the time, the captain fearing to use one--apprehending that it might attract the stroke.3 We have to enquire into the expediency of conductors their proper form &c As chairman of the Committee (Patterson4 Peale5 and myself) I hope to have your advice on the whole subject--and specially as respectsA the lateral discharge--if danger is to be apprehended there from.6 What is your opinion of Snow Harris' plan? do you think the enormousB sise of the copper plat[e] on the lower mast necessary?7 What do you think of the plan used in the French ships (iron or copper wire ropes as backstays[)?]8 I have the report and documents from t[he] British Admiralty.9 Will you if perfec[tly] convenient ascertain from our Navy Department if they have any facts from our navy officers, or others, shewing the utility or otherwise of conductors--if any ship with a good conductor has ever been injured or saved by the conductors10--pray excuse my lame hand and believe me as ever

Your friend

Geo. W. Smith

No 3 Dugan's Row Spruce Street Philada

P.S. I rejoice--but with fear and trembling at your appointment--but I regard you as Daniel in the den of lions to say nothing of meaner beasts.

Prof. Henry

Henry Papers, Smithsonian Archives. First page torn on right edge. In original, illustration is in left margin.

- 1 A Princeton graduate (1822) and now a Philadelphia merchant. Henry Papers, 5:303.
- 2 Lightning struck the mainmast of the packet ship Thomas P. Cope on November 29, 1846, setting after her cargo of hemp and tallow. On January 1, 1847, the American Philosophical Society appointed a committee to investigate the circumstances of the accident. Eliza Cope Harrison, ed., Philadelphia Merchant: The Diary of Thomas P. Cope, 1800-1851 (South Bend, Indiana, 1978), pp. 518-519; APS Proceedings, 1843-1847, 4:300-301.
- 3 The Cope, like most merchant ships, carried a removable conductor. Typically, these consisted of an iron or copper chain hung from the mainmast, with the lower end in the sea. William Snow Harris, On the Nature of Thunderstorms; and On the Means of Protecting Buildings and Shipping against the Destructive Effects of Lightning (London, 1843), pp. 130-140; A. M. Griffiths et al., "[Abridged] Report of the Committee Appointed by the Admiralty to Examine the Plans of Lightning Conductors, of W. Snow Harris, Esq. F.R.S. and Others," Annals of Electricity, Magnetism, and Chemistry, 1840, 5:1-20, especially pp. 4-6.
- 4 Robert Maskell Patterson, director of the United States Mint and a trustee of the University of Pennsylvania. Henry Papers, 2:413n.
- 5 Franklin Peale, chief coiner of the United States Mint. Henry Papers, 4:177.
- 6 Opinions differed as to whether lateral discharges posed a danger to ships fitted with lightning conductors. Some authorities believed that flying sparks could ignite a ship's cargo or, on naval vessels, a powder magazine. Others disagreed, however, stating that little danger existed if the conductors used were of sufficient capacity and continuous throughout their length. Such differing views about lateral discharges were part of a broader ongoing debate about the reality of the phenomenon. Griffiths, pp. 7-10, 19-20; Henry Papers, 3:53n-54n; 4:263; and 5:439n-440n.

Convinced that the threat posed by lateral discharges was real, Henry urged caution in the arrangement and use of lightning conductors on ships. As he observed in 1859,

It is true, the quantity which tends to fly off laterally from the rod is small, yet we have shown by direct experiment that it is sufficient even when produced by the electricity of a small machine, to set fire to combustible materials; and therefore it cannot be entirely free from danger in a ship, loaded for example with cotton. ["Atmospheric Electricity," Part V of "Meteorology in Its Connection with Agriculture," Report of the Commissioner of Patents for 1859: Agriculture (Washington, 1860), p. 482.]

7 The plan devised by William Snow Harris, a Plymouth physician and author of several papers on electricity, was intended to afford ships permanent lightning protection. His conductor was a band of copper plates. Each link in the band consisted of two plates riveted together, each "about four feet long, from six inches to one and a half broad; the thickness of the under layer being one eighth, and of the upper layer one sixteenth, of an inch." The band was nailed in place in a continuous line along the ship's projecting points and beneath the lower decks, terminating in the hull. In 1839, a British Admiralty committee stated that smaller plates could be used without detriment. Griffiths, pp. 5, 6-15, 16-17; Encyclopaedia Britannica, 8th ed., s.v.

"Electricity," p. 610 (quotation); Henry Papers, 3:173n.

We have not found any comment by Henry on the size of Harris's plates. In 1859, he termed the plan an "admirable arrangement" whose only drawback was that it conducted lightning through the hull. "Atmospheric Electricity," p. 482; see also Henry Papers, 3:514-515; 4:263n.

8 French naval vessels carried removable conductors made of copper or iron wire rope, which, when installed, ran from the mainmast, down the backstays, and into the water. Such conductors had limited utility, since their capacity was insufficient and they were lost altogether if the mast fell during a storm. Griffiths, pp. 4-6; Harris, pp. 134-136.

9 A. M. Griffiths et al., Copy of the Report and Evidence from the Commission Appointed to Inquire into the Plan of William Snow Harris, Esq. F.R.S. Relating to the Protection of Ships from the Effects of Lightning, United Kingdom, Parliament, January 18-August 11, 1840, House of Commons Sessional Papers, No. 63, pp. 1-96. The report contained letters, descriptions of Harris's and other plans, and accounts of ships struck by lightning.

10 We do not know if Henry contacted the Navy Department regarding the information which the APS committee desired.

The committee never presented a report; its final disposition is not known.

A Henry emphasized the following text by drawing a hand in the margin with the index finger pointing to it.

B Altered from i

11. TO HARRIET HENRY

Washington, Cap. Room of the Vice Pres. January 27th, 1847

My dear H.-- The Board of Regents have appointed a meeting this evening, to agree on a plan of a building and thus complete the business of the session, and before they arrive, being alone, I drop you a line. This morning I was quite dispirited and had resolved that if things took the turn they appeared to be likely to take, I would tender my resignation. Bache was also much depressed, but providentially the whole matter settled down into a very harmonious and satisfactory arrangement and, the probability is now, that we shall all separate well pleased with the transactions. The only difficulty which remained yesterday, was that of the erection of a large and beautiful building. Bache and myself were exerting ourselves to defeat the building scheme, while all the Washington influence was against us. This was the state of things when Bache devised a scheme to harmonize each party with each other, which consisted in proposing to defer the completion of the building for five years, and to expend in the process of erection the interest which would accrue from the money the other party proposed to devote immediately to the building. By this plan a large surplus will be saved from the annual funds of the Institution. He proposed this plan yesterday, but no attention was given to it until this morning, and not then, until Bache had introduced a proposition restricting the sum to be expended for building to one hundred thousand dollars. The other plan was then taken up explained, discussed, and in all probability, will this evening be adopted.1 I have kept myself quite cool and, though difficulties innumerable have beset my path, yet all things have gone as well as I could have hoped. I have told the men of Washington that I intend to adopt a new line of policy--that of straightforwardness and honesty. I have pressed my points with vigor but not officiously. There was an indication of a squall this morning, which however passed over very well. Mr. Choate and his friends stated that they had concurred in my appointment, with the understanding that the plan of a library, though not a large one, would not be entirely abandoned, and that Prof. Jewett would be appointed as my assistant. He further stated that he had been informed that I was not anxious to assume the responsibility of nominating the [assistant]A secretary, and he hoped that the Board would recommend to me Prof. Jewett--whereupon the Board or a majority of them recommended the above named gentleman, and in compliment with the recommendation I nominated him. On the minutes of the proceedings, I saw this morning, that the fact of the board having requested me to nominate the gentleman, had been omitted. I then requested that the minutes should be amended in this particular, which gave rise to quite a discussion; I have insisted that the facts should be stated just as they occurred and finally the whole was adjusted to my satisfaction.2

8 PM-- The Board has just adjourned, but inasmuch as Mr. Choate, who thought of leaving tomorrow, has concluded to stop until another day--the Board adjourned until tomorrow without doing any business. If nothing occurs to mar the proceedings which are now in a very favorable train we shall adjourn in harmony, and with a fair prospect of the Institution going into successful operation.

I am quite anxious to hear from you and Louisa. I have not heard from Princeton since the arrival of the package of letters from the little girls. The time seems so long, that the interval of a day or two appears like a week. I hope to get away next week, and be at home at the opening of the college.3 The present is the longest vacation I have ever spent. It seems six months since my appointment to the Smithsonian took place.

The messenger is waiting to close this room, and therefore I must stop with the assurance that I am as ever

only yours

J.H.

Mary Henry Copy, Family Correspondence, Henry Papers, Smithsonian Archives. Mary Henry Copy: Two variant copies in same location.

I Bache's plan followed upon a resolution presented by Chancellor Dallas at the January 26 meeting, which stated that to preserve funds for Smithsonian programs, no more than \$100,000 should be spent on its building; the resolution was tabled. The next day, Bache offered a similar resolution, limiting spending from the building fund principal (\$242,129) to \$100,000; it also was tabled. The regents then reconsidered Dallas's resolution, whereupon Bache offered as an amendment to it that "a plan of finance and construction can be adopted" (p. 28) under which no more than \$100,000 of the building fund principal would be spent. After debate, the board decided to reconvene that evening.

A memorandum of understanding, dated January 27 and read to the board on January 28, outlined Bache's plan. It stated four principles. First, insofar as possible, the principal of the building fund was to be preserved. Second, the building's construction was to be spread out, with its wings completed in two years and the whole in five, at an average annual expenditure of one-fifth of the total cost (estimated at \$202,000 to \$217,000). Third, at least \$15,000 per year was to be loaned, during the first two years, from the annual income of the Smithsonian fund and added to the interest on the building fund. Fourth, \$252,000 was to be drawn from the treasury and set aside as a separate building fund. After five years, assuming an annual expenditure of \$43,000 (from the new building fund, its annual interest, and the \$30,000 to be borrowed from the Smithsonian fund), a balance of \$129,384 would remain, to be added to the Smithsonian fund's principal.

The memorandum was never entered into the minutes, nor is there any record of its official adoption. As Robert Dale Owen noted, however, the "prospective plan of finance and scale of expenditure, throughout the years in which the building shall be in progress, . . . did, in fact, receive the sanction of the Board" (p. 448). Its details formed the basis for the method of financing the construction which appeared in the contract signed by the building committee on March 20, 1847. And, though they slightly modified its particulars, the executive committee adopted the plan in December 1847 as a "scale of expenditures for the next four years" (p. 447).

Rhees, Journals, pp. 25, 28, 447-455, 627-628. Four copies of the memorandum are found in the Smithsonian Archives:

three (one in Bache's hand) in Box 5 of the Bache Papers, and the fourth in Box 30 of the Henry Papers.

2 The board considered Jewett's appointment after first approving three resolutions offered by Henry W. Hilliard. The first set the salary of the assistant secretary acting as librarian at \$2,000; the second requested the secretary "to nominate to the Board an assistant, who shall be the librarian," and whose salary would begin when the building could accommodate a library; and the third allowed compensation to the librarian for any services rendered for the institution in the interim. After the resolutions were adopted, Henry was recorded as remarking that "understanding Professor Charles C. Jewett, of Brown University, to be the preference of a majority of the Board," he therefore nominated him as assistant secretary acting as the librarian. George Evans then called on the board to approve Jewett's nomination "and consent to his employment"; his resolution carried. Rhees, Journals, p. 27.

The minutes thus left it unclear who actually appointed Jewett: Henry, acting with the regents' consent, or the regents, by confirming Henry's nomination? As Henry's comments to Harriet indicate, however, his immediate concern was simply to insure that the minutes reflected that he had nominated Jewett only after being requested to do so by the board.

3 Princeton's second term commenced on February 4. Catalogue of the Officers and Students of the College of New Jersey, 1845-1846 (Princeton, 1846), p. 22.

A Missing from this and one of the variant copies, but present in the other.

12. TO WILLIAM ALEXANDER HENRY

Washington Jany 27th 1847

My Dear Son

I have been expecting for some time past to receive a letter from you but as yet I have been disappointed. I suppose however that it will come in good time. I I was much pleased with the letters from the little girls 2 and shall expect some further communications from the same quarter. Washington is a city of great bustle during the session of congress but when the two houses have adjourned it is said to be quite dull. It* is a remarkable place for meeting persons whom you have not seen for a long time or have long forgotten. A man called on me a few nights ago who lived in Albany when he was a boy and knew me at the time. He called to my recollection several facts which I had entirly forgotten particularly one inreference to my having be caught by a man while throwing stones down a hill and being nearly put into the watch house. I was not however at the time doing wrong intentionally but carelessly; I was throwing stones with several other boys down a hill in the evening without thinking that they might hurt some person when several persons came running afer us and as I was the last to move I was caught. One of the stones had struck a man or came near striking him. It is not enought that we intend to do no harm but we must in all cases take heed to the effects of our actions and be assured that our carelessness or ignorance doesB not injure others. For if we are not careful in these particulars we are very culpable though we had no intention of doing wrong. On this point you may recollect one of the stories of Gough the temperance lecturer3 who relates that a man fired a canon from a hill into a [---] town and killed several persons when he was informed that of what he had done he said oh! I [?diid]C ^ did ^ not intend to hurt any body I was only firing for sport. But to return to the man I had not seen him before since I was a boy and indeed he had gone entirly out of my recollection though he was still in my memory (What is the difference between recollection and memory) and as he might have become in the mean time a very unworthy person perhaps a very bad man I told him that until I knew more of his character I could not admit him to the intimacy of a friend though we had been companions in early life. I treated him however very civilly and after some time he left me. He had been an officer in Texas and though he had very respectable connections his breath smelt of rum and I was not sorrey when he left me except that he shough give such evidence of not being a very good man-- I met another old acquaintance George Clinton sone of the late Governor Clinton the author of the canal policy of the state of New York4--but I have mentioned the facts of this meeting I think in one of my letters to your Mother.5 I have also met a great number of students--the young man that stopped at our house at the beginning of last session and occupied for a week and more your little room, I have forgotten his name, I see frequently. Also there are many of the old graduates of Princeton in Washington some and not a few live here and others [ar]eC on from the south and west. Washington is at present very much crowded with strangers. Several hundred young men are here applying at the war office for commissions in the army. It does not speak very well I think for the character of a young man to be anxious to get into the army, by an appointmnt without having passed through the academy at West Point. When the war is over they will be thrown out of employment not being in the regular army--they will be exposed to great hardships be liable to be killed and should they live through the war will be broken down in health and will have contracted such bad habits as will render them very unworthy citizens. War is a dreadful curse and I hope the time will soon come when nations shall go to war no more. [---] When you come to Washington as I think it probableD you will next summer you will be pleased with ^ the ^ capital. It is an immense building I presume the largest in the united states. It stands on the brow of a hill and while you enter on the east side by a high flightE of steps into the building on the first floor on the opposite side there are several flights and these introduce you into a lower story. In the middle of the building, is an immensely large circular room called the rotunda surmountedF with a dome and a sky light called the rotunda and surrounddG on all sides with large pictures each about 20 feet long by about 10 or 12 high. These pictures are placed in pannels or intentations in the circular wall. All the pannels are now filled except one--a new picture has lately been put up-the landing of columbus by Vanderlin. It is a very fine picture which the artist has spent several years in painting-- Each picture cost if I am not mistaken 9 thousand dollars. 6 The sketch in the margin will give you some idea of the relative positions of the room of the House of Representatives and the senate chamber. The latter is much smaller than the former and the two are situated on opposite sides of the rotunda.

Adieu

To W A Henry From his affectionate FatherH

a is a small rotunda for ventillationI

*Ask Mother to explain to you the meaning of this sentence about the Houses.A

Family Correspondence, Henry Papers, Smithsonian Archives.

1 William wrote his father two days later: [January 29, 1847] (dated as "Friday," with a file note of "February 1847"), Family Correspondence, Henry Papers, Smithsonian Archives.

2 Not found.

3 John Bartholomew Gough, who in 1845 had lectured in Princeton on temperance. Henry Papers, 6:275-276.

4 Henry may have been referring to The Canal Policy of the State of New-York: Delineated in a Letter to Robert Troup, Esquire (Albany, 1821), by "Tacitus." A list by Henry named it as one of sixteen "Clinton Pamphlets" (by or about DeWitt Clinton) in his library.

5 Doc. 5.

6 Vanderlyn and the three other artists who in 1837 received commissions to execute four historical paintings for the Capitol

Rotunda each were paid \$10,000 for their work. Vivien Green Fryd, Art & Empire: The Politics of Ethnicity in the United States Capitol, 1815-1860 (New Haven, 1992), p. 46.

A Written in left margin of first page.

B Altered from do

C Ink blot.

 $D\,Altered\,from\,probably$

E Altered, possibly from flith

F Altered from S

G Altered from surround

H Moved from above the dateline.

I Written sideways in margin to left of illustration.

13. TO HARRIET HENRY

Washington Thursday Jany 28A[-29]th 1847

My dearest

Your letter1 giving me an account of the death of our dear Louisa2 was received this afternoon on my return from the capital. Though the intelligence was not unexpected it shocked me very much and I have since been very melancholly and I may say home sick. I am deeply impressed this eveing with the uncertainty of Life and the unsubstantial nature of all earthly affairs--What a change in the course of two short months has been made in our little circle unbroken for ten years--Well all things are ordered by a Power which controlls events and over rules them for good to those who put their trust in Him. I fear you are extremely lonely and dispirited and I wish that I could transport myself in a moment to you. The Board met to day and settled the principal business of the pressent session but they meet again on saturday to finish a little business left unadjusted. The meeting has terminatedB very harmoniously & though though the organisation is not precisely such as I could wish yet it is all I could reasonably expect form the several acts of congress which we were obliged to comply with. Baches plan of putting up the building has carried--the wings are to be erected first and the body completed in five years so that the cost of building will be drawn from the interest of the money which would otherwise have been expended immediately.

^ Friday ^ C I shall not be able to leave Washington until the latter part of next week. The Board will adjurn on saturday and will not probably meet again until next December though according to law they are required to meet in Feby next at this time those in Washington will meet and adjurn without doing business.3 I have been all the forenoon busilyD engaged with a clerk in the official duties of my office--in arranging the minutes and adjusting the dutiesE business of the board. I have found the occupation plesant and by no means difficult. A little common sense will stand a man in place of much practicalF knowledge of a merely technical kind.

I am finishing this letter at Bache's in the Office4 he has a dinner party of his relatives of the younger kind among whom is Miss Lesley Cook from Princeton. This young lady appears to be quite as great as favourite in Washington as in Princeton.

I have felt quite depressed all day Louisa has scarcely been out of my head for a minute the weather is gloomy and were it not that [I] ^ had ^ considerably to occupy me I should have been quite home sick. It appears a very very long time since I left home and I am wondering how you will all appear when I return. I hope you have been careful of your health and now that Louisa requires no more attendance you will rest yourself--send for a sewing woman and have the cloths of the children put in order without fatigue to yourself-- Take some rest after all the exertions you have made--endeavour to cultivate a cheerful state of mind--put trust in Providence--amuse yourself with books and look if possible on the bright side of the passing changing scenes of Life. I am to visit Mr Webster5 this evening though I do not feel very much inclined to talk. I am rather inclined to think I shall be very dull and not suceed in being even a good listner which next to the character of a good speaker is highly esteemedG particularly by good talkers.

I spent a short time this morning in the room of the Supreme Court of the US. The Judges of this court with their Gowns are the most dignifed asembly of men to be found in our Country. They hold office for life and consequently are above the temtation of being influenced by party considerations and since they owe their office to the integrity of the Union they will always be a check on the dendancies to its dismemberment. The House yesterday spent 9 hours in attempting to settle whether yesterday was to morrow or the day before. A resolution had been proposed two days ago that a debate on a bill should be terminated "tomorrow" the resolution however was not acted upon until the day after it was proposed and the question then was whether the "tomorrow" was the day after the bill had been proposed or the day after the bill passed. The House adjourned without I believe settling the question6-- Adieu as ever your H.Family Correspondence, Henry Papers, Smithsonian Archives.

1 Not found.

- 2 Louisa Alexander died on January 24, 1847. William Henry to Joseph Henry, [January 29, 1847] (dated "Friday," with a file note of "February 1847"), Family Correspondence, Henry Papers, Smithsonian Archives.
- 3 The board adjourned on January 30 and reconvened on February 5, when it adjourned sine die. In keeping with a resolution adopted September 9, 1846, fixing the times of their two regular annual meetings, the regents reconvened for the first such meeting on February 17, the third Wednesday in February. The second annual meeting took place on December 8, the second Wednesday in December. Rhees, Journals, pp. 4, 31, 32, 39.
- 4 That is, the office of the Coast Survey. See Henry Papers, 6:444n.
- 5 Daniel Webster (1782-1852), orator, statesman, and Whig senator from Massachusetts. DAB.
- 6 On January 26 a resolution was introduced in the House of Representatives to terminate debate on a naval appropriations bill "at one o'clock to-morrow," but it was not approved until January 28. Debate resumed after the vote. At the appointed hour, a member asked that the debate be ended, but the chair denied the request, stating that since the resolution only took effect upon its adoption, debate could continue until the afternoon of the following day, January 29. Numerous roll-call votes ensued on motions--all defeated--to suspend the debate or to adjourn, and proceedings dragged on for hours. Near the end, representative Reuben Chapman asked the chair "whether this was to-day or to-morrow? If the House could make to-morrow part of to-day, could it not make as well to-day into to-morrow?" The session finally ended at 10:30 p.m., after the chair cast a tie-breaking vote on a motion to adjourn; the issue of what was "tomorrow" was left for another day. Congressional Globe, 29th Congress, 2d Session, 1846-1847, 16:280-283 (quotation on p. 283).

B Altered from terminaded C In the original, preceded by angled double lines and written at an angle to signal a break with the text above. D Altered from busille

E Altered from f

F Altered from pracfical

Storia dell'elettricità- Lettere di Henry

G Altered from esseemed

14. TO HARRIET HENRY

Washington Saturd-- Jany 30th 1847

My dear H.

The Board met again this morning but did not finish all the business. they They will I fear keep me until the latter part of next week. All the plans of the building and the operations for the future year (or I should say the present year) have been arranged. I am getting quite home sick and sometimes wish almost that congress would stop the whole affair and suffer me to return to Princeton.

I again take courage and resolve to persevere with a stout heart believing that all would be well were my wife and children around me-- I have been engaged most of the day since the adjournment of the Board with the architect in arranging the plans of the different parts of the building. It will be a most magnificent affair when finished but if the whole fund necessary to finish ^ complete ^ the structure is derived from the accruing interest I think it will be more than five years in completion. I have just received a note of invitation from Mrs Marcy to dine with the secretary of war1 on Tuesday next. I called last evening with Dr Lindly2 to see Mr Webster but found him engaged in a political meeting with some of friends of the same side. Dr Lindly I think I have mentioned before; he is a Brother of Dr Lindly once a professor in Princeton.3 His Wife is a relative of Daniel Webster4 and was an acquaintance of Mrs Taylor.5 She became acquainted with Mrs T. I think she said in New-ark. Finding Mr Webster engaged I called at General Dix's6 and there spent the evening very pleasantly with the General--I never was intimately acquainted with Mr Dix I found him very kind and gentlemanly though he did not much impress me very much with his talents. I meet a great many persons every day that I have not seen before for some time. Yesterday I was acosted with ^ by ^ two persons from Albany and to day ^ by ^ others from the south. Mr Dix informed my that Horatio Potter7 had come on from Albany to perform the marriage cerimony between an officer I think of the Navy and the eldest daughter of Mr Ferguson.8

Mr Espy and his wife are here staying at a boarding house.9 I have not yet call on them though I have promised to do so. My time has been so much occupied with the meetings of the Board that I have been unable to make any calls except in the evening and then but seldom.

I wish I were with you and the children this evening-- All the excitement of pressing my plans on the Board is now passed and I am left ^ at ^ this time in a state some what approaching a collapse and feel that nothing would give me more pleasure than a cheerful fire--a good easy chair with my wife and children around me. I sent a letter enclose with one to you to Will yesterday.10 I mentioned in this that the cost of the of the pictures in the rotunday was 5 thousand dollars apiece. I am correctly informed to day that the cost was 10 thousand Dollars each. The only pannel yet unfilled is that which was assigned to Inman. He received before he diedA 6 thousand dollars in advance but did little or nothing to the picture. It is not probable this pannel will be filled until the mexican war is finished. When this will beB the case is now not known--the prospect is darker rather than otherwise.11

I am writing this in the room of the vice President and it has become so dark that I can scarcely see the point of my pen. I must therefore close with the assurance that I am as ever

your

Η

Family Correspondence, Henry Papers, Smithsonian Archives.

- 1 William Learned Marcy, an acquaintance of Henry's from his Albany days, was appointed secretary of war in 1845. Henry Papers, 2:34n; 6:253n. His wife, the former Cornelia Knower, was the daughter of Benjamin Knower, a prominent Democrat and another of Henry's New York acquaintances. Henry Papers, 2:156n-157n.
- 2 Harvey Lindsley or Lindsly (1804-1889), a graduate of Princeton (1820), was a Washington physician. Princeton Catalogue, p. 133; John M. Lindly, The History of the Lindley-Lindsley-Linsley Families in America, 1639-1930 (Winfield, Iowa, 1930), pp. 430-431.
- 3 Philip Lindsley (1786-1855), another Princeton graduate (1804), was its professor of languages from 1813 to 1824 and acting college president in 1823. He became president of Cumberland College (the University of Nashville) in 1824. DAB.
- 4 Harvey Lindsley's wife, Emeline C. Webster (1808-1892), was a cousin of Daniel Webster's. Lindly, p. 431; Charles M. Wiltse, ed., Guide and Index to the Microfilm of the Papers of Daniel Webster (Ann Arbor, 1971), p. 36.
- 5 Perhaps Julia Taylor, a family friend. Henry Papers, 5:379n.
- 6 John A. Dix, formerly New York's adjutant-general and later its secretary of state, was currently a Democratic senator from that state. Henry Papers, 3:37n; BDAC.
- 7 An Episcopalian minister, Horatio Potter was rector of St. Peter's Church in Albany. Henry Papers, 6:289n.
- 8 Robert A. Lacey and Blanche Ferguson were married on January 27, 1847. Her father, James Ferguson (Henry Papers, 2:15n-16n), another of Henry's Albany associates, was a first assistant on the Coast Survey. Old Marriage Records A-K (1811-1858), District of Columbia Marriage Bureau, Washington, D.C.

9 Since 1842, James Pollard Espy had been employed by the Surgeon General's Office of the War Department to coordinate its meteorological observations. He met his wife, the former Margaret Pollard (d. 1850), in 1812 while he was principal of, and she a teacher at, the Cumberland Academy in Maryland. After their marriage, he adopted her maiden name as his middle name. Henry Papers, 2:195n-196n; 6:574n; DAB.

10 Docs, 11 and 12.

11 Henry Inman had died the year previous just as he was beginning work on a painting of Daniel Boone's Kentucky cabin, the first in a series he had been commissioned to complete for the Capitol. William H. Powell (1823-1879, DAB), a former student of Inman's, received the balance of his commission in 1847. His painting, Discovery of the Mississippi by De Soto A.D. 1541, was installed in 1855. Henry Papers, 6:390; Vivien Green Fryd, Art & Empire: The Politics of Ethnicity in the United States Capitol, 1815-1860 (New Haven, 1992), pp. 46, 57.

A Altered from didd

B Altered from bi

15. TO HARRIET HENRY

Washington Feby 3rd 1847

My dear H

The board of Regents meet for the last time during their pressent session on Friday morning1 and after the meeting at 4 o'clock PM I intend to start for the north and hope to be with you at [?least] on saturday night.

This is a blustering day at Washington but quite warm. The wind is very high and has been so all night-- I have been much engaged in superintending the affairs of the Institution and looking after the effects of Smithson. There is in the Patent office a number of boxes containing many of his articles and a cupboard filled with manuscript papers belonging to him.2

Among the articles is a bronze metalion likeness of Smithson which is to be engraved for the frontis piece of the transactions. We are now looking out for a room which may serve as an office and depository for the books which are constantly coming in from the different publishers who according to law are required to send a copy to the Library of the smithsonian.3

I hope the children have received the package of letters I sent and that they were amused with the contents.4

I am beginning to feel a little more used to Washington and were we once settled here with the children around us I think I should be well pleased.

I have seen a number of students starting on their return to Princeton and have requested some of them to say that I would be on towards the latter part of the week.

Charles Abert5 took me in his little waggon to see Mr Stone6 who lives about 2 miles from the capital. He has a very beautiful situation and is now devoting himself to the art of sculpture and is succeeding most admirably. He was working on a bust of Prof. Dod7 and has succeeded admirably. It is incomparably better than the one8 made in Phild I did not see his wife and daughter they were out at the time. On my return from Mr Stones I spent the remainder of the evening at Mrs Green's9 brothers10 and was much pleased with my visit. Mr Mc Culloh is a very intelligent man and is highly esteemed by all parties in Washington. He thinks that after the Institution is once organized it will go on without molestation and that I will have pretty much my own way in the management. I have been variously affected with the prospect of the success of the establishment. I have sometimes high hopes of its usefulness and then again the future is dark but every think in life is uncertain, and when we think we are standing on the firmest earth the hiden fire may be burning beneath us. The sailor boy on the bending mast often lives through the storm while the [?secure] landsman in fancied security is crushd with his falling house.

When you come to washington you will not want for the new books of the day they all come for the library of the Institution.11

Though I am in the focus of Political events I know but little of what is going on--my head quarters for the present during A the day is in the vice Presidents Room in the Capital. It is a beautiful room finely carpeted, with armed chairs damask curtains &c. &c. With a servant in attendance.

The city is full to overflowing with strangers--hundreds of young men are flocking to Washington to get commissions. Young Webster the clergyman's son has been appointed comissary--with which I am well pleased.12

Your

H-

Family Correspondence, Henry Papers, Smithsonian Archives.

1 February 5.

- 2 The previous day, Henry had visited the Patent Office Building and met with John Varden, whose duties as custodian of the collections housed in the "National Gallery" included caring for Smithson's personal effects. Entry for February 2, 1847, in William Q. Force, "Extracts from a Diary Kept by John Varden, at the U.S. Patent Office Building, and Placed by Him in My Hands," n.d., Folder "Telegraph Notes, Etc., 1846-1881," Box 23, Henry Papers, Smithsonian Archives; Douglas E. Evelyn, "The National Galley at the Patent Office," in Magnificent Voyagers: The U.S. Exploring Expedition, 1838-1842, ed. Herman J. Viola and Carolyn Margolis (Washington, 1985), pp. 226-241, especially pp. 236, 237.
- 3 Section 10 of the act establishing the Smithsonian Institution designated its library as a copyright depository; see Henry Papers, 6:466, 594.
- 4 Henry to Helen Henry, January 30, 1847; Henry to Mary Henry, January 31, 1847, Family Correspondence, Henry Papers, Smithsonian Archives. According to Harriet, Henry's letters produced "delight" and a "burst of laughter." Harriet Henry to Henry, February 2, 1847, in same location.
- 5 A Princeton graduate (1842), Abert was a brother-in-law of Alexander Dallas Bache. Henry Papers, 4:220n. His father, John J. Abert (Henry Papers, 3:69n), was chief of the Army's Topographical Bureau.
- 6 Horatio Stone (1808-1875), a New York physician, had moved recently to Washington and taken up sculpture. His work

included busts of several American statesmen. DAB.

7 Albert Baldwin Dod, professor of mathematics at Princeton, had died on November 20, 1845. Henry Papers, 1:434; 6:337n.

8 In 1846, Henry had arranged with Augustus Lenci, a Philadelphia sculptor, to make a portrait bust of Dod. Lenci also furnished twenty-five plaster casts for subscription sale to Dod's friends and Princeton alumni. Donald Drew Egbert, Princeton Portraits (Princeton, 1947), p. 99. Philadelphia City Directory, 1846; Lenci's bill to Henry, April 6, 1846, College Finances, 1840-1849, John Maclean Papers, Princeton University Archives, Seeley G. Mudd Manuscript Library, Princeton University; Samuel H. Pennington to Henry, December 30, 1846, Henry Papers, Smithsonian Archives.

9 Isabella McCulloch Green; see Doc. 4.

10 James W. B. F. McCulloch, the first comptroller of the treasury, whom Henry first met at Washington in December 1846, was the son of John McCulloch by his first wife, Anne Todd (d. 1789). Isabella Green was John McCulloch's daughter by his second wife, Elizabeth McBlair. Henry Papers, 6:593, 599; Alice Norris Parran, Series II of "Register of Maryland's Heraldic Families": Tercentenary of the Founding of Maryland (Baltimore, 1938), p. 238.

11 On the contrary, Charles C. Jewett in 1850 complained that because of the cost of shipping books to the Smithsonian for copyright deposit, "few publishers complied with the requirement of the act of Congress." Smithsonian Report for 1849, p. 35.

12 Charles R. Webster, a Princeton graduate (1840), on January 18 was appointed an assistant quartermaster. Webster had sought Henry's recommendation, but it is not known if he provided one. Princeton Catalogue, p. 160; Charles K. Gardner, A Dictionary of . . . the Army of the United States, 2d ed. (New York, 1860), p. 475; Webster to Henry, December 4, 1846, Henry Papers, Smithsonian Archives.

Webster's father, Charles Webster, was pastor of the Presbyterian Church of Monmouth County, New Jersey; his grandfather, long a prominent Albany publisher, had been a trustee of the Albany Academy when Henry was hired in 1826. George Rogers Howell and Jonathan Tenney, eds., History of the County of Albany, N.Y., from 1609 to 1886 (New York, 1886), p. 371; Henry Papers, 1:27n, 132-133.

A Altered from ar

16. TO HARRIET HENRY

Washington Thursday Ev. [February 4, 1847]A 11 O'clock

My Dear H

I have just returned from a very plesant dinner party at Secretary Marcy's. The party was small but in good style and very agreeable. The Secretary and his Lady were very attentive and polite to me--among the guests were Governor Fairfield of Maine1 and Governor Somebody I have forgotten whom from Connecticut.2

After the dinner which commenced at about 7 o'clock I went to Mr Walkers3 to meet Bache. Where I have remaind until just now. This morning I made my first appearance in the white House.4 I had called before and left my card but did not see the President. I was admitted though a number of Gentlemen were wating audience.5

The man in the great position received me with much politeness and affibility made enquiries as to meB and requested that I would call frequently particularly after the adjournment of congress.

The room of audience for business is on the second floor and is though not very large quite plesant the President sits at a large table on one side of the fire place and his visitors arrange themselves on the other side fasing him.

The office though one of much honor is certainly not one of much leisure-- All day long strangers are arriving or and all at certain hours are admitted.6 We found alone with the President a roudy looking fellow with a monsterous[...] talking loud and urging the appointement of himself or a friend to some office. The manners of the great man are affible but considerably dignified not as much so as those of General Jackson but more than those of Mr Van Buren.7

This has been a very windy day and for Washington quite cold. I have been making many inquiries about the health of the city8 and find various accounts. The general testimony is that the inhabitants in the months of aug. and sept and perhaps a part of nov are liable to chills and fever provided they expose themselves to the air at night by sitting in the open air or to the fog in the morning shortely after sun rise.

I also learn that the most health part of the city is on the mall where the Smithsonian Hall is to be erected. It appears from the accounts of several with whom I have conversed that those who live on the out-skirts of the city are more exposed to chills than the inhabitants of the centre and more thickly settled parts. C This is the case with Charleston and other cities at the south while the middle of the city is perfectly healthy the country around is impregnated after sundown with malaria. The effect is probably due to the decomposition of the vegetable matter around the city and the impregnated air is purified by the smoke of the chimnies or is prevented by the houses reaching the centre of the city. 10

I think when you are once settled here you will be pleased with the place you may go into society or not as you may think fit and as there is always somethg going on during the session of congress there is no want of excitement.

I had an invitation to a party this evening at the vice Presidents but as there was to be a great rout with dancing there I concluded not to go. I have been quite cheerful for two days past and begin to feel quite confident in the success of the Smithsonian though clouds and darkness have settled hereto-fore upon its prospect. I intend starting for home tomorrow evening but perhaps I shall stop at Baltimore to avoid riding during the night. I am living on the anticipation of the pleasure I hope to enjoy in meeting you and our dear little ones. I have been from you long enough to feel how much I need your company sympathy direction love and all that has rendered you a part of myself for the last 16 years and I feel most forceably the truth of your remark that life is too short to spend much of it in seperation.

Your

H-

Family Correspondence, Henry Papers, Smithsonian Archives.

1 John Fairfield (1797-1847) was governor of Maine from 1839 to 1843, when he was elected to the United States Senate. BDAC.

2 Clark Bissell (1782-1857) was governor of Connecticut from 1847 to 1848. Thomas William Herringshaw, Encyclopedia of American Biography of the Nineteenth Century (Chicago, 1905).

3 Robert J. Walker.

4 That is, his first audience with President Polk. Henry had visited the White House before, in 1836. Henry Papers, 3:135.

18. FROM JOHN FOSTER 1

Union College Feb. 18 1847

My Dear Sir

I received a few days since the enclosed letter2 directed as you will perceive to you & to my care. I was utterly at a loss what to make of the circumstance--thought it possible the writer might have learned that you were to visit our Dutch City about this time--had in short a great variety of unplausible explanations. At length after waiting sometime seeing something about electricity by the advice of a legal gentleman I opened it & found it abounding in a commodity of which I presume many of your letters are full--queres. How it should come to be directed to my care I can only explain in one way. A member of our Senior Class who takes great interest in Electricity resides in Castleton.3 He had probably been conversing on the subject & so mingled the names of the originator & reporter of your discoveries that the brain of Mr Lane became confused & he supposed that the two individuals must be essentially one & the same. I hope you will bea[r]A with becoming meekness the honor thus imposed on you--an honor entirely unsought & attributable to no active agency of yours.

Though often sorely tempted I have not written you before because I supposed the increase of your correspondence since your appointment to Washington must be excessively burdensome. Few have made greater sacrifices than myself in consenting to your acceptance. Nothing but a sense of duty to the scientific interests of the country could have induced me to allowB your removal to such a fearful distance that I may not be able to see you again in years. Bache & Henry both gone is a thought to sigh over. I should much like to know whether there is a good degree of certainty that the Smithsonian is to be a Royal Institute or Royal Society4 instead of an Agricultural school where lectures without number shall be yearly given to empty benches. I have watched with interest the efforts to give the Institution a right direction & sincerely hope they will meet with success even in this democratic & utilitarian country.

I was greatly rejoiced to receive the Bulletin containing your report on the Telegraph wires.5 It came just in time for me to give the Seniors the substance of it at the close of my lectures last term. It ^ is ^ marked with all that transparency which characterizes your other papers & which I can never sufficiently admire.

My Oersted's app. for comp. water is out of order. A bubble of air has found its way into the glass bottle & divides the column of water. As yours6 has most probably met the same accident often I should like to know what method you find best for expelling the intruder.

We all deeply sympathize with Prof. Alexander in the loss of his excellent wife. His house must be left desolate indeed.

If you can without too much trouble give me a few lines I should feel much obliged--not otherwise. I received Bache's report a few days since.7 We are all pretty well--Jackson at work on the Optics & very dyspeptic.C

Yours as ever

John Foster

Prof. Joseph Henry LLD

PS. I stop the press for a moment to announce that I have just received from Mr Gurley8 (Troy) a fine vertical & horizontal monochord.9 The wires (two sets), I had before received from Paris.

My best regards to Mrs Henry

JF-

Henry Papers, Smithsonian Archives.

1 Foster was teaching mathematics and natural philosophy at Union College. Henry Papers, 6:78n.

2 Doc. 17.

3 Selah G. Perkins. A General Catalogue of the Officers, Graduates and Students of Union College, from 1795 to 1868 (Albany, 1868), p. 74.

4 References to the Royal Institution and the Royal Society of London, respectively.

5 Either Henry's presentation in the APS Proceedings, 1843-1847, 4:260-268, or its reprinting as "On the Induction of Atmospheric Electricity on the Wires of the Electrical Telegraph," Silliman's Journal, 1847, 2d ser. 3:25-32.

6 Purchased in Paris. Henry used his Oersted apparatus for the compression of liquids both for classroom demonstrations and research. Henry Papers, 3:541; 5:28, 179.

7 Probably U.S. House, 29th Congress, 2d Session, Report of the Superintendent of the Coast Survey, Showing the Progress of That Work, House Documents, No. 6 (1846).

8 William Gurley (1821-1887) had been trained as a civil engineer at Rensselaer Polytechnic Institute. He was a partner in the firm of Phelps and Gurley, makers of mathematical and philosophical instruments. Charles E. Smart, The Makers of Surveying Instruments in America since 1700 (Troy, 1962), pp. 60-62.

9 An instrument for measuring and exhibiting the mathematical relations of musical tones.

A Ink blot.

B Altered from p

C Altered from dyppeptic

19. FROM ISAAC W. JACKSON 1

Febry 18th 1847 Schen

My dear Henry

Your letter2 was duly recd;--but as I supposed you too much busied with matters of moment to spend time in an amateur correspondence even with a friend, I refrained from writing you in return, though especially tempted to do so. Before I say a word, let me beseech you to remember that you & I are on such terms that any question I may ask you or any request I may make may be treated precisely as a suggestion springing up in your own mind, entertained & thrown aside at your pleasure.-- This being admitted,--I proceed-- A change in politics has again had an unfavorable influence upon fortunes of our frnd Patterson,3--reduced him as he says to "Shoemaker's wages"-- He is anxious to "quit a busines which has now become an unrequited drudgery & almost odious" to him-- Such is his language-- He is negotiating with a gentlemn relative to the sale of his books, in order he says "to enable him to pursue his studies" etc-- -- All this shows that he is reduced almost to the verge of despair,--for you know he idolizes his books-- Besides the plan I think is a very unwise one & may exercise a most unhappy effect upon his future life-- I have therefore determd to consult with his frnds & see if we cannot propose something better, than his project of parting with what he holds so dear, & abandoning all employment but study with its inevitably bad consequences---- I start for Alby in a few minutes for the very purpose,--tho I have little hopes of effecting any thing--

I write you to enquire if there is any probability of your being able ultimately to give him a place in the Institute.4 It has occerd to me that if you should determ to publish a journal ^ etc ^ , his services would be invaluable,--from his perfect acquaintance with his business--as aA general directer in all matters relating to your printing, proof reading etc no trifling affair where mathematical symbols are concernd--for not one math. work in twenty publihd in the country is printed with even tolerable accuracy-- -- A very modest salary would I presume satisfy him,--barely enough to support his family,--provd the position would be such as to give him a reasonable degree of leisure--

You mentnd the place of Calculater in the Coast Survey,--I have saidB nothing to him about it,--as I was entirly ignorant of its dutie's, emolumt perid of its continuance etc---

Is there no place at Washington under the governt that ^ would ^ answer for him, & which could be procured if a powerful influence were exerted in his favor-- -- If you are not too busy will you give the subject some consideration & write me soon.-- But as I said at first, we must not be troublesome to you,--Patterson himself is wonderfuly averse to troubling any one with his matters-- I presume he would object to my writing to you.-- If you could afford the time,C I should like to hear a little about the Institute,--your plans etc all strictly entr nous-- --

I am now attempting to prepare something on Physical Optic's5-- I have nearly completed the generl exposition of the theory,--the principle of interference & its application to to reflection & ordinary refraction,--& the colors of thin plates & diffraction-- I am so prodigeously afraid that I may make some egregious blunder, that I shall scarcely dare publish it unless I can get some one to well acquainted with the subject to read it over,--to give it a rapid reading at least-- As there is not much reference to figures, it would require but little time. If you could borrow the time requisite,--it would gratify me,--but dont say that you can, if it will prove any serious inconvenience,--it may be out of the question, in which case dont hesitate to say no at once,-- If I did not feel confidence in your frendship I should not make this request,--reciprocate it by saying nay,--if there is any thing in the way of granting it-- We are all tolerly well-- Myself suffering from dyspepsia as usual, when I confine myself to the study,--if I had a vacation of a week I would make you a visit-- Mrs J6 recd Mrs Henrys kind invitation by Miss Rily7-- It would give her great plasureD to visit Princeton, & as she owes our frnds in Philadelph a visit it may be effected--

Poor Alexander, What an affliction has he been visited with, from the little I know of his character & habits I shouled think he would feel it most deeply-- -- With the kindest remembrance of Mrs J & myself to yourself & Mrs Henry

your frn

I,W,J,

Henry Papers, Smithsonian Archives. Reply: Draft, August 2, 1847, Henry Papers, Smithsonian Archives.

- 1 Professor of mathematics and natural philosophy at Union College. Henry Papers, 1:254n.
- 2 Not found, but probably a response to Jackson's letter to Henry of November 30, 1846 (Henry Papers, 6:542.)
- 3 John Paterson, a mathematician and printer for whom Jackson repeatedly tried to find employment. Henry Papers, 4:14n.
- 4 No position was found. In his response, Henry excused the delay by claiming that Jackson's letter

was received at a time when I was . . . in the midst of the bustle of electioneering for the carrying of my plans of the smithsonian I could not say what would be the results and whether there would be any place for a person of the character of Patterson.

- 5 We have found no evidence that Jackson ever completed this.
- 6 Elizabeth Pomeroy Jackson. Proceedings of the Sesqui-Centennial Gathering of the Descendants of Isaac and Ann

7 Jane Ryley was an old family friend. Henry Papers, 1:445. A Altered from he B Altered from h C Altered from leisure

Storia dell'elettricità- Lettere di Henry *Jackson* . . . (*Philadelphia*, 1878), p. 128.

 $D\,Altered\,from\;h$

20. FROM FREDERICK SIDNEY GIGER 1

Balt Feb. 20th 1847.A

My dear Sir.

I have not heretofore had [the]B opportunity of congratulating you on yr appointment, though I can scarcely perceive much room for it, as the giver has received more than the recipient. But to my business; & it is of serious importance, or I would not have had the assurance to trouble you whilst so completely engaged with the arduous duties you have assumed.

The reports of the case I have cut from the Balt Sun from which you can gather the histo[r]y of the assault & also what is expected of me.2 With the exception of an excess of fluid about the parts of generation there was no evidence to my mind sufficient to prove the actual commission of rape. Now the whole point hinges upon an answer to this question. Was that fluid spermatic or not? The microscope must determine this.3 If spermatozoa can be found in it, I am free to swear that it is spermatic fluid & that rape was committed. I have placed the fluid under a capital microscope but have not had sufficient Sun light to make an examination which is satisfactory to me. Now the object of this letter is to ascertain wether, if, I should send on part of the linen upon which I have placed a portion of the fluid you would do me the kindness to make an examination of it by the Solar. & Eye. microscopes4 I am very anxious that this should be done as the life of a human being may probably depend upon it. It will also be another illustration of the powerful application of science & another nut for the anti-cui bono philosphers, to crack--

I would write more, but I do not wish to occupy too much of your valuable time.

With sentiments of respect & affection I remain your Disciple

F. S. Giger

PS. The trial will take place on the 2d of May next, although the examinations should be made next week-

FSG

Henry Papers, Smithsonian Archives.

- 1 A former student of Henry's, Giger was practicing medicine in Baltimore. Henry Papers, 6:441n.
- 2 Giger was the attending physician in a case in which an African-American male, Horace Wright, was accused of raping Sarah Jane Allen, a teenaged white girl. On February 12, the badly beaten Allen was brought to Giger's office for treatment. Two days later, Wright was arrested. Initially, Wright was charged with assault and attempted rape, but on February 27 the latter charge was changed to rape, presumably on the evidence presented by Giger. On May 28, Wright was released from prison, having been found not guilty. There is no documentation of Henry becoming involved in the case. Baltimore Sun, February 15, 16, 17, March 1, 1847; Case Number 1108, Baltimore City and County Jail, City Criminal Docket, 1832-1853, Maryland State Archives.
- 3 Utilizing a microscope to identify spermatic stains on clothes was a relatively recent innovation. Alfred S. Taylor, Medical Jurisprudence, 4th American from 5th English ed. (Philadelphia, 1856), pp. 511-513.
- 4 A solar microscope projected a magnified image upon a white screen, using sunlight. Encyclopaedia Britannica, 8th ed., s.v. "Microscopes," p. 789. By "Eye. microscope," Giger was probably referring to observing the specimen directly rather than projecting an image.

A Day altered from 19

B Ink blot.

21. FROM [SPENCER FULLERTON BAIRD] 1

Carlisle Feb. 25 1847.

Prof. J. Henry,

Sir

I wrote to you some weeks ago,2 stating that having heard that the situation of Curator to the Smithsonian Institute was to be filled shortly, and being advised thereto by some of my friends, I wished to become a candidate. I also mentioned my intention of sending on letters from different individuals as soon as I could procure them. I accordingly take the liberty of sending the accompanying, which I have received ^ from Dr. Morton,3 J. J. Audubon,4 John Cassin,5 J. D. Dana, &c.6 Dr. Gray has kindly offered to write personally to you on the subject ^ .7 Some I retain on account of the too partial terms in which I am mentioned, and of those forwarded to you, many contain opinions to which my utmost self conceit will not allow me to subscribe.

I have been told by my friends to mention in my application to yourself, A such places and passagesB of Scientific works as refer to my name ^ and any ^ scientific ^ publication I myself have made ^ . The number of these is limited, Mr. Audubon, Dr. Gray and a few others are all who have put my name in print. My own publications are few. Various catalogues of the Plants and Animals of this region some of which I enclosed to you a few weeks ago constituteC the principal,8 except various descriptions of new species of North American birds in Silliman's Journal, Journal of the Academy of Nat. Sciences9 Supplement to Audubon's Birds of North America,10 &c.

My constant labor on OneD or two works have Econfined my attention for a number of years. The principalF of which is a complete ^ My labors for several years past have been directed principally to the collectionG of materials for two works, a a work on the ^ SynonymiesH of the Birds of North America. To do this in the most complete manner I have spared no pains. Every work toI be found by me in the Public and Private libraries of Boston, New-York, Philadelphia New Haven and Washington has been carefully examined. The result of this is that manyJ discoveries, have been made as to the correct nomenclature of our Species.K The whole occupies several hundred foolscap pages and is nearly ready for publication.11 I am only waiting the arrival of ^ until I can consult ^ several SwedishL and German works to publish the results of my labors, the corrected list ^ of our birds ^ at least, if not all the Synonymies-- All my ornithological friends at home and abroad have kindly urged the speedyM completion of this labor ^ work ^ as a very great desideratum, among them Hugh E. Strickland of Oxford,12 Charles Bonaparte,13 H. Schlegel14 Curator of the Museum at Leyden, and others. (Bibliography

Should I go to WashingtonN myO collections wouldP of course accompany me. The principal of these are Specimens of North American Birds, Quadrupeds, Reptiles, and Fishes. ^ Complete skeletons & Crania of numerous vertebrata, and Forest tres ^ My ornithological collection is probably the richest in N. American species of any in the world containing with very few exceptions all those figured and described by Audubon, with many others ^ unknown to him ^ . I possess numerous new species which I intend to publish in monographs of Families or genera. They are all in skins, about three thousand in number, properly labelled & well preserved. Especial care has been taken to procure every variety of age andQ sex. I have besides a good series of European birds and eggs obtained from various correspondants in that country.15

In addition to the skins and bodies of animals I have a good collection of American Forest trees and shrubs Photographed some years ago-- Complete skeletons of numerous vertebrata, beside various crania &c.

A principal object also of my studies has been the preparation of a Bibliography of Ornithology and of American Natural History in general.16 With this view I have consulted all the Catalogues great and small of England France, Germany, Holland &c ^ which I could find. ^ . I have had the honor of being called on to assist in perfecting the great Bibliographia Zoologia of Prof. Agassiz,17 and to furnish various lists of desirable books in different branches of Zoology ^ & Nat. History ^ to different persons and Societies.

You will I hope pardon me for having said so much about myself and for repeating what I wrote to you before. May I hope for a speedy information as to what are the possibilities of sucess,R and whether any election has been decided on to take place shortly. I have the permission of the writers of the accompanying letters, Dr.S Morton, Mr. Cassin, J. J. Audubon, James D. Dana and of others as Dr. Gray, Major Le Conte,18 &c. to use their names as references.Draft, Folder "Copies of Correspondence Regarding Position for Curator of the Smithsonian Institution, 1847," Box 40, Baird Papers, Smithsonian Archives. Reply: Doc. 22.

- 1 Professor of natural history at Dickinson College, Baird (1823-1887) specialized in ornithology. In 1850 he became assistant secretary at the Smithsonian, responsible for natural history collections, the foreign exchanges, and publications. DSB; Smithsonian Report for 1850, p. 10.
- 2 Draft, February 6, 1847, same location as present letter.
- 3 Samuel George Morton was one of America's leading physical anthropologists and paleontologists. Henry Papers, 1:461n; DSB.
- 4 John James Audubon, the artist and naturalist. Henry Papers, 2:58n.
- 5 The leading American ornithologist of the day, John Cassin (1813-1869) was curator of the Academy of Natural Sciences of Philadelphia. Elliott, Dictionary.

- 6 Copies of letters from Morton, February 13, 1847; Audubon, February 11, 1847; and Dana, February 7, 1847; same location as present letter.
- 7 Not found, but according to Gray's letter to Baird of February 23, 1847 (Baird Papers, Smithsonian Archives), written that day.
- 8 Three catalogues were published in the Literary Record and Journal of the Linnaean Association of Pennsylvania College. George Brown Goode, The Published Writings of Spencer Fullerton Baird, 1843-1882, Bulletin of the United States National Museum, No. 20 (Washington, 1883), pp. 1-3.
- 9 Two articles in Silliman's Journal and one in the Journal of the Academy of Natural Sciences of Philadelphia were co-authored with his brother, William M. Baird (1817-1872). Goode, Published Writings, p. 1.
- 10 Birds of North America, 7 vols. (New York, 1840-1844), 7:359.
- 11 Not published.
- 12 Hugh Edwin Strickland (1811-1853) had drawn up the authoritative rules for zoological nomenclature. DNB.
- 13 Lucien Jules Laurent Bonaparte (1803-1857), Napoleon's nephew and a former resident of Philadelphia, was an expert in both ornithology and ichthyology. DSB.
- 14 The ornithologist Hermann Schlegel (1804-1884) was on the staff of the Leiden Museum. Erwin Stresemann, Ornithology: From Aristotle to the Present (Cambridge, Massachusetts, 1975), pp. 192-219.
- 15 For a summary of Baird's collections, which he brought with him to the Smithsonian in 1850, see Smithsonian Report for 1850, pp. 42-43.
- 16 Not published.
- 17 Bibliographia zoologiae et geologiae, 4 vols. (London, 1848-1854).
- 18 A former army topographical engineer, John Eatton LeConte, Jr. (1784-1860), was best known for his work on North American Lepidoptera. Elliott, Dictionary.
- A Altered from myself
- B Altered from paggases
- C Altered from are a
- D Altered from one
- E Altered from has
- F Altered from They are
- G Altered from collecting
- H Altered from Synonymy
- I Altered from in
- J Altered from may
- K Period altered from comma.
- L Altered from swedish
- M Altered from ra
- N Altered from washington
- O Altered from th
- P Altered from could
- Q Altered from or of
- R Altered from success

S Altered from P

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22. TO SPENCER FULLERTON BAIRD

Washington March 3rd 1847

Prof S. F Baird

Dear Sir

Your letters and testimonials relative to the office of curator of the Smithsonian Institution1 have been received and put on file to be considered when the time arrives for the appointment to be made. The Board of Regents I think will not appoint a Curator until the building is in a proper condition to receive the specimens of Natural History and this will probably not be the case under five years. With much respect

I am yours &--

Joseph Henry

P.S. I hope you will pardon the delay of this answer to your letter as well as its brevity. I am so much occupied with the organization and so overwhelmed with letters that without an assistant I cannot keep up with my correspondence. I send you with this a copy of the Report and Resolutions relative to the organization.

J-H-

Baird Papers, Smithsonian Archives.

23. TO HARRIET HENRY 1

Saturday night [March 13, 1847]A

My Dear H.

I wrote to you by the afternoon mail and I fear my letter2 was rather gloomy. Since writing I have seen Mr Owen3 the vice President Bache and others and the prospect is rather brighter. The committee on the building4 I think will pause and I am certain they will very much reduce their plans of expenditure.

Mr Owen will stop if he is not pushed on by the others. Mr Preston5 I found did not leave the city and is still at Gadsby's6 his convictions of the necessity of having the whole matter reconsidered is strengthened.

Bache has come more warmly into my views--the boldness of the measure took him by surprise and alarmed his prudence but he is now fully impress with the importance of staying proceedings7 and I think there is but little doubt that things will yetB go right. I am now in much better sperits than when you left. Before the break of day is the darkest time-- Honest intention with industry properly applied will I am sure make head way against any thing of personal interest or local object. It is quite chilly to night the large room is not very chearful in the way of fire and Miss Frost8 has allowed me but one candle. I regret this because it does not look quite as liberal as we had though her. I suppose hower that it is the custom and therefore I must submit.

I wrote to John Ludlow9 and prepared a note for Mary giving her in a few words the contents of your letter and telling her that on account of your having suddenly concluded to start for home you had left a letter to her unfinished every other consideration but that of seeing your children having for the moment been driven out of your head.

This must be in the mail to night or it will not start in the morning so I must close with the assurance that I am more than ever your own H.

Family Correspondence, Henry Papers, Smithsonian Archives.

24. TO HARRIET HENRY

Washington monday [March 15, 1847]A

My dear H

I expect to hear from you by the mail of this evening though I may not get your letter until the morning. I have just returned from attending the funeral of Mrs Allen.1 She was burried in the congressional burrial ground2 and placed I think temporarily in a vault. It is customary in this place to expose the face of the corps to all who choose to look at it. It struck me this morning for the first time that the custom is not an agreeable or proper one. We would in preference perfer to remain in the recollection of our friends and acquaintances as we were in health and life rather than in the condition of incipient decay.

I have met the building committee and this morning and I find them much modified in their views of the building. They do not intend to close the contract as soon as they intended and have promised to make no move without consulting me. I think they will consent to the calling of a new meeting of the board to reconsider the whole matter this meeting will probably take place in July.3 The resolve which I made with your advise on thursday night or rather on friday morning has or will be of good effect. Mr Walker as Bache immagined has taken holed of the affair with great vigour and declairs that if they do not consider well their contracts he will withdraw the funds and stop the whole affair of the building.4 Indeed he is desposed to proceed at once to coercive measures. I think however that all will be arranged without violent action.

Mr Owen is now I think quite willing to give up his fantasy of the building provided there is any danger of any thing like a blow up. I wish you would not say much about the affair in Princeton for I think all will be as I wish.

I am now going to see Mr Walker to report progress to him as well as to restrainB him from going to rapidly ahead.

I shall drop this into the office as I come back.

As ever yours

H.

Family Correspondence, Henry Papers, Smithsonian Archives.

- 1 The funeral of Effie McArthur Allen (1806 or 1807-1847), the wife of Senator William Allen of Ohio. National Intelligencer, March 15, 1847.
- 2 Although it has no direct connection with Congress, the Congressional Cemetery, a few kilometers east of the Capitol, is the site of hundreds of cenotaphs erected by Congress in memory of its members. Eleanor M. V. Cook, Guide to the Records of Your District of Columbia Ancestors (Silver Spring, Maryland, 1987), p. 37.
- 3 No regents' meeting was held until December 8. Rhees, Journals, p. 39.
- 4 As secretary of the treasury, Robert J. Walker oversaw the actual disbursing of the Smithsonian's funds. Rhees, Documents (1901), 1:431, 432.

A From internal evidence.

B Altered from s

25. TO HARRIET HENRY

Washington Saturday Night March 20th 1847A

Dearest

I am this evening very home sick or at least have been so but feel relieved by commencing this letter to you. I hoped to get off this morning so as to be with you this evening but was disappointed. The week which is just about comming to a close has been a very anxious one though all things appear now to be as I could wish or rather as well as I had any reason to expect. You know that I made a resolution with your concurrence to attempt to arrest proceedings as to the building or to put the affair in such a state that the Board of Regents at a future meeting might have the power of controoling the building and of reversing if they thought fit their action.

After much difficulty and many efforts I succeeded in getting a clause inserted into the contract which gives the Board the power of stopping the building after the wings are finished and of modifying the plan in any way they may deem proper.1 But I will give you an account of the whole when I return. SufficeB it to say that I have had much trouble and have been obliged to use some coerrsive measures.

I hope to be with you on monday eveng and until then my Dearest farewell

Η

Family Correspondence, Henry Papers, Smithsonian Archives.

1 The construction contract between the Smithsonian and the contractors, James Dixon and Gilbert Cameron, was supposed to be signed at the building committee's evening meeting on March 19. Henry attended that meeting and persuaded the committee to refrain from signing the contract until Bache--who was ill--had had an opportunity to examine it. At the first of two meetings on March 20, Robert Dale Owen, the chairman of the committee, at the suggestion of Henry and Bache, submitted an addendum to the contract giving the Board of Regents the right "to make important alterations in the plan of the building, or in the time of its execution," in exchange for proper compensation for the contractors. The contract, with the addendum, was signed on the evening of March 20. Rhees, Journals, p. 627.

A Day altered from 19

B Altered from to

26. TO CHARLES COFFIN JEWETT

Princeton, March 23thA 1847

My dear Sir. Your letter1 was received a few days ago, while I was in Washington, but at that time I was so much engaged in matters of the highest importance to the institution, with which we are connected, that I could not find a moment of time in which to answer it. I am very desirous of having a long and free talk with you on the subject of the Smithsonian Institution; we have embarked together on a perilous voyage and unless the ship is managed with caution and the officers are of the same mind and determined to pull together we shall be in danger of shipwreck.

I was much pleased to receive your proposition of meeting and if you can make it convenient, you will oblige me very much by coming to Princeton. I have returned to this place to remain some time in order to finish my course to the present senior class and with the exception of a short occasional visit to Washington I shall remain here until June....2

I was also much pleased to have had an interview with you at Washington,3 because though I nominated you as the preference of the majority of the Board of Regents, yet as to you personally I had no objection and indeed you were the only candidate with whom I had any acquaintance.

With much respect I remain truly yours

Joseph Henry.

Professor Jewett.

Mary Henry Copy, Henry Papers, Smithsonian Archives. Reply: April 12, 1847, General Manuscripts Collection, Department of Special Collections, University of Pennsylvania Libraries.

1 Of March 16, 1847, General Manuscripts Collection, Department of Special Collections, University of Pennsylvania Libraries. In it, Jewett expressed his surprise at being elected and the hope that Henry "will not have reason to regret the nomination," promised his "cordial cooperation," and suggested a meeting in New York to discuss "topics, connected with the duties of my office."

2 In his reply, Jewett wrote that he would be in Princeton on April 15. There is no documentation of a meeting. However, Henry was in Princeton on that date, having returned to Princeton from Washington on the fourteenth. Henry to James Henry, April 15, 1847, Family Correspondence, Henry Papers, Smithsonian Archives.

3 Henry Papers, 6:617, 618n.

A According to Jewett's reply, the outgoing copy was dated March 24.

27. TO CLEMENT RUSH DE LA NOUTANE 1,A

Princeton march 24th 1847

Dear Sir

The plan of publication of articles presented to the Smithsonian Institution has not been fully settled it will however most probably be as follows. The memoir presented for publication will be referredB to a commission of men of character and reputation and learned in the branch of knowledge to which the memoir pertains the name of the author being concealed until the decision has been given. Or the author may withdraw his memoir if the decision is unfavourable without making himself known.

If the commission decide that the memoir is an addition to the sum of human knowledge resting on original experiments observations, or researches, the article will be received for publication in the transactions and paid for out of the funds of the Institution.

It has been considered necssary to restrict the memoirs to be accepted to those which rest on original investigation particularly in the Physical sciences and to exclude all merely hypothetical or speculative articles because if this rule be not observed the Institution would be overwhelmed with the number of articles of the latter kind. Indeed we have already received a sufficient quantity of material of the purely hypothetical kind to make quite a large volume.

Though this rule may exclude the admission of some articles of value yet its importance is so apparent to the Regents and councellors of the Institution that I doubt not it will be ridgidly adhered to.

The lecturers who C will be engaged are those to be called to Washington to deliver short courses during the session of congress. This however is one of the points not yet settled.

Accompaying this I send you a copy of the report on the organization of the Institution2 by which you will see that many plans are proposed for carrying out the intention of the Donor but it must be recollected that the income is very limited and insufficeent to accomplish a tenth part of what is proposed.

with much Respect Your's &c

Joseph Henry

- P.S. I do not think it forms any part of the present plan of the Regents to publish school books. JH ^ Accompanying the letter I send you a copy of the Report on the organization of the Institution. ^
- P.S. This letter was witten several weeks ago but as the $^$ but was not sent at the time because $^$ the place of your residence was not give $^$ mentioned $^$ in your letter $^$ commu[nic]ations $^$ I cound not send I have howev $^$ since $^$ learnd that yourD letters were from Virginia.3

Draft, Henry Papers, Smithsonian Archives.

1 Unidentified.

- 2 Report of the Organization Committee of the Smithsonian Institution (Washington, 1847).
- 3 According to the outside address, Henry had originally addressed his letter to Diana Mills, Maryland. Diana Mills, Virginia, was a post-village approximately 120 kilometers (75 miles) west of Richmond. J. Thomas and T. Baldwin, eds., A Complete Pronouncing Gazetteer, or Geographical Dictionary of the World, 2 vols. (Philadelphia, 1858).

A From outside address.

B Altered from refered

C Altered from which

D Altered from the

28. FROM EPHRAIM GEORGE SQUIER 1

Chillicothe, Ohio, March 24, 1847--

My Dear Sir:

I address you at the suggestion of a mutual friend, Prof. Marsh2 of Burlington Vt., who takes as you well know, a lively interest in all investigations promising to add to the general stock of knowledge. I presume he has informed you, and you have probably observed intimations of the fact, in the public press, that in conjunction with Dr. E. H. Davis of this place, I have been pretty actively engaged, for the past two years, in investigating the ancient remains of the West, but more particularly of the Ohio Valley. Before coming to this State, (two years since,) I had had my attention directed to the innteresting subject of our antiquities, and had read, with much Interest though with little satisfaction, the brief and detached notices which had been published relating to them. I found much speculation, and but few facts, and instead of being illuminated found myself involved ^ in \(^\) deeper darkness. Atwater's paper in the Archelogia American, 4 I found, in A common I presume with every person who has read it, to be a congeries of hearsays, many of them improbable and few wellattested--Bpresented rather with a view to excite the marvelousness of the public than to throw any clear and certian light upon our monuments, whereby we might solve the grand ethnological problem which they involve. 5 Upon coming to the State, located as I found my self in one of the centres of ancient population, I was not long in gratifying my curiosity respecting them. The second day after my arrival, found ^ me ^ ten miles in the country, on an expedition to visit the wonderful wells, of which I had read, dug in the solid rock, in the bed of Paint Creek. (Arch. Am. p.[...])6 I found them, and would you believe it?--they were--hugh Septaria7 and their casts!--abundance of which occur in the Slate Strata of this region! A promising begining truly! This circumstance impressed me still more of the with the uncertain nature of our information on the subject of our remains, and contributed materially in inducingC me to conceive a Systematic plan of investigations, in respect to them. I soon found an associate, and from that day to this all my leisure has been occupied in pursuing it. It was not intended at the start to publish, and we should not probably think of doing so now, had it not been for the solicitation of our friends at the East, who feel interested in our researches. Upon visiting New York last summer, I took on with me a few relics and a number of plans, sketches &c, for the purpose of laying them before the Ethnological Society of that city with which we had been for some time in correspondence 8 Mr. Gallatin, the venerable president, became so much interested that he volunteered to advance the funds for bringing out a sketch of the results of our inquiries, in the regular proceedings of the Society. It was at first proposed to publish a paper of 100 or 200 pages, but the interest which has been exhibited as preliminary to a more extended and imposing work, which should embrace in its scope a thorough investigate examination of the whole field. The original design was afterwards extended, (though without abanding the purpose of making a systematic and thorough investigation from the Lakes to the Gulf,) so as to include an ample account of all the facts which our labours have developed. In the ^ [?arrageing] these ^ preperation of these I am now busiley engaged: hoping that their publishing enab even if they \(^\) it \(^\) does not enable \(^\) lead \(^\) me to complete my c the cherished purpose of \(^\) a ^ systematic exa investigation of our antiquites, over the whole field of their occurnce, will serve to throw some positive I clear and certain light upon them. The sole purpose of the publicatn is toD present facts; leaving speculation out of to others leaving without indulging in speculations; if When believing that it will be quite time enough to draw gene make the genrl &c9Draft, Squier Papers, Library of Congress. Reply: Doc. 38.

1 Born in upstate New York, Squier (1821-1888) attended the Troy Conference Academy in Vermont. He taught, considered a career as an engineer, and then turned to journalism. After working in New York State and Connecticut, he settled in Chillicothe in 1845 to edit a weekly newspaper. There he met E. H. Davis and began collaborative research on the ancient mounds in the area. An ardent Whig, he was elected clerk of the Ohio House of Representatives in 1846. His subsequent career included an appointment as chargé d'affaires to Guatemala (1849-1850), archaeological studies in Central America and Peru, the promotion of railroads in Honduras, and journalism. Squier was aggressive, paranoid, emotionally unstable, quarrelsome, and unable to accept criticism well. He suffered increasingly from mental illness. Thomas G. Tax, "E. George Squier and the Mounds, 1845-1860," in Towards a Science of Man: Essays in the History of Anthropology, ed. Timothy H. H. Thoresen (The Hague, 1975), pp. 101-102, 109, 117-120; Robert E. Bieder, "The American Indian and the Development of Anthropological Thought in the United States, 1780-1851" (Ph.D. diss., University of Minnesota, 1972), pp. 307-308.

2 George Perkins Marsh, a representative from Vermont who had been a strong supporter of the Smithsonian as a national library during the congressional debate over the legislation, would become a regent later in 1847. Henry Papers, 6:465.

In a letter of February 23, 1847 (Squier Papers, Library of Congress), Marsh told Squier that "it has been suggested that you would do well to offer the results of your investigations to that body [the Smithsonian] for publication." Squier replied in a letter (not found) which Marsh showed Henry. On March 6 (Squier Papers, Library of Congress), Marsh wrote Squier that Henry "desires me to say to you that the Smithsonian Institution will publish your essay in the best style both of letter press and of illustration."

- 3 Edwin Hamilton Davis (1811-1888) was educated at Kenyon College and the Cincinnati Medical College. A long-time resident of Chillicothe, he was very familiar with the mounds. In 1850 he became a professor at the New York Medical College, which he left in 1860 to practice medicine. His later anthropological work centered on an ethnological map of the United States. Tax, pp. 102-103; DAB.
- 4 Caleb Atwater, "Description of the Antiquities Discovered in the State of Ohio and Other Western States," Archaeologia Americana. Transactions and Collections of the American Antiquarian Society, 1820, 1:105-307. The first systematic investigation of the earth mounds of the Ohio and Mississippi River valleys, Atwater's publication hypothesized that the mounds were built by the ancestors of the cultures of Mesoamerica. The mound builders were not, in his view, the ancestors of modern Indians. Atwater, a lawyer living in Ohio, had personally surveyed some of the mounds, but relied heavily on the fieldwork of others. Thomas G. Tax, "The Development of American Archaeology, 1800-1879" (Ph.D. diss., University of Chicago, 1973), pp. 130-132; Curtis M. Hinsley, Jr., Savages and Scientists: The Smithsonian Institution and the Development of American Anthropology, 1846-1910 (Washington, 1981), p. 23; DAB.

5 The problem was the nature of American Indians. Prior to the work of Squier and Davis, the accepted paradigm was that the mounds were built by a non-Indian civilization which fell victim to the Indians, migrants from Asia and a much more savage people than the Moundbuilders. There was no consensus regarding the origins of the Moundbuilders. The ancestors of the Moundbuilders were sometimes identified with Asian civilizations, sometimes with the Mesoamericans, sometimes with Europeans (for example, the Welsh), sometimes with the ancient Israelites. Even mythical people were sometimes credited with building the mounds. There was general agreement, however, that the ancestors of the Indian tribes were incapable of building the mounds and represented a decline in the level of civilization from their predecessors in North America, a decline further evident in the contemporary tribes. Tax, "The Development of American Archaeology," pp. 63-96.

6 On pages 150-151, Atwater classified these "wells" not as natural objects but as man-made, resembling "those described to us in the patriarchal ages."

7 Limestone nodules whose cracks were filled with crystallized carbonate of lime, septaria were a source of cement. Edward Hitchcock, Elementary Geology (Amherst, 1840), pp. 15-16.

8 In addition to the American Ethnological Society, Squier had sought patronage from the American Antiquarian Society and the American Academy of Arts and Sciences. Tax, "Squier and the Mounds," pp. 104-107.

9 Thus began the process which culminated in the publication of Squier and Davis, Ancient Monuments of the Mississippi Valley: Comprising the Results of Extensive Original Surveys and Explorations, 1848, SI Contributions, vol. 1 (Washington, 1848). This landmark publication was the catalyst in the transformation of American archaeology. Thanks to Henry's editorial control over the publication, "solid evidence replaced conjecture as the dominant archaeological method." Tax, "Squier and the Mounds," p. 99.

Subsequent letters in this volume will document the steps in the path from this letter to finished publication. Five themes dominate those letters. First, Henry was determined that the first Smithsonian Contribution to Knowledge would establish proper precedents, especially the procedure for refereeing submissions, even if it meant manipulating the correspondence and falsifying the record. Second, Henry felt it important that the first Smithsonian publication not be in the physical sciences, but rather in a field he was not identified with personally, to demonstrate the breadth of the institution's interests. (Henry had argued both privately and publicly that the Smithsonian should support a wide range of disciplines. In support, he cited the breadth of Smithson's own research. Henry Papers, 6:499; Smithsonian Report for 1847, pp. 178-179.) Third, Henry would come to consider Squier rash and untrustworthy. Fourth, and conversely, Squier would feel himself ill-used by the Smithsonian, both financially and intellectually. Last--but for the history of archaeology, most important--Henry was determined to purge as much speculation as possible from the Squier and Davis manuscript.

In the end, Ancient Monuments refrained from gross speculation. It offered no explanation for either the origin of the Moundbuilders or their subsequent disappearance. In a footnote, Squier and Davis did suggest that the native civilizations of Central and South America may have originated in a migration of Moundbuilders from North America. There was also speculation, attributed by historians to Squier, about the importance of comparative religious studies. Squier and Davis, pp. 302-303; Bieder, pp. 325-326.

A Altered from an

B Dash altered from comma.

C Altered from a

D Altered from s

30. TO ROBERT DALE OWEN

Princeton march 25th 1847

My dear Sir

Enclosed I send you the letter of introduction for Mr Stabler1 and I have to acknowledge the receipt of several packages of letters of which I have made the proper disposition.

I intended to mention to you if I did not do so the fact that I had authorized the Rev Mr Russel2 the brotherinlaw of Mr French3 to receive and acknowledge the receipt of all books prints &c sent to the Institution, in my absence, from Publishers. Should any article of this kind come into your possession you will oblige me by delivering it to this Genleman.

I have made arrangements with Mr French to ^ have ^ the Journal of Proceedings of the Board of Regents copied into the large book by the same person4 who copied the first part of the Journal. I thought it best to employ this Person first because by doing so we would have the supervision of Mr French and secondly ^ also ^ because this clerk had been paid ^ in advance ^ at the last time he was employed in part ^ leas in part at least ^ for this ^ a part of the ^ work.

On reflection I think the engraving of the head of Smithson to accompany the memoir of the chancellor5 should be considerably larger than the medallion--say about the size of one of the portraits in A the Democratic Review6 perhaps a little larger. We shall require three different engravings of the head one for the seal another for the memoir and the third for the title page of our publications. The last should be a copy of the seal on wood or type metal so that it may be set up with the tye ^ letter press ^ of the page and struck off at the same time.

I have sent Daniel's letter7 to Mr Mills8 and requested him to attend to sending off the drawings.9 I have also written to Daniel10 returning the money enclosed in his letter and informing him that his drawings will be forward to him free of expense.

I have found to day a notice by Davies Gilbert11 late president of the Royal Society of Smithson in an annaversary address to the society.12 Gilbert and Smithson were at Oxford together and members of the same College.B I would write immediately to Gilbert for farther information as to the character of Smithson but I am under the impression that the former died a year or two ago.13 This fact however I can ascertain by going over the volumes for the last few years of the Philosophic Magazine.

Also by asertaining to what college Gilbert belonged we shall have the one of which Smithson was a Member and by writing to Oxford something additional may be procured inreference to our patron Saint.

I arrived safely at home on Monday evening 14 and am now enjoying the quiet of myown family the pleasure of which is much enhanced by the contrast with the bustle and excitement to which I have been subjected for the last two months in Washington.

Please inform your Brother15 that though I am almost overwhelmed with letters and lectures I have found time to verify the fact that an incombustible substance introduced into a flame increases in a very remarkable degree the amount of radient heat.

With much Respect I remain Truly yours &--

Joseph Henry

Hon R. D Owen

Draft, Henry Papers, Smithsonian Archives.

- 1 Edward Stabler (1794-1883) was the postmaster of Sandy Spring, Maryland, president of the Mutual Fire Insurance Company of Montgomery County, and a noted engraver of seals and stamps. On March 15, 1847, the executive committee commissioned Stabler to prepare a seal for the Smithsonian. Roger Brooke Farquhar, Historic Montgomery County, Maryland, Old Homes and History (Silver Spring, Maryland, 1952), pp. 182-183; Rhees, Journals, p. 445; Stabler's tools, the screw press he made for the Smithsonian, the plaster cast of the seal, and other artifacts are in the National Numismatic Collection, National Museum of American History.
- 2 Before being employed by the Smithsonian, Charles P. Russell had been a clergyman in New Hampshire and had briefly worked as a messenger in the House of Representatives. He remained with the Smithsonian, assisting in the library and handling the copyright correspondence, until 1850, when he became a clerk in the Post Office. Benjamin Brown French, Witness to the Young Republic: A Yankee's Journal, 1828-1870, ed. Donald B. Cole and John J. McDonough (Hanover, New Hampshire, 1989), pp. 92, 189, 271; Rhees, Journals, p. 477; Desk Diary, [July 7], 1850.
- 3 Clerk of the House of Representatives, Benjamin B. French had been assistant secretary, recording clerk, and librarian pro tem of the Smithsonian during the early months of its existence. French's wife and Russell's wife were sisters. Henry Papers, 6:555n; French, p. 4.
- 4 Adam J. Glossbrenner, a clerk in the House of Representatives. Rhees, Journals, p. 10. The original "large book" was destroyed in the Smithsonian Building fire in 1865.
- 5 A reference to the biographical memoir of Smithson, never published, projected for the first volume of Smithsonian

Contributions to Knowledge. See Doc. 46.

6 These portraits were 12.2 centimeters high by 9.4 centimeters wide. The United States Magazine and Democratic Review was a general monthly magazine.

7 Not found. Howard Daniels was a Cincinnati architect who had submitted the only non-medieval entry for the Smithsonian Building. Kenneth Hafertepe, America's Castle: The Evolution of the Smithsonian Building and Its Institution, 1840-1878 (Washington, 1984), pp. 29, 47.

8 Robert Mills (1781-1855) was the Architect of Public Buildings. In 1840 he had produced plans for a proposed Smithsonian/National Institute Building, selecting a medieval style. The building committee hired him as superintendent of the construction of the Smithsonian Building. DAB; Hafertepe, pp. 6-8; Rhees, Journals, p. 597.

9 Letter to Mills not found.

10 Draft, March 19, 1847, Henry Papers, Smithsonian Archives.

11 Promoter of the cause of science in Britain. Henry Papers, 3:300n.

12 Proceedings of the Royal Society, 1830-1831, 1:8-9.

13 He died in 1839.

14 March 22.

15 David Dale Owen (1807-1860), former Indiana state geologist, had been appointed to survey the Chippewa Land District in Wisconsin. At the request of his brother, in 1845 he had drawn up a plan for the Smithsonian Building. DSB; Hafertepe, pp. 18-21.

A Altered from of

B Altered from s

The letter of introduction has not been found.

31. TO PETER BULLIONS 1

Princeton March 26th 1847

My dear Sir

That All the screws of the Smithsonian Institution have not as yet been put in proper place and ^ [f]ully tightened is most true but ^ this ^ need ^ not surprise you when it is recollected that the plan of the ^ great ^ edifice itself has not been fully settled. I am however some what surprised to learn that you have not received the certificate of deposit of the books you sent to the Library of the Institution.2 I saw them more than a month ago ^ several weeks ago ^ in the office of Mr French and I think it not improbabl that he has sent the certificate to your printer instead of yourself. Inorder however to avoid delay I enclose a certificate which you may fill up with the titles of the books for I beleive I may trust to your honesty thus far.

We are all well-- ^ poor fellow ^ Stephen ^ poor fellow ^ has met with a sad loss and feels it very deeply ^ much ^ -- ^ He is a man of few words. ^ Motherin law has gone to live with him and appears quite contented with the change-- Mrs Henry made me a visit of a bout two weeks duration during my stay in Washington. She could scarcely bear a longer seperation from her children. Should she live however until they are grown up and have become active members of society she will be obliged to make a sacrifice of feeling in this respect particularly if we may judge of the destiny of our ofspring by that of yours.3

I have been at Washington nearly all winter and have now returned to Princeton for the purpose of completing my course of lectures with ^ to ^ the Senior class. I have not as yet intirely severed my connection with Princeton ^ this Institution ^ and may perhaps give a short course of lectures ^ here ^ next year in college but of this I am not certain. ItA will depend on the action of the Trustees of ^ the ^ college at their next meeting. MyB object in thus retaining my connection with Princeton was twofold first that I might not too suddenly leave the Institution in the midst of a year before my course of lectures was completed and secondly that in case the affairs of the Smithsonian were not very inviting ^ promising ^ I might return to Princeton my former position.4

My plans inreference to the Smithsonian Institution have not been adopted ^ perhaps ^ as fully as I could have wished ^ expected though ^ we were obliged to make a compromise inorder to harmonize the conflicting opinion. As a ^ And a ^ calm review of ^ however ^ all the proceedings ^ thus far ^ of the Regents I see nothing ^ at present to ^ to prevent my going on for if my plans ^ views ^ have not been fully adopted I shall have less responsibility and the failure should it happen cannot intirely be attributed to me. The whole affair is at present quite new and all are anxious to be active in the management but I think the Regents will soon be tired of it and then betwen ourselves I hop to have more of my own way. Indeed were it not for two persons who had particular objects ^ to ^ attain I should have had all the arrangements to my own mind before the adjournment of the Board.C

I am so much engaged just now that I cannot give you a full account of the proceedings at Washington but I hope to see you during the summer and then to have a long crack with you.

I send you with this a copy of the Report of the committee of organization5 and I have marked in the margin the several suggestions which form the parts of the plan proposed by myself. They were adopted by the committee and incorporated in their Report.

With much Respect I remain as everD Truly your Frend

Joseph Henry

William coming to Princeton Rev Dr Bullions

Draft, Henry Papers, Smithsonian Archives.

- 1 Professor of Latin and Greek at the Albany Academy and Henry's former colleague there. Henry Papers, 1:129n.
- 2 Approximately two weeks earlier Bullions had submitted copies of his books to the Library of Congress and Smithsonian library as part of the copyright deposit procedure. The Library of Congress had already acknowledged receipt of his package. Henry Papers, 6:594; Bullions to Henry, March 24, 1847, Henry Papers, Smithsonian Archives.
- 3 In his letter of the twenty-fourth, Bullions mentioned that four of his children no longer lived at home.
- 4 For Henry's relationship to Princeton while secretary, see Henry Papers, 6:557, 559, 597-598.
- 5 Report of the Organization Committee of the Smithsonian Institution (Washington, 1847).

A Altered from it

B Altered from my

C Altered from board

35. TO JOHN VARDEN 1

Princeton March 29th 1847.

Dear Sir,

Your favour of the 24th instant2 informing me of your disposition of the papers, books &c of the late James Smithson has just been received. I am much obliged to you for the care of the articles and will pay you when I come next to Washington. You will do me a favour if you will collect any articles belonging to the Smithsonian bequest which may come to your knowledge. In the library under the table were a number of boxes containing chemicals and other materials which I should like to have preserved for though they are of little intrinsic value yet they are interesting as being part of the effects of Smithson. Also, if you can procure any of the articles of clothing which were given away and preserve them by means of arsenic or otherwise you will be doing a service to the institution.

With much Respect I remain truly Yours &c

Joseph Henry.

John Varden, Esq.

RH 411, Rhees Collection, Huntington Library. In Harriet Henry's hand.

1 John Varden (d. 1865) opened a museum in Washington, D.C., in 1829. In 1841 he moved his specimens to the Patent Office Building, where he also oversaw the collections of the National Institute, the specimens of the Wilkes Expedition, and other government collections, in the "National Gallery." When the government collections were transferred to the Smithsonian Institution in 1858, Varden went with them. He remained with the Smithsonian until his death. Douglas E. Evelyn, "The National Gallery at the Patent Office," in Magnificent Voyagers: The U.S. Exploring Expedition, 1838-1842, ed. Herman J. Viola and Carolyn Margolis (Washington, 1985), pp. 230, 233, 236-241; Daybook of Washington City Museum, Varden Papers, Smithsonian Archives; Desk Diary, February 12, 1865.

2 Not found.

37. TO ALEXANDER DALLAS BACHE

Princeton March 31st 1847

My dear Bache

I would have reported myself before this time had I not since my return from Washington been afflicted with something like an opthalmia which has obliged me to use my eyes as little as possible though I have been under the necessity inorder to keep down my correspondence to write a number of letters daily. I arrived safely at home the next evening after I left you found all well and happy to see me.

Since my return I have taken entire charge of the Senior class and am now getting on quite rapidly with my lectures. I am again with the exception of my eyes in my normal condition and can look back if not with complacency at least with resignation on the erection of the norman cenotaph over one half the buriedA funds of the Smithsonian legacy and I have concluded that after making a reasonable effort to prevent this improper application of the trust I will take your advice and if the Regents will act in the matter without much pressing I shall in this respect let things take their course. Besides this the idea has lately impressed itself on me that since we are to form a large collection of articles of Foreign and curious research which may serve to excite the love of learning a collection of Physical instruments instruments should form an essential part of this and be of such a character as to induce a pilgrimageB to Washington of all the quid nunc professors in our country to enlighten themselves as to the progress of science and to witness the new phenomena. I In accordance with this view I have sent out an order by the steamer of the 1st to Soleil2 for a complete set of articles for the polarization diffraction and interference of light; also to Ruhmkorff for a complete collection of Melloni's apparatus with all the latest improvements. I have ordered with this two extra galvanometers with wires of different lengths which will be useful in a variety of researches on electricity and heat. To these orders I have added another to Morloye for a set of the more interesting instruments on sound4 and I have concluded to set some of the instrument makers in Boston at work on such articles as may be manufactured of a good quality in this country.

Since my return to Princeton though I have been much annoyed with my eyes and much driven with teaching and Smithsonian correspondence yet I have had by snatches quite an interesting time of experimenting. Science as if to make amends for the disquietude I have suffered for her sake during the last few days of my residence in Washington has opened her pireanC spring5 and given me a few exhilerating sips which have completely restored my self-complacency and satisfaction with the world. I can now look back on the annoyances at Washington as a thing to be laughed at with the exception of the trouble and anxiety I gave you and your good wife. These are real sources of regret which no altered condition of my own mind can efface. I know that you were overwhelmed with business relative to the coast survey and preparations for your journey to the south and I deeply regret with feelings of mortification the large and perhaps uncalled for demands I made on your time as well as the uneasiness I gave you as to the fate of the Smithsonian. Still I think the stir which was made did good and were it not on your account I cannot wish that a move of the kind had not taken place.

I have written to a number of persons relative to the 'Contributions' and as an additional inducement for the working men of science in our country to publish in our transactions I have thought that the annual report of the secretary to the Board of Regents of the State of the Institution should contain a popular analysis of all the papers accepted for the transactions, and as this Report would be presented to congress and published as a public document a more wide diffusion would be given of the discoveres than in any other way. 6 I have also set one of my young men at work to explore all the scientific Journals accessible at Princeton for notices of Smithson and his labours and I have in this way procured an obituary notice of our Saint by Davies Gilbert who speaks of him in terms of affection and respect. They were college mates at Oxford and were drawn to each other by a kindred love of science. Smithson was considered the best chemest at Oxford and particularly excelled in the analysis of minute quantities. The story of the analysis of a tear which the chemest caught trickling down the cheek of a Lady is told. I am under the impression that Davies Gilbert died a short time ago or I would write to him for further particulars.

The subject of my experiments has been the radiation of heat from flame; the same we conversed on in Washington. I have conclusively established the fact that an increase of radient heat does take place when an incombustible solid is introduced in to a flame. So far as I have worked out the problem the facts are as follows the solid substance absorbs the combined but not latent heat of the flame and afterwards radiates it into the surrounding space or in other words flame is an exceedingly bad radiator of heat what ever may be the degree of its temperature and the effect of the solid is to increase this power. By introducing a solid into a flame of hydrogen or alcohol the quantity of water evaporated from a vessel placed over it will be diminished while the amount of heat radiated into surrounding space will be increased.

As far as economy is concerned in some cases the introduction of the solid will have the effect of robbing Peter to pay Paul the boiling ham over the fire will loseD what the roasting turkey gains but when the object is to heat an appartment by a blazing fire the solid introduced will increase the econom effect. I find in looking over all the books that the radient power of flame for heat has never been investigated--when the heat of flame is mentioned a reference is made to the power of heating a body by contact and in several of the standard works it is stated on the authority of Davy that the luminosity of flame is inversely as the heat.7 If the radiant heat be understood the assertion is not true the two are proportional or very nearly so in all cases.

Though my eyes have been a source of considerable trouble for a week or more yet they have enabled me to make rather an interesting observation on the halo which is sometimes seen around a candle when we are suddenly roused from sleep. One of my eyes a few nights ago exhibited so distinct and beautiful ^ an ^ appearance of this kind that I was induced to observe it with care, and to determine the orders of succession of colours. These I found to be the same as those of the rings by transmitted light of thin plates. This fact gave the cause of the phenomenon and suggested to me a new method of exhibiting the rings of NewtonE (do not smile) by means of a thin film of mucilage spread over the eye.

I should have mentioned while speaking of flame that I have hit on a very simple and perfect method of measuring the relative transparency of flame by placing the candle in a cone of light from a convex lens in a hole in a window shutter and receiving the

image on a white screen. Two flames may thus be very readily compared, the refraction of light through the heated air exhibits very distinctly the out line and also all the motions of the rarified air around.

I have also been giving some thoughtF to the Cavendish experiment and think one cause of error in the performance of the expermt was the want of homogeneity in the parts of the metal of the large ball. It is possible to cast so large a piece of metal without having the lower half more dense than the upper? To obviate this cause of error the ball should be so supported as to be movable in all directions so as to present each side in succession to the attracted ball. If the experiment be made in the capitol the apparatus should be so placed that nearly an equal quantity of attractive matter wouldG be found on each side in the line joining the centres of the large and small ball. If however a position of this kind cannot be obtained the effect of unequal attraction may be elimenated by turning the whole apparatus through an arc of 180H degrees and repeating the observations in this position. I am not quite sure as to the effect of magnetic action; according to Faraday's late discovery all unferuginous matter becomes magnetic in a direction at right angles to the magnetic meridian. An effect of this kind could hower be elimenated by observing in the meridian and at right angles to the same.8

I have never seen the fact noticed but I am certain the electrical currents induced in the swinging pendulum ought to have some effect on the time.

You will readily infer from this letter that my mind is in a much more pleasant state than when I left Washington. The return to scientific investigations has given a relief to the feeling of doing nothing which oppressed ^ &me ^ while dancing attendance on the Regents and Building committee. I am clearly of the opinion that could we once get the Smithsonian under head way your pleasure and comfort would be much enhanced, and perhaps your life prolonged by joining me in a series of physical researches.

Do you not intend to couple with the coast survey observations on the pendulum at different points and will not some observations of this kind be necessary to correct the results of the Cavendish determination.9

I hope you will put the article on the gulfI stream in process of preparation for the Smithsonian and also the observations on the magnetism of vessels.10

Please give our kind regards to Mrs. B--she has laid us under an unextinguishable debt which we can only acknowledge without the hope of being able to discharge. Mrs H. joins hartily in this sentiment. She request me to ask the colours determined on for a projected scarf.

You will oblige me by informing your sister that her package came safely to hand under the accomodating frank of Mr. Owen and that it has been sent to the Lady to whom it was addressed.

Were you not surprised by the anouncement of the results obtained by Pierce; I fear he has been too hasty.11 Mauray I see by the papers attempts to give Walker a slight tap by stating that the orbit of the new planet determined from the observations made since its reappearance does not pass through the missing star.12

I shall expect a note from you informing me when you intend starting for the south and in the mean time I shall remain as ever

most sincerely yours

Joseph Henry

[?Dr] A. D. Bache

P.S. My eyes were so bad last night that I could not finish this letter which was begun the day before. Mrs H. will act as my amanuensis in answering the letters of the Smithsonian. I have had a number of notes from Mr Owen13 enclosing letters &-- and I have written to him once14 but I have heard nothing of K the movements of the building committee or when the ground is to be broken.

J.H

Did you see by the number of the comptes Rendus for 11th Jany that Arago has honored me by an analysis of my report on the electricity of the telegraph.15

Bache Papers, Smithsonian Archives. Copies: Two partial drafts, March 30, 1847, in same location. Mary Henry Copy of one of the drafts, misdated March 20, 1847, in Henry Papers, Smithsonian Archives.

1 As early as December 4, 1846, the regents had approved a resolution accompanying the report of the Owen committee to appropriate \$4,000 for the purchase of philosophical and chemical apparatus. On January 28, 1847, a resolution was approved authorizing Henry to contract for apparatus. The total amount spent in 1847 for scientific apparatus (exclusive of that for meteorology and expeditions) was \$1,571.47. Henry described it as

of importance, not only in the way of original research, but also in illustrating some of the most interesting and recent phenomena of physical science, as well as serving as samples for imitation to the artists of this country.

Rhees, Journals, pp. 14, 29, 452, 481; Smithsonian Report for 1847, p. 189 (quotation).

- 2 Jean-Baptiste-François Soleil, the premier optical instrument maker in Paris. Henry Papers, 3:382n. None of the orders mentioned in this paragraph have been found.
- 3 Heinrich Daniel Rühmkorff was a German instrument maker who worked in Paris and was known for his electrical apparatus. Henry had ordered a set of Macedonio Melloni's thermoelectric apparatus from him in 1841. Henry Papers, 5:125, 135, 156, 161-162, 236, 327.
- 4 An invoice, bearing a file date of August 1847, for approximately \$350 worth of acoustical apparatus ordered by Henry from Chez Marloye of Paris is in the Henry Papers, Smithsonian Archives. Marloye's 1840 and 1845 catalogs are in the Henry Library.
- 5 The Pierian spring was the fountain of the Muses and hence a source of inspiration.
- 6 Section 3 of the act establishing the Smithsonian required the Board of Regents to present to each session of Congress "a report of the operations, expenditures, and condition, of the Institution." Published as congressional documents, the annual reports included a report by the secretary to the Board of Regents. Henry did, in fact, comment on proposed publications.
- 7 We have been unable to find such a statement specifically attributed to Davy. In Henry's later article on his experiments, he qualified the assertion and eliminated any reference to Davy: "It is frequently stated, in works on chemistry, that the heating power of the flame of the compound blowpipe is very great, while its illuminating power is quite small." "On the Effect of Mingling Radiating Substances with Combustible Materials," AAAS Proceedings, 1855, 9:112-116 (quotation on p. 116).
- 8 Henry had long been interested in Henry Cavendish's experiments to determine the density of the earth (see Henry Papers, 6:255n). Here he suggested how Bache could modify his vacuum apparatus to eliminate the anomalies that Francis Baily had encountered in his extensive repetition of the experiments from 1838 to 1842. In his investigation of diamagnetism in 1845, Faraday had shown that all matter was affected by magnetic fields (Experimental Researches in Electricity, Twentieth and Twenty-First Series, especially paragraph 2420). Thus the earth's magnetic field would have an effect on the balls of the apparatus even if they were non-ferrous. George Whitehead Hearn of the Royal Military College, Sandhurst, had recently addressed this problem in "On the Cause of the Discrepancies Observed by Mr. Baily with the Cavendish Apparatus for Determining the Mean Density of the Earth," Phil. Trans., 1847, pp. 217-229, which was read to the Royal Society of London on March 11, 1847. Hearn proposed to use iron balls whose obvious magnetism could be measured and corrected for. Henry presumably did not know of Hearn's work.
- 9 Pendulum observations such as Henry suggested would indicate changes in gravity on the earth's surface which were indicative of changes in the shape of the earth. The Coast Survey did not pursue such observations systematically until 1872 when Benjamin Peirce, Bache's successor, put his son, Charles Sanders Peirce, in charge of pendulum-swinging observations. Thomas G. Manning, U.S. Coast Survey vs. Naval Hydrographic Office: A 19th-Century Rivalry in Science and Politics (Tuscaloosa, 1988), pp. 5-6, 8-9, 74-77; Hugh Richard Slotten, "Patronage, Politics, and Practice in Nineteenth-Century American Science: Alexander Dallas Bache and the United States Coast Survey" (Ph.D. diss., University of Wisconsin-Madison, 1991), pp. 246, 248, 328.
- Henry and others sympathetic to the Coast Survey cited the problem of the determination of the figure of the earth as one of the contributions that it could make to basic research as a natural outgrowth of, and without detriment to, its surveying work. See, for example, Joseph Henry, "[The Coast Survey]," Biblical Repertory and Princeton Review, 1845, 17:342-343; Proceedings of the American Academy of Arts and Sciences, 1848-1852, 2:127-128; Charles Henry Davis, "The United States Coast Survey," The World of Science, Arts, and Industry Illustrated from Examples in the New-York Exhibition, 1853-54, ed. B. Silliman, Jr., and C. R. Goodrich (New York, 1854), p. 40.
- 10 Neither was ever published by the Smithsonian, although Henry announced in the Smithsonian Report for 1848 (p. 16) that the first was forthcoming. Bache commented on his late brother George M. Bache's work on the distribution of temperature in the Gulf Stream at the 1849 meeting of the American Association for the Advancement of Science and referred to it again at the 1854 meeting. Bache, "On the Distribution of Temperature in and near the Gulf Stream, off the Coast of the United States, from Observations Made in the Coast Survey," Silliman's Journal, 1856, 2d ser. 21:29-37. We are unaware of any Bache publication on the magnetism of vessels.
- 11 A reference to Benjamin Peirce's part in the disputes following the discovery of Neptune in September 1846 by J. G. Galle, of the Berlin Observatory, who found it following French astronomer U. J. J. Le Verrier's theoretical prediction of its location. Working independently, Le Verrier and English astronomer John Couch Adams had hypothesized an undiscovered eighth planet to account for anomalies in the orbit of Uranus.
- At the Naval Observatory in Washington, Sears Cook Walker (Henry Papers, 3:369) searched old star catalogs and concluded that a supposedly fixed star observed by J.-J. L. de Lalande in 1795, but later missing from that location, was in fact Neptune. Combining Lalande's observation with recent ones, Walker computed new elements and found a much smaller and less eccentric orbit than Le Verrier and Adams had hypothesized. Peirce examined and verified Walker's work and announced to the American Academy of Arts and Sciences on March 16, 1847,

THAT THE PLANET NEPTUNE IS NOT THE PLANET TO WHICH GEOMETRICAL ANALYSIS HAD DIRECTED THE TELESCOPE [emphasis in original] . . . and that its discovery by Galle must be regarded as a happy accident. [Hubbell and Smith, p. 270.]

Peirce thus discredited one of the most exciting scientific predictions of the century. His challenge to the theoretical discovery of Neptune by Le Verrier and Adams was instantly controversial not only in Europe, where Le Verrier defended himself by attacking Peirce, but also in the United States, where not even Walker initially agreed with him. Benjamin Apthorp Gould and James Dwight Dana represented two poles in the American reaction: Gould praised Peirce's "candor and moral courage" (Hubbell and Smith, p. 281), while Dana condemned him for presuming to act as "a critic upon European astronomy" (Hubbell and Smith, p. 284). For the episode and an analysis of what it meant about the American scientific community, see John G. Hubbell and Robert W. Smith, "Neptune in America: Negotiating a Discovery," Journal for the History of Astronomy, 1992, 23:261-291, which concludes:

Peirce's own research, as well as his championing of Walker's studies, certainly had the effect of demonstrating the talents and abilities of American scientists in an extremely demanding branch of what was widely regarded as the science, astronomy. [p. 284.]

Henry Papers, 6:526n-527n; Philip S. Shoemaker, "Stellar Impact: Ormsby Macknight Mitchel and Astronomy in Antebellum America" (Ph.D. diss., University of Wisconsin-Madison, 1991), pp. 145-164; Morton Grosser, The Discovery of Neptune (Cambridge, Massachusetts, 1962), pp. 138-141.

12 In a letter to Secretary of the Navy John Y. Mason, Matthew Fontaine Maury (Henry Papers, 3:23n-24n), superintendent of the United States Naval Observatory, reported a recent observation of Neptune's position by Joseph Stillman Hubbard. Hubbard's observed position differed from that predicted by Walker, whose calculated orbit was based on the identity of Neptune with Lalande's "missing star." Maury wrote that this might "lessen the hypothesis as to identity." Walker had resigned from the Naval Observatory under duress in early March. Maury to Mason, March 26, 1847, in Newark Daily Advertiser, March 30, 1847 (quotation); Francis Leigh Williams, Matthew Fontaine Maury: Scientist of the Sea (New Brunswick, 1963), pp. 168, 526.

13 Only one such note or letter has been found. Owen wrote Henry on March 17 (Joseph Henry Papers, Duke University Library), introducing Judge Stryker, who was about to begin a periodical to which Owen thought the Smithsonian should subscribe. This is probably James Stryker, who began the American Quarterly Register and Magazine in 1848. Frank Luther Mott, A History of American Magazines, 1741-1850 (New York, 1930), pp. 368-369.

14 Doc. 30.

15 The Comptes rendus for January 11, 1847 (p. 43), merely noted in three lines that Arago had presented a verbal analysis of Henry's report, originally delivered to the American Philosophical Society in June 1846 and published in the APS Proceedings, 1843-1847, 4:260-268. Henry Papers, 6:432.

A Altered from burried

B Altered, possibly from pilgramage

C Altered from fou

D Altered from loose

E Altered from newton

F Altered from thoughts

G Altered from should

H Altered, possibly from 90

I Altered, possibly from gulpth

J Altered, possibly from derived

K Altered from from

38. TO EPHRAIM GEORGE SQUIER

Princeton April 3d 1847.

My dear Sir,

Your communication of the 24th of March1 was received the day before yesterday via Washington and I hasten to answer it, at my first leisure moment.

I have heard of your interesting researches in Ethnology and it would give me much pleasure to publish an account of them in the first number of the Smithsonian Contributions to Knowledge.

I was authorized by the Board of Regents at their last session, to publish during the present year, a number of the Contributions to be printed in a quarto form and the matter to consist of such original memoirs as might be presented for publication and found on examination by competent judges to be actual and interesting additions, to the sum of human knowledge.2

It is not the present intention of the Institution to publish any memoirs in the form of seperate volumes; a plan of that A kind would lead to endless difficulties. The author however in all cases after a short time will be allowed to republish his materials in any form he may think proper and in order to assist him in so doing the free use will be given him of the engravings and other illustrations belonging to the Institution.

I hope after due reflection, you will agree with me in opinion that the best method of publishing the results of your labours will be in the way prescribed through the pages of the Smithsonian Contributions. The appearance of your researches in the transactions of a respectable Institution will immediately give them a character and make them favourably known to all engaged in the same persuit throughout the civilized world and thus establish on sure grounds the foundation of a lasting reputation.

The plan proposed is the one usually adopted by men of science abroad, particularly in publishing the results of their first labours and is the course which science has established to guard herself against the practices of those who would enjoy her honors without the industry or genius to merit them. The publication of a scientific memoir, in a seperate volume on the responsibility of the author, is an appeal to the public generally for that commendation which it is the privilige of only the learned few to grant and scarcly ever fails to produce a prejudice against the work in the minds of those who are best qualified to appreciate its merits and on whose judgement its character must ultimately depend.

I forgot to mention that a sufficient numbersB of extra copies will be struck off before the type is distributed to enable the author to furnish all his friends with the article and perhaps if you have no objection to the appearance of your work in a quarto form a whole edition may be worked off for your own use, not however to to be published until the numbers of the Contributions are distributed.

There are several points which I should like to discuss with you and if you intend to visit the east you will oblige me by coming to Princeton and I shall be happy to receive you at my house.

Excuse the freedom of my remarks, they are dictated by a desire to promote the best interests of science.

I am with much Respect Yours truly

Joseph Henry.

E. Geo. Squier. Esq

Squier Papers, Library of Congress. In Harriet Henry's hand. Reply: See Doc. 46.

1 Doc. 28.

2 At its January 26, 1847, meeting, the Board of Regents authorized the publication of the Smithsonian Contributions to Knowledge and appropriated \$1,000 from 1847 funds for the series. Rhees, Journals, p. 26.

A Altered from this

B Altered from number

39. TO HARRIET HENRY

Washington Tuesday April 13th 1847

My dear H

I expect to start for home tomorrow and be with you the next day. The weather since I left home has been delightful and I have been quite well. In comming down the Bay on saturday night I was a little sea sick and the disturbance of my stomache did not entirely leave me all day sunday.

I informed you in my letter of yesterday1 which I was obliged to stop short by the closing of the mail that I came on to Washington with a Dr Blake who brough letters for me from England.2 He and his new wife are going to Texas to settle in matrimonial quiet--a strange determination of which I think he and she will repent but they are at present quite sanguine inreference to the pleasure they are to enjoy in the wilderness. I say they though I should say he because I have not met the lady. He left in the cars last night to return to Phild and thence to proceed by the way of Cincinati to the west.

I have taken up my lodgings at Gadsbys and find this the most plesant house I have yet been in at Washington. The vice President is here and I am near my business-- The affairs at Washington appear at this time in a more plesant condition than at any previous period. Col Totten who is on both the executive and Building committee has returned and under his direction things will go on properly. He looks remarkably well and appears highly pleased with the result of the attack of Vera Cruse you will see by the papers that he was one of those who agreed on the terms capitulative.3

I have had three interviews with Mr Walker who at my suggestion has appended to the geological surveys which have been ordered by government magnetic observations on the dip and intensity of the magnetic forces-- One set of instruments I am to purchase from the funds of the Smithsonian Institution and the ^ an ^ other to be paid for by Government. All the expense of the observations will be paid out of the public Treasury and the results will be given to the Smithsonian for publication.4

The Commissioner of the Land officce5 with whom I had an interview will also instruct the public surveyors or those engaged in surveying the lands of the Government to make observations on the variation of the compass so that without expending but little of the funds of the Smithsonian I find I can here do a good deal for the cause of american science.6

Mr Owen is about starting for home? his brother has been appointed to make a geological survey of Wisconsin territory and will thus be employed for some years independent of the Smithsonian.8

I have to day drawn 500 dollars and can at any time get what I wish on my salary9 so that with what I have done yesterday and to day in the way of science and the receipt of the money has made me feel more than any thing which has happened since I became connected with the affair. Having the money in my pocket makes me feel that I am really the Secretary of the Smithsonian Institution and come what will I shall not be without a small pecuniary compensation for my trouble.

I have not as yet seen the Frost family although I intend to call on them. Bache had left before I got on-- He received however my letter 10 and appears to have reported that my mind is full of the subject of extending knowledge.

I feel considerable encouraged to think that my situation in Washington after I am once fairly settled will be one in which I shall be able to do considerable good-- They will I think be inclined to put confidence in my suggestions and knowing that I have no other interests to serve than those of truth and science I think my influence will be of some importance to the country. The readiness with which my suggestions were complied with in the cases I have mentioned has given me this encouragement.-- McPeak is very anxious to be employed and the committee have concluded to retain him at the rate of one dollar per day11---

Tell Mr Mclean12 that I shall be home on Thursday and ready to take the class or classes next week and also the latter part of the present week-- Tell Carry that Tom Thumb is on a visit to Washington.13 His carriage has been driving about the streets with an immense crowd of boys around it. The General himself was not in. The carriage is about the size of the fireboard of the dining room and is drawn by two ponies which together would not weight as much as Push. They are just about the size of Alfred Woodhulls14 dog or the one he used to have. The poniesA are driven by a boy of about the size of Carry dressed in the style of the old English drivers with a great profusion of lace a three cocked hat and silk breeches with knee buckles. On behind is a footman dressed in the same costume the whole affair making one of the most curious little equipages which can be immagined. As I went up to the War department I saw the little carriage drive up to the Presidents House. The General was making a call on the great man of the White House.15

Perhap I will call to see the little General this evening he holds his court at 7 o'clock and then I can give the children a full account of the little gentleman when I return or in my next letter.

As ever your

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Family Correspondence, Henry Papers, Smithsonian Archives.

1 Family Correspondence, Henry Papers, Smithsonian Archives.

2 Possibly James Blake, who received an M.D. from the University of London in 1846. In his letter of April 12, Henry wrote that Blake gave him a letter of introduction from Thomas Graham, professor of chemistry there. University of London: The

Historical Record (1836-1926), 2d issue (London, 1926), p. 323.

3 Joseph Gilbert Totten was chief of the Army Corps of Engineers and a Smithsonian regent. He had returned the day before from Mexico where he helped plan the siege of Veracruz, Mexico's chief port and a gateway to Mexico City, to force an end to the war. He also negotiated the terms of surrender, which occurred on March 29, and carried General Winfield Scott's official announcement of the capitulation to the United States. Henry Papers, 4:320; K. Jack Bauer, The Mexican War, 1846-1848 (New York, 1974), chapter 13.

4 Public land policies dating from 1785 required that land in the public domain be surveyed before settlement and classified as to whether or not it contained minerals. The mineral lands were to be reserved by the federal government, the non-mineral lands sold. In March 1847, Congress transferred authority over the reserved mineral lands from the War Department to the Treasury Department, established a Lake Superior Land District (Michigan) and a Chippewa Land District (Wisconsin Territory), and authorized the sale of the mineral lands to the public. Prior to sale, the federal government was to conduct surveys to distinguish areas rich in mineral resources from agricultural areas. Treasury Secretary Robert J. Walker chose Charles Thomas Jackson (Henry Papers, 3:60n-61n; DAB; DSB) to conduct the Lake Superior survey and David Dale Owen to survey the Chippewa region. Walker's instructions to Jackson and Owen, written three days after this letter, incorporated Henry's suggestion:

it is highly important that a series of observations be made on the dip and intensity of the needle, as intimately connected with the geological and mineralogical character of that region of country, and as likely to lead to results interesting to the cause of general science. [U.S. House, 30th Congress, 1st Session, Letter from the Secretary of the Treasury, Transmitting His Annual Report on the State of the Finances, House Executive Documents, No. 6 (1847), pp. 8, 9, 131-139 (quotation on both pp. 132 and 136.)]

Combined with magnetic variation (declination) data produced by the routine land surveys, dip and intensity readings would constitute a full measurement of the earth's magnetic field. Jackson's magnetic instruments were to be provided by the Treasury Department, Owen's by the Smithsonian.

Jackson chose John Locke (Henry Papers, 3:420n), a veteran of several magnetic surveys, to make magnetic observations in addition to his duties as an assistant geologist. After a change of administration and a decision that Locke's work was government property, his observations were published in Jackson's Report on the Geological and Mineralogical Survey of the Mineral Lands of the United States in the State of Michigan . . . (U.S. Senate, 31st Congress, 1st Session, Senate Executive Documents, No. 1, Part 3 [1849], pp. 588-603). The tables were printed improperly, however, and Locke republished the data, along with earlier 1845 and 1846 observations, in Observations on Terrestrial Magnetism, 1852, SI Contributions, vol. 3 (Washington, 1852). The report on Owen's survey did not include any data on terrestrial magnetism although Locke was advised by Walker at one point to make observations in Owen's district also and Locke was interested in doing so (Jackson, p. 440; see Henry Papers, 7:243-244 and 276-278).

Mary C. Rabbitt, Minerals, Lands, and Geology for the Common Defence and General Welfare, 3 vols. (Washington, 1979-), 1:83-85; Dupree, Science in the Federal Government, pp. 91-92; Smithsonian Report for 1847, pp. 189-190; Jackson, especially pp. 371, 394, 563-572; D. D. Owen, Report of a Geological Reconnoissance of the Chippewa Land District of Wisconsin, U.S. Senate, 30th Congress, 1st Session, House Executive Documents, No. 57 (1848). For the dependence of geomagnetics on other disciplines and the Smithsonian's role as a catalyst in lending instruments to surveyors, see Gregory A. Good, "Geomagnetics and Scientific Institutions in 19th Century America," Eos, 1985, 66:521-526.

- 5 Richard Montgomery Young (1798-1861), a lawyer and former senator from Illinois (1837-1843), was commissioner of the General Land Office from 1847 to 1849. BDAC.
- 6 Henry was referring here to the routine surveying of the public lands. The surveyors used a solar compass to determine true north-south lines by measuring the sun's position. Invented by surveyor William A. Burt, it was especially useful in areas where iron deposits caused erratic readings from a standard surveyor's compass and gave readings of magnetic variation within a quarter of a degree. As the readings were numerous, Henry thought lines of declination could be drawn from the data with reasonable confidence. Charles Whittlesey later summarized variation observations in the Michigan and Wisconsin area in J. W. Foster and J. D. Whitney, Report on the Lake Superior Land District. Part II. The Iron Region Together with the General Geology, U.S. Senate, 32d Congress, Special Session, Senate Executive Documents, No. 4 (1851), chapter 20; Smithsonian Report for 1848, p. 16; William A. Burt, Description of the Solar Compass, Together with Directions for Its Adjustment and Use (Detroit, 1844); a copy is in the Henry Library.
- 7 Robert Dale Owen attended building committee meetings through April 20 and then returned to Indiana to campaign for his reelection. Rhees, Journals, pp. 674-679.
- 8 David Dale Owen had advised the Smithsonian without charge on plans and materials for the building. Henry may have feared, as others did at the time, that his goal was to get a Smithsonian position, presumably as assistant secretary in charge of the natural history collections, through the influence of his brother. See, for example, G. P. Marsh to Mary Baird, February 10, 1847, Baird Papers, Smithsonian Archives; James Hall to E. N. Horsford, March 27, 1847, Horsford Papers, Rensselaer Polytechnic Institute Archives; J. B. Rogers to W. B. Rogers, April 5, 1847, W. B. Rogers Papers, Archives, Massachusetts Institute of Technology. Rhees, Journals, pp. 3-4, 5, 6, 604-610, 612-614, 664-667.
- 9 Although Henry's salary was \$3,500 a year, he drew only \$1,750 from the Smithsonian in 1847 as he was still receiving a salary from Princeton for teaching there. Smithsonian Report for 1847, p. 156.

10 Doc. 37.

- 11 On April 14, 1847, the building committee rehired William McPeake as a messenger, a function he had performed earlier. A native of Ireland, McPeake (ca. 1792-1862) remained at the Smithsonian as a messenger, doorkeeper, and janitor until his death. Sometimes referred to as "McFuss," McPeake was described by Caspar Wistar Hodge as "the most exalted dignitary" connected with the Smithsonian and "a character worthy of a novel." Smithsonian Report for 1847, pp. 122, 123; Eighth Census of the United States, 1860, District of Columbia (NARA microfilm M653, reel 104, frame [935]); Washington Evening Star, December 1, 1862; C. W. Hodge to Charles Hodge, November 11, 1848, Charles Hodge Papers, Manuscripts Division, Department of Rare Books and Special Collections, Princeton University Libraries.
- 12 John Maclean, vice-president of Princeton. Henry Papers, 1:433n.
- 13 Charles Sherwood Stratton (1838-1883), better known as "General Tom Thumb," was a midget under the artistic management of P. T. Barnum. At nine years of age, Stratton was only the size of a small toddler but was already a veteran of a three-year European tour during which he performed for the crowned heads of Europe. Stratton's visit to Washington consisted of three days of public appearances at Jackson Hall. DAB; National Intelligencer, April 14, 1847. Neil Harris, Humbug: The Art of P. T. Barnum (Boston, 1973), pp. 50-52, 99-102, 215.
- 14 Alfred Alexander Woodhull (1837-1921), a young Princeton resident. DAB.
- 15 In his diary, Polk mentioned adjourning a cabinet meeting to meet Tom Thumb, "a most remarkable person." Allan Nevins, ed., Polk: The Diary of a President, 1845-1849 (New York, 1968), pp. 216-217.

A Altered from pony

40. FROM EBEN N. HORSFORD1

Cambridge, Apr. 14,/47--A

[...] on the very da[y ...]ther.

I am at a loss to account for the glass not reaching you. It was enclosed within two or three pamphlets and prepaid. It grieves me indeed--as I know Prof-- Faraday thought to please you, particularly.2 I beg you will tell him this circumstance when you write him--

[...] the fact [?with] [...] the increase of radiant [...] the introduction of an incombustible body into flame is certainly most interesting. Is the increase so very considerable that you might mark the differences, between the effects of Baryta, Strontia, Lime, and Magnesia compounds--say hydrates of the first three & carbonates of all? I think I mentioned to you5 having found the conducting powers, and [ge]neral chemical properties to be [...] the degree of their intensity, in [th]e order of their atomic weights. [I] have just been through with the entire chemical history of all the compounds of these earths & find the law true with two or three exceptions-- If you would like to make the experiment, & have not the substances I will try and prepare them for you--though as yet I have no laboratory.

I am very Respectfully and truly yours,

Eben N. Horsford

Prof Joseph Henry. LLD.

Henry Papers, Smithsonian Archives. The top half of the first sheet and one side of the second sheet are missing; the ellipses indicate where one or two words are missing, except at the first and third instances, which indicate where the first sheet is torn in half.

- 1 The newly elected Rumford Professor on the Application of Science to the Useful Arts at Harvard. Henry Papers, 6:51.
- 2 Faraday had given Horsford some glass for reproducing the Faraday effect which Horsford had dutifully forwarded along with a letter of December 31, 1846. Henry wrote on January 8 that the glass had not arrived with the letter. Evidently Henry's letter had not reached Horsford by March 2, when Horsford wrote to ask for Henry's advice on his new position and to inquire whether Henry had received the glass. On March 24, Horsford wrote James Hall to complain that Henry had never responded to his three letters from Europe, written at Henry's suggestion and with the assurance of a response, or to his March 2 letter. Horsford attributed Henry's lack of response to "a negligence arising from an immense pressure of duties" or to some unintentional offense on Horsford's part. Henry Papers, 6:621; Mary Henry Copy, Henry to Horsford, January 8, 1847, and Horsford to Henry, March 2, 1847, Henry Papers, Smithsonian Archives; Horsford to Hall, March 24, 1847, State Geologists' and Paleontologists' Correspondence File, Series B0561, New York State Archives.
- 3 Henry had evidently described to Horsford his experiments of late March on the increased radiation of heat from a flame due to the introduction of an incombustible solid.
- 4 In his later paper on these experiments, Henry mentioned trying "glass, carbonate of lime, sulphate of lime, stone coal, fire clay, &c." but being unable to determine relative effects without specimens of equal diameter. "On the Effect of Mingling Radiating Substances with Combustible Materials," AAAS Proceedings, 1855, 9:112-116.

5 In his letter of December 31, 1846 (Henry Papers, 6:622).

A Moved from end of letter.

41. TO ELIAS LOOMIS

Princeton April 22nd 1847

My dear sir

Your favour of April 12th came to Princeton while I was in Washington1 and I now begin this answer at almost the first moment ^ of ^ leisure I have had at my command since my return. I have nothing at present to suggest with reference to the plan of the memoir so far as you have given it in your letter it fully meets my views.2 I can give you no information until I see or hear from Mr Espy as to the number and character of the observations made at the military posts.3 Mr Espys salary was struck from the appropriation bill at the last session of congress and in consequence of this he intends to leave Washington next July.

I do not ^ think ^ that he can have any cause to be displeased with our proceedings you will of course give him due credit for his labours and he will be invited to furnish for publication in the Smithsonian Contributions to Knowledge the results of any researches he may have as yet not given to the world.4 I would however be glad if it were in my power to do something in the way of attempting to restore him to his former position. I consider him a man of most excellent character who has laboured industriously and successfully in the cause of science and who in a country of so much wealth as ours should not thus be deprived of the pittance ^ to ^ which a few months before he was thought entitled to. He has continued to receive the reports from the several government stations but has not published any results that I have heard of since 1843.5

The secretary of the Treasury at my suggestion appended to his order for a geological survey of the new Territories directions for a set of magnetic observations on the dip & the intensity. The condition was that I should give the instructions and purchase the instruments the results to be given to the smithsonian for publication.

I found by enquiry at the land office that all the surveys of the public lands are now made with an instrument called a solar compass which gives the meridian by means of an imageA of the sun, the declination6 being known, to within about a quarter of a degree and perhaps less. Also the surveyor has been directed in allB cases, on each line to note the deviation of the magnetic needle and in this way considerable material has been furnished for perfecting the variation chart of our country. Would not the plan of procuring a good map plate of the united states and having a number of copies made of it by the electrotype process be of interest? on one of the plates the magnetic lines being delineated on anothe the thermal on a third the geology &c and thus in time forming the elements of a physical atlas of our country.7

I think of visiting New York in the course of a week or two and I will then give you a full account of all the proceedings relative to the smithsonian. In the meantime I beg to assure you that I remain as ever

Truly yours

Joseph Henry

Prof. Loomis

Loomis Papers, Beinecke Rare Book and Manuscript Library, Yale University. Draft: Henry Papers, Smithsonian Archives (differs in wording and order of material and has an additional paragraph on Smithsonian affairs, specifically the funding compromise). Previously printed in Nathan Reingold, ed., Science in Nineteenth-Century America: A Documentary History (New York, 1964), pp. 155-156.

1 Letter not found.

- 2 Loomis's "Report on the Meteorology of the United States" reviewed the progress of the field and presented a plan under which the Smithsonian would organize and direct "a grand meteorological campaign" to collect systematic observations of phenomena. It appeared as an appendix to the Smithsonian Report for 1847, pp. 193-207 (quotation on p. 206).
- 3 Loomis reported around sixty military posts which recorded meteorological data. Observations were made four times a day on barometers and thermometers, the direction and force of the wind, and the direction, velocity, and amount of clouds. The amount and times of rainfall were also noted. Loomis, pp. 195, 205.
- 4 Loomis devoted three pages to Espy's "generalizations, given in his own words." Henry published a brief extract from an undated letter on meteorology by Espy immediately following Loomis's report. Loomis, pp. 197-199 (quotation on p. 197); Smithsonian Report for 1847, pp. 207-208.
- 5 Espy's first report on meteorology was dated 1843 but issued in 1845. A two-page "report" to Surgeon General Thomas Lawson in 1845 restated the generalizations of the first report and added two new ones. Espy's second report on meteorology was not published until 1849. Fleming, Meteorology, pp. 70-72, 97; David M. Ludlum, Early American Tornadoes, 1586-1870 (Boston, 1970), pp. 171-174.
- 6 That is, astronomical declination.
- 7 Under annual research grants in Henry's "Programme of Organization," he had included:

Explorations in descriptive natural history, and geological, magnetical, and topographical surveys, to collect material for the formation of a Physical Atlas of the United States.

The physical atlas suggestion was not pursued at this time. In a letter of May 4, 1865, to Henry, George Gibbs revived the idea. He proposed preparing skeleton maps and distributing them to government surveys and expeditions, members of learned societies, and individual scientists. As far as we can determine, the first actual product of the sort Henry envisioned appeared in a Census Office publication: Francis A. Walker, comp., Statistical Atlas of the United States Based upon the Results of the Ninth Census 1870 ([New York], 1874). Part I, "Physical Features of the United States," included maps of river systems, woodlands, annual rainfall, storm centers, annual mean temperature and extreme temperatures, isobars, hypsometric (elevation)

data, coal strata, and geological formations. The data on rainfall and annual mean temperature were provided by the Smithsonian. Smithsonian Report for 1847, p. 175; George Gibbs, "A Physical Atlas of North America," Smithsonian

 $A\ Altered\ from\ immage$

B Altered, possibly from ea

Report for 1866, pp. 368-369.

B Atterea, possibly from e

42. TO [JONATHAN HOMER LANE] A

Princeton College of New-Jersey April 22nd 1847

Dear Sir

Your communication of the 8th of Feby on the subject of electro dynamic Induction1 was received through the favour of my friend Professor Foster of Union College. It came to however at a time when I was so much occupied with the duties of the organization of the smithsonian Institution that I could give attention to no other subject.

I have made a long series of expermnts on the branch of electricity known by the name of Dynam Induction the results of which have been presented from time to time to the American Philosophical Society and published in the transactions or the proceedings of this Institution. Accounts or rather notices of my late experiments on this subject are to be found in the later volumes of the proceedings not the transactions of the Society. Also a brief notice of of my researches in general on the subjects of electrity and magnetism isB given in the suplmentary volume of the Encyclopedia Americana just published in Philadelphia under the direction of Professor Vethake.2

I intend publishing in the first no of the Smithsonian contributions to knowledge a memoir giving the full developement of all my later experimnts expimts on electricity.3

The phenomenon of the evolution of both oxygen and hydrogen from each wire of the decomposing apparatus with a discharge of ordinary electricty is I think readily explined on the prinples of the series of oscillations which precedes the restoration of the equilium in the discharge of a Leyden jar.CDraft, Henry Papers, Smithsonian Archives.

1 Doc. 17.

2 Joseph Henry, "Magnetism," Encyclopaedia Americana: Supplementary Volume (Philadelphia, 1847), 14:412-426.

3 Henry's own work was never published in the Smithsonian Contributions to Knowledge but appeared instead in appendices to the annual reports of the Smithsonian.

A From internal evidence.

B Altered from are

C Remainder not found.

43. TO JOHN STUART SKINNER 1

Princeton april 22nd 1847

My dear Sir

I hope you will pardon me for so long delaying to acknowledge the receipt of your letters2 and the ^ interesting ^ volumes on agriculture you were so good as to send me. The truth is I have been so overwhelmed ^ much pressed ^ with busness since my appointment that I have not been able ^ found it impossible ^ to keep up with my correspondence particularly as I have ^ had ^ no assistance.A

I consider the Farmers Library a valuable publication3 and on my own responsibility I take the liberty of ^ have concluded to ^ subscribeB for it on behalf of the Smithsonian Institution4 you will therefore please to send the numbers to me directed for the present to Princeton.

Agriculture is one of the branches of knowledge which in my opinion should ^ especially ^ receive the special encouragement of the Smithsonian establishment and I think the plan of organization which I presented to the Board of Regents would as effectually ensure this end as the limited income of the bequest and the number of objects claming ^ its ^ assistance will permit. The pamphlet which I send you with this letter will give you the several propositions of this plan ^ as expressed ^ in the form of the Resolutions marked in ink with the numerals 1, 2, 3, 4 & 5.5 ^ The two first ^ two ^ are intended to promote the increase of knowleged and the remainder to effect the its diffusion. ^ No. 1 offers inducements for undertaking new researches and the discovery of new phenomena ^ production of original memoirs ^ . No 2 provides for special experiments the ^ at the ^ expenses of which are to be defrayed by the funds of the Institution. For example the Board of Regents may direct that a series of experiments be made on the analysises of particular plants to determine what substances should be found in ^ added to ^ the soil inorder to their better production. No 36 provides for the publication of a series of periodical Reports on ^ the progress of ^ all branches of the three great divisions of human knowledge namely Physical science moral and political science critisim and the fine arts--these ReportsC to be prepared by Collaborators eminent in there respective lines who are to be furnished with all the journals of the worldD necssary for selecting the ^ proper ^ material. Under the head of ^ the head of Reports on ^ Physical science a small volume on agriculture would be annually published containing in a condensed form an account of all the positive additions which may have been made duringE the year to this branch of knowledge.

This plan was adopted provisionally by the Board but unfortunately the law of Congress establishing the Institution requires so large an expenditure of the funds in providing for a Library and a collection of specimens ^ a museum & a gallery of art ^ that the scheme I have mentioned for increasing and diffusing knowledge among men cannot be carried out as effectually as I could wish

The income of the smithsonian Institution is so small that little of general interest can be effected by collections Lectures and agricultural normal schools these plans can only produce local and partial results. The only means by which kn the Smithsonian bequest can be made available in increasing and diffusing knowledge ^ generally ^ among men generally is ^ princpally ^ by stimulating original ^ the labours of all in our country who are capable of enlarging the bounds of truth by ^ research in all parts of the country ^ and the world ^ and diffusing ^ valuable ^ information of a valuable kind as widely ^ and as cheaply ^ as possible through the press.

Plese accept my thanks for your kind offer of the use of the pages of your ^ valuable ^ journal journal. I shall perhaps avail myself of the privilege at some futur time. I am very

I am Very Respect fully Truly Yours

Joseph Henry

Draft, Henry Papers, Smithsonian Archives. Drafts: Two partial drafts in same location.

1 Skinner (1788-1851) was editor of the Farmer's Library and Monthly Journal of Agriculture from 1845 to 1848. From 1819 to 1830, he had published the American Farmer, the "first continuous, successful agricultural periodical in the United States." DAB.

2 Not found.

- 3 Skinner was hired to edit the journal by Horace Greeley and Thomas McElrath of the New York Tribune. Each issue included a reprint of a major work on agriculture as well as practical information on farming and notices of experiments, machinery, and inventions. DAB, s.v. "Skinner, John Stuart."
- 4 At an August 10, 1848, executive committee meeting, Henry presented Skinner's request that the Smithsonian buy three volumes of the Farmer's Library. The committee approved the purchase. The first three volumes (1846-1847) are listed in Catalogue of Publications and of Periodical Works Belonging to the Smithsonian Institution, January 1, 1866 (Washington, 1866), p. 540. Rhees, Journals, p. 464.
- 5 Report of the Organization Committee of the Smithsonian Institution (Washington, 1847), specifically the resolutions at the bottom of page 19 and the top of page 20.
- 6 Henry meant number 4.

Storia dell'elettricità- Lettere di Joseph Henry	
A Altered from assistant	
B Altered from subscribing	
C Altered from reports	
D Altered from g	
E Altered from t	

44. TO JOHN KEARSLEY MITCHELL1

Princeton april 23rd 1847

My dear Dr

I happened a few evening ago to have a conversation with Mr Walker secretary of the Treasury on the subject of the yellow fever and his remarkes struck me as being characterized with ^ so much ^ philosophical discrimination that knowing your interest in this matter I am induced to note them down for your inspection.

The following as far as I can recollect are ^ the conclusions ^ he has arrived at from his own observations of the phenomena as they have been exhibited for several years at Natchis and New Orleans.

- 1 Yellow fever occurs spontaneously in certain places under the predisposing causes of heat filth and moisture.
- 2 Yellow fever is sometimes ^ produced ^ from the pent up air brought in the hold of vessels from a distance and thence spreads by propagation, provided the necessary conditions are present.
- 3 The cause of the disease is destroyed by a single exposure of the air to a white frost. A case to illustrate this fell under Mr Walkers notice in which a house was closed at the time the fever was raging and not opened until after a frost; when three persons died who attempted to live in it though there was no feave in any other part of the city at the time.
- 4 The cause of the yellow fever appears to require the presence of of collections of human beaings for its propagation; no instance has been known of the disease breaking out or spreading on an insulated plantation not in the vicinity of a city.
- 5 Yellow fever after having made its appearance from year to year in a certain place has entirely disappeared after the land has been drained, vegetabl and animal matter in a state of putrescence removed, and a more general attention ^ given ^ to the clenliness of the place grounds & buildings.

I do not suppose that any of these conclusions are new to you though they may serve to fortify some of your points and I doubt not that Mr Walker would readily communicate to you the details of facts on which he has founded his inductions.2

With my best wishes for your continued success in all that renders life plesant and profitable I remn yours truly

Joseph Henry

Dr J. K. Mitchell

Draft, Henry Papers, Smithsonian Archives.

1 Mitchell was professor of medicine at Jefferson Medical College in Philadelphia. Henry Papers, 3:325n.

2 The cause of yellow fever was unknown. The dominant view in the medical profession was that it was caused by miasma, or poisons in the air produced by marshes. Others blamed atmospheric conditions, while a minority believed the disease was caused by tiny animal or vegetable creatures usually termed animalculae. Doctors also divided into contagionists, who believed the disease was spread by people or animals, and non-contagionists, who believed it could arise spontaneously and be spread by infected air. As with other fevers, disease theorists tried to determine the cause by a process of induction from everything known about the disease. Henry was undoubtedly aware of Mitchell's lectures on fevers, six of which from the 1846-1847 academic year became On the Cryptogamous Origin of Malarious and Epidemic Fevers (Philadelphia, 1849). Having hesitated to publish because he feared controversy and felt he lacked conclusive proof, Mitchell joined the organic theorists by proposing a "fungous theory of fevers," in which yellow fever was caused by fungus (pp. iv, 106). Although Mitchell did not mention Walker's observations, he did discuss some of the same phenomena Walker noticed (pp. 102-107). The true cause of yellow fever, a virus carried by mosquitoes, was not discovered until the turn of the century. Phyllis Allen, "Etiological Theory in America Prior to the Civil War," Journal of the History of Medicine and Allied Sciences, 1947, 2:489-520.

A Altered from attemppted

46. TO [EPHRAIM GEORGE SQUIER]A

Princeton April 28th 1847

My dear Sir

Your letter of April 22nd has just been received1 and I hasten to suggest the plan of publishing your memoir in parts in the sucessive nos of the Smithsonian Contributions. I should myself prefer this plan if the memoir will be ^ is to be ^ long and the plates difficult of execution. By adopting it you will be less hurried the publication of the first no. of the contributions will be less delayed and corrections and additions which may suggest themselves in the course of the preparation of the article can be more readily made.2

It is intended to refer your memoir to the Ethnological Society of New-York for approval and from this tribunal I presume you need fear neither delay nor hesitation as to an opinion of the character of your labours.

I wish if possible to get the first no. of the contributions published about the time of meeting of Congress3 and should you conclude to publish in parts, say in the first and second nos. I would be pleased to receive the 1st part as soon as convenient.

The Introduction to the 1st No. will consist of a biographical memoir of Smithson by the chancellor of the Institution the Hon Mr Dallas. The no. will also contain a paper on the gulf stream the result of the researches of the late Lieut. Bache4 who lost his live in completing in completing this work. It will embrace a paper probably from Professor Pierce of Cambridge and another from myself as these papers are all on subjects of Physical science I should prefer an article ^ memoir ^ like yours for the first no article of the no.Draft. Henry Papers, Smithsonian Archives.

1 Not found.

- 2 The first volume consisted of the Squier and Davis memoir in its entirety and nothing other than that memoir.
- 3 Congress convened on December 6, 1847.
- 4 George M. Rache
- 4 George M. Bache.
- A From internal evidence.

45. FROM JOHN MACLEAN

College of New Jersey Princeton. April 28. 1847.

My dear Sir

As it is desirable for all concerned, that there should be matured, before the next meeting of our Trustees, some plan which will secure to our students, as far as practicable, a course of instruction in Natural Philosophy, like to that which they now enjoy;--permit me to submit for your consideration the following propositions. If either of them should meet your views, I will do all I can to carry it into effect. If neither should be acceptable, I will thank you to suggest some one more agreeable to your own views and feelings.

In case you are not committed to a contrary course, I would propose, that you should give notice to the Regents of the Smithsonian Institution, that at the expiration of twelve months from the 1st of July next, you will resign your post of Secretary; and resume your former relation to the College: and that you should agree to do so on the following conditions,

- 1 That from the 1st of July 1848, your salary shall be \$2.000 year.
- 2 That for the ensuing year, your salary shall remain as it now is;1 with the understanding, that you are to make adequate provision for the instruction of the students in the studies of your department,--by instructing them youself alone, or with the aid of some competent teacher to be employed by you, with the approval of the Faculty.

If the above proposition cannot be acceded to, I would then propose, That you should make a permanent arrangement with the Regents of the Smithsonian Institution which will enable you to spend two months in a year in Princeton; and that you should also engage to deliver here, year by year, a course of thirty lectures on Physics:2--and that as a compensation, you should retain for the use of your family, should you deem it desirable, the house now occupied by you; and receive a salary of \$500. a year, or \$700. a year without a house.3

In this case it would be requisite to appoint another Professor, who might be styled Professor of Mechanical Philosophy; and whose duty it should be to teach, with the exception of Physics, the branches now taught by you, and also to lecture on Architecture.4 For one, I would greatly prefer the first of these, propositions; and I mention the other simply because I deem it much better for the College than to lose your services altogether.

You need feel no delicacy about receiving a larger salary than your colleagues. With the exception of Dr Torrey, who only devotes only a part of his time to the College, and of myself, you have been much longer a Professor than any of your colleagues, and on that account you are fairly entitled to a larger compensation; to say nothing of the greater value of your services:--and I can assure you, that no one of us will feel himself undervalued, because of any addition to your salary, ours remaining as they are.

With the most sincere respect & esteem, Your friend & colleague,

John Maclean

Professor Henry.

Henry Papers, Smithsonian Archives. Copy: Maclean Papers, Princeton University Archives, Seeley G. Mudd Manuscript Library, Princeton University.

- 1 Henry probably received his full salary (\$1,500 and a house) from Princeton for the 1846-1847 academic year, during which he continued to reside in Princeton but traveled to Washington periodically.
- 2 The course Henry had been teaching was much longer. The previous year, for example, he delivered eighty-nine lectures. Henry Papers, 6:412n.
- 3 At a meeting on June 30, 1847, Princeton's Board of Trustees agreed to retain Henry as professor of natural philosophy, with a salary of \$500 and the use of his current house, and specified that he could be assisted by other faculty members. The board promoted John T. Duffield to assistant professor of mathematics so that Stephen Alexander could assume part of Henry's duties in natural philosophy. Trustees' Minutes, June 30, 1847, vol. 3, p. 480, Princeton University Archives, Seeley G. Mudd Manuscript Library, Princeton University; John Maclean, History of the College of New Jersey, 1746-1854, 2 vols. in 1 (1877; New York, 1969), 2:320.
- 4 George Musgrave Giger (Henry Papers, 6:338n), adjunct professor of Greek, took over the lectures on architecture, which had been given by Henry from 1833 to 1838 and then by A. B. Dod until his death in 1845. Catalogue of the Officers and Students of the College of New Jersey for 1847-'48 (Princeton, 1848), p. 20; Henry Papers, 6:

47. TO HARRIET HENRY

Washington Saturday ½ past 3 oclock MayA 1 1847

My dearest

I arrived here this morning a little past 8 o'clock after quite a plesant passage. I found a place provided for me in the prossession and that if I had not come on there would have been some dissatisfaction. The vice President expected me of course. The order of proceedings were published in the papers and it was expected that I would see them and the plase assigned me the celebration. The whole affair has just closed and I have returned to my room at Gadsbys covered with dust and while the servant is brushing my coat I devote the minutes which are to elapse before dinner to you. The procession formed at the city Hall2 then marched through the streets to the Presidents House where the President and the heads of departments were received. It then returned passed down 11 st to the site of the building on the mall.

On the cround near the corner of the new building was erected a stage decorated with evergreens on which the principal personages connected with the Institution were assembled. In front of this the masons went through the ceremony of Laying the corner stone--after which an address was delivered by the vice President3 and then the whole adjurned. I should have mentioned that before the corner Stone was laid a very impressive and eloquent prayer was offered by the Rev Mr Evans of the methodist Church.4

The number of persons assembled was very great perhaps 10B thousand with a considerable proportion of Ladies.5 All the masons for miles around were assembled together with the military-- At the conclusion of the ceremony the a salute from canon was fired

The speach of Mr Dalass was very well but had I seen him a litler sooner I think I could have given him a few hints which might have modified some parts.6 Speaches and celebrations of this kind are however the mere flourish of the moment and produce no lasting effect. They are the relics of the ages before the invention of the art of printing when wh men could only act on men through the medium of the senses when pagentry and oratory were invoked to captivate the eye and ear of those whoes intellects were dormant. But in these tims exhibitions of this kind are not as necessary and I hope the time may come when oratory and all the employed to lead the judgement astray through the impressions on the imagination will be do away with. If all the discussions in congress were divested of oratory the truth would sooner be settle on.

I have just returned from dinner where I enjoyed myself very much not in very voracious eating but in rather nice tasting of many articles of savery character.

I have not as yet heard through the telegraph of your being worse and as no news is good news I shall cherish the idea though with some anxiety that you are better. I left home with considerable misgiving but in the cars I found the Rev Mr Burns of Schenectady who kept me in pretty close conversation until we reached Phild I did not have time to go to Dr Ludlows but was obliged to leave one boat for the other and had only an opportunity of getting a "hasty plate of soup" of oysters. On board of the steam I found a young midshipman who had just returned from Vera Cruse and gave me a goodly number of long yarns as to the War.

We arrived at about eleven O'clock at Baltimore and. I put up at the Eutor House7 which I found a very plesant establishment. We started from Baltimore at ½ part 6 oclock and travelled over the distance to Washington in about one hourC and a half.

I found Mc Peak in great business in the way of attending to all the affairs of the ceremony. He expressed great pleasure at my appearan and has since been very attentive to my wants at the Hotel.

The weather has been quite plesant though rather cold to day-- I was pleased with this for had the day been hot I would not have daird to walk as far in the sun as I have done to day. I had however an umberrella one belonging to Col. Totten withwhom I walked at the head of the civil part of the procession. The col. was very attentive to me and gave me some very minute and interesting accounts of the siege from which has lately returned. I was thrown a little into a state of mortification this morning when I arrived, covered with dust and one of the "pipes" of my nether garment dirtied with pitch, and expecting to be called upon in a few short time to join the procession or to go to the city Hall preparatory to joining to find on opening my trunk my clothes apparently missing. I afterwards recollected that you had informed me that the articles were put in the upper part. I was destined however to experience a little disappointment for when I came to put on my pants I found a wrong par had been put into the trunk namely a thin summer par instead of my new cloth ones. I put on the thin ones but found the weather so cool that I was obliged to take them off again not however until the cloath articles had been well brushed. I was alittle anoyed at first but the conclusion the occurrance fixed on my mind was the importance of the attention of my wife to all my affairs.

Without her I should be a lost man the world would be sad and life insupportable. The bell is ringing and I must close

Adieu my dearest

Family Correspondence, Henry Papers, Smithsonian Archives.

1 The National Intelligencer of April 30, 1847, published a notice of the upcoming ceremony of the laying of the cornerstone of the Smithsonian Building. In the mile-long procession, Henry was paired with Vice-President Dallas, chancellor of the Smithsonian, immediately following President Polk and his cabinet and preceding the regents. The issue of May 3 reported the procession and ceremony at the site in detail.

Alfred Vail alleged in a letter to Samuel F. B. Morse that the building committee, irritated with Henry over his desire to contain building costs, insulted him intentionally by not inviting him:

Henry was not even invited by Building Committee to be present at the laying of the Corner Stone--and came on and witnessed it, in the capacity of a "loafer" as one of his friends terms it.

The minutes of the building committee, which organized the event, mention specific invitations only to the president and vice-president. In the same letter, Vail claimed that Henry refused to let Vail's American Electro Magnetic Telegraph (Philadelphia, 1845) be put into the cornerstone. Vail to Morse, May 17, 1847, Morse Papers, Library of Congress. Rhees, Journals. p. 674.

- $2\ At\ the\ foot\ of\ Judiciary\ Square\ (Four-and-a-half\ St.\ and\ Louisiana\ Avenue,\ NW).$
- 3 Dallas's address appeared in the National Intelligencer and was also separately published in Address Delivered on Occasion of Laying the Corner Stone of the Smithsonian Institution, May 1, 1847 (Washington, 1847).
- 4 The National Intelligencer reported that the lengthy prayer was actually delivered by Brother McJilton, grand chaplain of the Grand Lodge of Maryland. The Reverend F. S. Evans, of Ryland Chapel near the site of the Smithsonian, delivered the benediction. Washington City Directory, 1846.
- 5 According to the National Intelligencer, six or seven thousand people witnessed the procession and ceremony.
- 6 Dallas reviewed the origins of the Smithsonian and described the design of the building. In one section, he noted that certain functions of the Smithsonian, such as a museum, were dictated by the provisions of the act relative to the building: "Congress have stamped this character upon it, by prescribing and appropriating its vast interior compartments, and by other positive expressions of their will." In the same section, he explained:

It is the first duty of the Regents to obey the unequivocal behests of Congress--to carry them out faithfully, on the scale and in the spirit they obviously import; and to let their measures flow, not from their own discretion, but from the provisions of the law which they are empowered to execute.

7 That is, the Eutaw House.

A Altered from J

B Alternate reading: 20

C Altered from two hours

8. TO HARRIET HENRY

Washington May 2nd 1847

My Dearest

The cars leave at 6 o'clock tomorrow morning and therefore unless I write this evening I shall not have an other opportunity of sending a letter until tomorrow night.

This has been a dark and cloudy day of rather plesant temperature with rain in the morning the first which has fallen in this place for about four weeks. Though I have been some what lonely and a littl anxious about you I have spent the day rather plesantly and I hope some what profitably. I have been twice at Church with Dr Lindsly and in the morning heard a very interesting discourse from a gentleman from Boston whoes name I have forgotten. His subject was the Mysteries of Revelation and for clearness of exposition soundness of doctrine and aptness of illustration I have heard nothing to surpass it for a long time.

There must always be mystery however elevated our intellectual powers we are the finite contemplating the operations of the Infinite. The traveller who assends the gentle acclevity of a mountain beholds at each step new objects breaking in upon his vew but still his prospect is bounded and perhaps interrupted by obstructions at a little distance. As he assends higher these no longer obscure the vew but beyond is the boundingA circle of earth and heaven--even this expands in dimensions as his progress continues upward but to what ever mountain height he may clime his vision can ^ never ^ encompass the earth and his vew must still be terminated on all sides by the misty mingling of ocean and sky.

This afternon the church went in at half past four on account of the funeral of one of the elders and instead of a sermond a short address was given with the administration of the sacrament.

I hope my dearest you have recovered from the attack and that I will find you enjoying much better health than when I left home or indeed than you have done for several months past.

You have been to careless of your health and while you have been anxious about the children and myself myB better half yourself has not been thought of. You know I cannot do without you scarcely for a single day for though I may be from home for several days in succession yet you make the arrangements--you facilitate my starting and highten the pleasure of return by the long anticipated kiss and the fond embrace.

I have found this house Gadsby's a very plesant stopping place. The room is comfortable and the servants attentive. Mr Gadsby1 is quit obliging but the expense is rather heavy.

Washington is very beautiful at this season the trees are in full foliage & the fields around covered with a righ carpet of green.

I called last evening at Mr Frosts the old gentlemanC was apparently much gratified with my call. Charlot made many enquiries about you the tall maden Lady Miss Frost was as calm and prim as ever.

I have been quite well since I left home the pill I took a few days ago have done me much good. I was however very greatly fatigued last night and could scarcely get asleep with the pain of my feet and leags after walking so far in the Procession and about the Town.

It is now half past ten and after commending you our dear little ones and myself to the Father of all merces I will retire to rest. I am writing this in my room on a little table at the foot of my bead after it is folded I will carry it downstairs and put it in a bag that hangs against the wall and which will be taken before I am up to the cars. That you may be preserved through the darkness of night and from the evils of the day that you may continue to be blessed in this world for many years and when you leave it have a full assurance of greate blessing in the world to come is the sincere prayer my dear Wife of your affectionate Husband. It is necessary almost to a proper appreciation of those we love that they should occasionally be placed in unusual positions with reference to us. That sickness or absence or some other circumstance should break the monotony ordinary existence inorder that we should know the state of our own feelins-- The fact that I am from home and that I left you sick calls fourth my warmest feelings and at this moment I can think of nothing which would give me greate pleasure than to clasp you in my arms.

Do you know DearestD that yesterday was our wedding day2 and that we are getting to be an old couple. Good night

DarestE

Please kiss all the children for me.

Family Correspondence, Henry Papers, Smithsonian Archives.

1 Presumably a relative of the original proprietor, John Gadsby, who had died in 1844. He had a son named John Gadsby, Jr., who managed the hotel at one time. The 1846 Washington City Directory lists a William Gadsby at the hotel's address. Dorothy H. Kabler, The Story of Gadsby's Tavern (Alexandria, 1952), pp. 23, 51; James Goode, Capital Losses: A Cultural History of Washington's Destroyed Buildings (Washington, 1979), pp. 168-169.

2 The Henrys were actually married on May 3, 1830. Henry Papers, 1:274n; 6:443n.

A Altered from bound

Storia dell'elettricità- Lettere di Joseph Henry B Altered, possibly from I C Altered from G D Altered from d

E Remainder written in margin.

49. TO HARRIET HENRY

Washington monday morning 7 o'clock May 3rd 1847

My Dearest

I have just got out of bed and with my wrapper on, seeing the writing materials so conveniently before me and missing your accustomed presence at this hour I cannot refrain from scribbeling a few lines to you though I have nothing to say. I am reminded however by the dating of the letter that this is the 3rd of May and that 17 years ago we were together in a little room in a tavern at New Haven just commencing the journey together of wedded ^ life ^ . The beginning though perhaps as sunny as journeys of the kind usually are was yet not quite as bright as immagination could have painted it. I found you different in some respects from what I ^ had ^ immagined you to be and not knowing my peculiarities and faults of character until they were revaeld by more intimate communion you were perhaps shocked and disappointed. I have certainly great cause for thankfulness that you consented to be mine, and that our love should have increased with our years. We know not what is in store for us but of this we may be assured that we cannot escape the general lot of humanity--that difficulties and tryals await us but the anticipation of these should not prevent us from enjoying the goods which providence has bestowed on us at the present and when the evil day may come we can live over the past, in memory, and draw a lasting supply of plesant reflections from this source. The prospect of usefulness at Washington appears brighter than it did and I think there will be little difficulty in making arrangements by which I shall for some years to come be able to spend two or three months of the warmest weather in Princeton. I had much conversation with Col. Totten on Saturday and though he is a gentleman of not many words yet he entered very fully into my vews which was the more plesant since at first he was in favour of a library and voted I think for an other Person.1 Bache told me that when we became acquainted with each other we would draw together. Now that he is on the ground every thing will go on well in reference to the building. 2 My views I find are becoming known and better appreciated and on the whole I am well pleased that I came on to. The A celebration was authorized by the building Committee and consequently it was my duty to be in attendance the notice given in the paper of the order of proceeding which, however I did not see until I reached Baltimore, was con[si]dered a sufficent invitation both to myself and the Vice President.

In comming to Washington I may not consult my own ease but on the most mature reflection I think it my duty to continue my connection with the Institution and when this thought is presented to my mind I feel perfectly easy as to the result. If we act conscientiously and faithfully, endeavouring before God to do our duty, the result in the long run cannot be otherwise than good. I can truly say that my appointment has not been to me a source of self congratulation for though on some occasions and at some moments I may have felt a little proud of my advancement yet you can bear me witness that the prevailing feeling has been one of deep solicitude as to the responsibility I have assumed and of distrust of my ability to carry out the view of the Donor. I say of distrust ^ but ^ I do not intend by this that I have had any misgivings as to the success of the Institution could I have it entirely under my own controll, but ^ I speak ^ of my ability to induce the Regents to adopt the best measures and to keep the establishment free from the influence of designing individuals. In this undertaking fraught with important consequences to the country, the world, and to our family I must look to you for support--for sympathy--for assistance--for councel--we must set aside our sensitiveness--cherish the true pride of character which is not ready to notice the slightest want of attention;--which, conscious of merit in itself requires but little from the acknowledgement of the world-- I think a residence in Washington where every one does as he chooses will not have a bad influence on your character--your position will if you chose give you standing and the constant changes in the society ^ inhabitants ^ will enable you to choose to mingle or not in society.

I am certain our children will be better off in this Place than in Princeton unless the society of the latter place changes very much we can have a governess in the family and in the course of a year or two our daughters will be companions for you--ready on all occasions to assist and support their mother; and in Washington not subjected to the mortification which I fear they will be liable to in Princeton. We shall if our lives ^ and theirs ^ be spared, have two grown up daughters in the course of 5 years and if we can procure for them good instruction we may hope to receve as much pleasure from their society as women, as we have done from them as children. Will. bids fair to be a good and useful man and his personal appearance as well as that of the girls are is such that a mother, even as fond as you are, and as proud as fond, need not be ashamd of. The gong has proclaimed the breakfast-- I have been scribling near an hour and can scarcely recollet without an effort what I have written. I can however assure you that my pen has only served to give expression to the genuine feelins of my heart thoughB as you ^ know ^ my fingers are not adequate to the task of expressing the as much as I feel.

Eight o'clock P.M.

I have just come from supper and will now finish my letter. I have been all day engaged in writing out the plan of the Smithsonian and having the article copied3-- I wish to show it to Col. Totten but the copiest has not yet finished the task so that I am not ready to go with it to night as I expected.

This has been quite a beautiful day. The Sun bright but not very warm. You will probably see the address of the vice President in the news paper. I do not think it is quite correct in some particulars though it is very prettily done so far as the expression goes. The articles the English embassador were sold be[fore]C I arrived they went quite high some of the articles were sold to Persons in New York there was quite a rage to get a pece of furniture which had been imported from Europe for the English embassador.4

I hope you have intirely recovered and since [I ha]ve received no intelligence through the telegraph [or oth]erwise I presume you are better though I should [...] pleased to see you and judge for myself [...]ing-- Kiss all the children for me [...] you get about again be careful [...] would give this advise from motives [...] love for we cannot spare you [... c]leaning or work is to be done let others [... lit]tle rest if it be possible for you to do [...] your own--H.Family Correspondence, Henry Papers, Smithsonian Archives. The lower left corner of the last page is torn off, causing missing material increasing from two letters at the beginning of the last paragraph to several words at the end.

Storia dell'elettricità- Lettere di Joseph Henry

1 Henry had written his wife in December that Totten had voted for Francis Markoe. Henry Papers, 6:600.

- 2 Totten was one of three members of the building committee. During his absence in Mexico, Robert Dale Owen and William W. Seaton, both proponents of a large Smithsonian building, had conducted the committee's business with the help of William J. Hough, who took Totten's place. Rhees, Journals, p. 33.
- 3 This was a draft of Henry's "Programme of Organization" (Henry Papers, 7:244-248).

England." DNB; National Intelligencer, April 29, 1847.

- 4 Following a period of difficult relations between the United States and Great Britain, the British ambassador, Richard Pakenham (1797-1868), left Washington on a leave of absence in May 1847 and retired rather than return to Washington. The auction notice called attention to "his very superior Furniture, &c., all of which is of the best kind, and most of it made in
- A Altered from the

B Altered from thout

C Hole in paper.

50. TO HARRIET HENRY

Washing Tuesday morning May 4th 1847

My Dearest

Yesterday as I informed you I was engaged nearly all day in writing out my programe of the organization of the Smithsonian Institution and in getting it copied to day I shall devote in part to the Smithsonian papers and tomorrow if nothing prevents I shall start for home. I do not think however that you need expect me before Friday. A I will write a line to day to Mrs Ludlow1 telling her that I shall be in the city on Thursday and that she is expected to go to Princeton with me on Friday.

I went to bed last night a little after nine slept well and now feel in good condition for the duties of the day. I am writing this while the servant is brushing my clothes.

I have just finished a letter to Mrs L2 and have informed her that you had been quite unwell and that unless she made her appearance in Princeton with me I should possibly be received very coldly and that you would be in danger of a relapse. I have informed her that she must be ready with her family to start on Friday at the fartherest. I do not know who are to accompany her and therefore I used the expression "you and your's." Will. I suppose will have his establishment in good condition and I think it will be well to get the addition to the seat I suggested made as soon as possible. It should be small not more than eight inches across just sufficient for the person whoB drives to sit on and made with a toung a litle less in width to shove into two cleats on the under side of the present seat. To make the fastening stronger a strap of iron may be screwed across the under side of the front of the seat as a b in the Figer which represents the under side of the seat turned upwards. Perhaps the whole may be most easily fixed by three straps of iron see Fig 2nd screwed upon the lower side of the seat and into which the toung of the drivers seat may be thrusted slid.

3 o'clock I have just returned considerably tired from the Mall--the house I though of hireing and the patent Office. The foundation of the building is commenced but little progress has yet been made the workmen are waiting for the supply of water through the pipe which is about being put down. I went from the grounds to the house but could not get entrance. I found however my way into the garden which is very beautifully laid out and all things around appears in good condition. From the house I went to the Patent office to look after some of the effects of Smithson sent up to the Cost Survey Office. Among the articles which was found was the grat coat of Smithson--a queer looking article.

12 o'clock at night--I have returned from Col Tottens. I call this evening first at Mr Walkers found him apparently well but unable to speak or rather the physican had forbidden him to use his voice. He was apparently pleased to see me and read with apparent interest my schedule of the organization of the Smithsonian Institution.

From Mr Walkers I went to Col. Tottens had a long talk with him on the subject of the Smithsonian and gave him a copy of my plan of organization with which he was well pleased and entered warmly for him into the plan items of the scheme-- All the house apparently have gone to bed but I could not resign myself to sleep until I had devoted a few minutes to you-- I recollect that in my letter of yesterday or the day before I spoke of needing your sympathy your support & assistance but do you not require mine--have you no duties as the mistress of a Family as the mother of my children which do not require my assistance. You have many--many cares--many days of suffering--many days of hard labour and many moments of vexation from bad servants--from the thousand ills of house keeping and yet you are on all occasions to be at the bidding of Husband and children and nothing can be done without mother--verily you are a pet but my feelings tell me the pet is sometimes sadly abused. You know however bad as we use you that we do love you and that though no excuse on our part will I know go a great ways towards reconciling you to the Lot of Woman.

From yours as ever

Family Correspondence, Henry Papers, Smithsonian Archives.

1 Anna Ludlow and her husband, John, were old friends of the Henrys from their Albany days. Henry Papers, 2:338n.

2 Not found.

A Altered from f

B Altered from to

51. TO HARRIET HENRY

Washington wednesday morning 7 o'clock 1847 May 5

My Dearest

I have written to you every day since my arrival and therefore this is my fourth epistle I hope you will receive the whole number though they contain nothing of importance. I say nothing of importance meaning thereby of interest to any Person but yourself for I am happy in beleiving that every thing however, trifling which relates to me, is of high importance to you. And though it is impossible that I should appear in your physical eyes quite as great and as faultless a man as I may in the mental vision of those who have only heard of me from a distance yet I feel assured and rejoice in the assurance that I ^ am ^ very dear to you and that you are even more tenderly and anxiously attached to me on account of the faults of character which must be glaringly exhibited to one in as close communion with me as you are. I was in my early life exposed to many temptations and I can never be sufficiently thankful that I have been preserved as I have been. "You may love me for the dangers that I have escaped and I will love you for pitying them."

I think the transfer to Washington when once it is made will be much less disagreeable than you immagine. YouA as well as myself will be roused to greater effort-- Your time and thoughts have been for several years past engrossed necssisarily with the ^ whole ^ care of the Family the physical and moral developement of our children, but as they grow older their intellectual faculties wil require more attention. You will be called on to devote with them considerable time to reading and mental operations which will rouse your energies in the direction in which they ^ you ^ are well qualified to excell. Mary will soon be old enough to take an interest in works of ^ a ^ higher order than those which now occupy her attention-- She wll read to you while you are sewing and your comments will as they do now but in a higher degree expand her mind. We must endeavour to get for our little Girls a Governess in the Family--if possible a Lady of good education, accomplished maners and of a good heart and temper. Mary requires a good deal of attention as to her carriage & her personal habits as to ease of action--Helen will require less of this and Carry least of all; she is a Lady born. The substratum ^ foundation ^ and the material of the character of each is admirable and they only require a little attention as to the embellishment. Will. I presume will be much pleased with the expected visit of Richard. I I must take him more under my charge and perhaps I can do this more effectually by carrying him with me when I travel we will then be more thrown together and a ^ more ^ free communication established.

I am now going to the Treasury office and shall not return until 3 O'clockB when I may perhaps scribble a few more lines. I start for home this evening or in the early train tomorrow. I expect to be in Princeton on Friday but should I not arrive until saturday do not be uneasy-- For a time adieu--

Just through dinner--was quite hungry spent the morning in the west part of the city visited J. Q. Adams2 in his 80th year remarkable memory related several interesting annecdotes of history-- Exhibited to him my plans of the Smithsonian Institution with which he was pleased.3 I promised to furnish him with a copy-- I shall not be able to get off until tomorrow morning.

The day has been warm but plesant the spring is quite late for this place though vegetation is much ^ perhaps I should say considerably ^ farther advanced than in Princeton. I [...]C my letter to Mrs Ludlow yesterday so that she will be prepared for my arrival tomorrow.

I hope to find you very much better on my return and shall be much disappointed if I do not receive the accustomed greeting inD the entry when I enter the door. Give my kind regards to Mary Ann LaGrange4,E and thank her for the use of her watch it has done me good service. I was however obliged to purchase a key for the article.

Kiss all the children for me and ^ receive ^ the unnecessary assurance that I am as ever

Your--H.

Family Correspondence, Henry Papers, Smithsonian Archives.

1 Presumably a son of Anna and John Ludlow.

2 John Quincy Adams, representative from Massachusetts and former president of the United States. Henry had first met him in 1836. Adams played a major role in debates over the Smithson bequest, which he thought should be used to fund a national observatory. DAB; Henry Papers, 3:135; 6:464n.

3 In his diary, Adams noted a visit from Henry, "who h[ad] a long conversation with me on the management of the Institution--very edifying." In his more formal diary, Adams noted that Henry "conversed in a very edifying manner upon the proposed management of that Establishment" but then continued: "Sunk as I have always apprehended it would be, into a nest of jobs for literary and Political adventurers." Diary entries for May 5, 1847, from "Rubbish IV" and Adams's formal diary, respectively, Adams Family Papers, Massachusetts Historical Society; both are quoted in Wilcomb E. Washburn, ed., The Great Design: Two Lectures on the Smithson Bequest by John Quincy Adams (Washington, 1965), p. 30.

4 An old friend from Albany. Henry Papers, 2:43n.

A Altered from f

B Altered from to

Storia dell'elettricità- Lettere di Joseph Henry C Hole in paper. D Altered from on

E Altered from Lagrange