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who has been in the Institution since I believe the year 1810 or before, does not know of any especial activity on Mr Smithson's part or remember any circumstance which might lead to such a conclusion. Persons are often importantly active who are not formally so. Indeed sometimes they are the most valuable but I cannot in the present case recover any indications of activity here.⁵

I send you all our printed documents. The list of Members and the Charters Byelaws &c &c I have [. . .]⁶ out, also a set of the early Journal numbers. They are very scarce & all are in the packet that were published. As Mr Vaughan⁷ wants the packet I may not detain them long enough to give them a decent exterior but I hope you will accept them as they are.

Ever my dear Sir your very faithful Servant

Signed M. Faraday

⁵ Faraday was relating what many others would subsequently discover—information about James Smithson was difficult to obtain. Smithson's papers, brought to the United States in 1838, were destroyed in the 1865 fire.

As Secretary of the Smithsonian, Henry attempted to gather information about Smithson's life and work. As future volumes will show, he was particularly interested in dis-

covering the motives for Smithson's enigmatic bequest to the United States.

Leonard Carmichael and J. C. Long, *James Smithson and the Smithsonian Story* (New York, 1965), pp. 43-44; James Smithson Collection, Smithsonian Archives.

⁶ The copyist left a blank here.

⁷ Either William or Petty Vaughan.

TO A.A. DE LA RIVE

De La Rive Papers, Bibliothèque publique et universitaire, Geneva ¹

Princeton College of New-Jersey
United States Nov 24th 1841

My Dear Sir

I have long intended to write to you but have deferred doing so from time to time for no good reason, but merely from a habit of procrastination. I am however just now induced to overcome my inertia by a conversation relative to yourself with my friend Dr. Hare who returned about 3 weeks ago in improved health from his European tour. He informed me that when he was in Geneva you were afflicted in your family by an accident

¹ Henry enclosed this letter in a short letter dated November 29 (also in the *De La Rive Papers*). The second letter introduces the bearer, Robert Baird. See Henry's introduction of Baird to Melloni of November 29,

printed below.

A partial Mary Henry Copy of a November 12 draft of this letter is in the *Henry Papers*, Smithsonian Archives.

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which had happened to one of your sons and by the consequent illness of Madam De La Rive. I hope these causes of grief have passed away and that you are again enjoying in your interesting family that happiness which should result from the successful prosecution of science and the possession of an enviable reputation.

Dr Hare showed me the first no. of the Archives of Electricity and I am so much pleased with the work that I have ordered it through M. Berteau of New-York, from your agent M Anselin of Paris. I have sent you since my return from Europe copies of two nos. of my "*contributions to electricity and magnetism*," which I hope you have received. I am now engaged in preparing for the press the 5th no. a copy of which I hope to be able to send you in a short time. I have but little time for research. My college duties occupy so much of my time that I can only experiment during the vacations and these embrace but a few weeks in the year.

I have little news in the way of science to communicate. There are few persons in the United States who engage in original research, although there are more persons among us interested in popular science than in any other part of the world. Those branches of science which depend on observation, occupy most attention. Geology has become very fashionable among us and the unexplored regions of the great west afford a wide field for its cultivation. A considerable portion of the public lands have been geologically examined at the expense of the government and 17 of the individual states have ordered surveys of their possessions. Mr Lyell the celebrated English Geologist has been called from London, to give a course of lectures in Boston² on his favourite subject. His course, which is just now in progress, is to consist of 12 lectures for which he is to receive 500 £s sterling. He intends to remain a year in this country studying the rocky formations and comparing them with those of Europe.³ We have now two magnetic observatories in operation one in Philadelphia under the direction of my Friend Professor Bache and the other at Boston under the superintendence of a Professor Lovering,⁴ of the university at that place. The observatory at Philadelphia is furnished with a complete set of German instruments both for magnetism and meteorology, the other observatory is provided with a set of English magnetic instruments. Both these establishments are supported by private subscriptions but we have some hopes that the general government will make an appropriation of money for the

² At the Lowell Institute.

³ For other comments by Henry on Lyell's visit, see his letter to Bache of August 10, 1841, above, and that to Torrey of February 19, 1842,

below.

⁴ Joseph Lovering (1813-1892), Professor of Mathematics and Natural Philosophy at Harvard. DAB.

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establishment of several other observatories in distant parts of the country.⁵ Two series of meteorological observations of considerable magnitude are kept in our country one under the direction of the officers of the army at the different military posts and the other by the several academies of the State of New-York. These furnish some interesting results in reference to the simultaneous directions of the wind, at distant places, and also in regard to the appearance of the aurora borealis. The mechanic arts however receive most encouragement in the United States. We pride ourselves much on the number, the beauty, and speed of our steamboats; and on the number and extent of our canals and rail-roads.

Some attempts have been made in this country to get up a society similar to the British Association but the success as yet has been but partial.⁶ The geologists have formed a society of the kind which has held two annual meetings, and apparently with good effect; but I doubt the propriety of forming an association which should embrace every department of science.⁷ We have among us too small a number of "working men" and too large a number of those who would occupy the time of the meeting in idle discussion. The British Association has undoubtedly done much good particularly in advancing those branches of science which depend on observation by prescribing the general forms and in furnishing the money necessary to the observations but it appears to me that its usefulness, for the present, is nearly at an end and that its friends would do well to suspend its operations for a while. The last meeting appeared to me little better than a failure.⁸

You have heard of the wonderful accounts from America of the attempts to apply electromagnetism as a moving power in the arts—these accounts

⁵ Although the American Philosophical Society had appealed to Congress in 1839 for such an appropriation, the effort was essentially dead by this time. See *Henry Papers*, 4:315-320.

⁶ For one such attempt, see *Henry Papers*, 4:114-115.

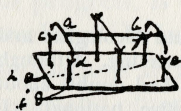
⁷ The Association of American Geologists, "the first viable national association for scientists," grew out of the efforts of geologists working on the New York Natural History Survey. The survey geologists found coordination necessary, and those from rural areas especially appreciated being able to meet and exchange information with their colleagues. The organization began small and with a narrow focus; eighteen state survey geologists from seven states attended the first meeting in Philadelphia in April 1840. The focus gradually broadened, the name being changed to

the Association of American Geologists and Naturalists at the 1842 meeting. Although Henry and other scientists had doubts about establishing a comprehensive national scientific organization in 1841, by 1847 they supported the move to turn the still fairly specialized Association of American Geologists and Naturalists into the all-encompassing American Association for the Advancement of Science. See Sally Gregory Kohlstedt, *The Formation of the American Scientific Community: The American Association for the Advancement of Science, 1848-60* (Urbana, Illinois, 1976), especially chapters 3 and 4; quotation from p. 60.

⁸ According to John Torrey, Henry characterized the BAAS as a "squeezed lemon." Torrey to J. W. Bailey, August 23, 1842, Bailey Papers, Boston Science Museum.

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have all been exaggerations and no advance of any importance what ever has been made. The persons who have been engaged in the attempts are those who have no knowledge of science and were willing to obtain a little notoriety at the expense of truth and honesty. I believe the project at present is entirely abandoned in the United States, at least I have heard, during the last year, of no new attempt of the kind. While on this subject you will pardon me for mentioning that in the first number of your Archives page 27, you have done me the injustice of ascribing to Professor Richie the invention of the first electro-magnetic machine, instead of giving me credit for the same. The invention was made by myself, immediately after my experiments on the construction of large electro-magnetic magnets and published about 6 months after, in the 20th vol. of Silliman's journal for 1831 (page 340). As soon as this no. of the journal was received in England Dr. Faraday (as he informed me himself) constructed a machine precisely like the one I had described, and exhibited it, as my invention at a meeting of the Royal Institution; not withstanding this, I am sorry to be obliged to say that Professor Richie published his account of a machine on the same principle in the transactions of the Royal society without alluding to my previous labours. The affair is not of much consequence but we find in this country that unless we are somewhat tenacious in relation to our rights we are liable to have our discoveries and inventions claimed by others owing to our distance and the want, (before the late triumph of steam) of rapid communication. I shall therefore look in some subsequent no. of your Journal for that correction of the statement (page 27) which on examination you may consider my due.⁹



I invented about two years ago a little machine, of which no particular account has yet been published but which you may consider of some interest since it is moved by a principle which has not as far as I know been applied to produce motion of the kind. I allude to the consecutive repulsion of the several parts of a galvanic current discovered by Ampere. You will readily understand the machine by a reference to the figure. *a b* is a piece of copper wire supported on an axis so as to vibrate freely in a vertical plane and terminated at the two ends by cross wires the extremities of which dip into shallow cups of mercury *c d e f*—*h i* are cups of mercury connected with the poles of the battery. When the cross wire at *a* is down so that its ends rest in the cups *c d* the current passes through it and repulsion takes place; the ends are thrown out of the cups and the current is closed at the other ex-

⁹ Henry might have known that Hare had already complained to De La Rive about this. See Hare's letter of August 11, 1841, printed

above. In a letter of May 8, 1846 (Henry Papers, Smithsonian Archives), Henry again asked for a correction.

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tremity by bringing the other ends in contact with the cups *b c*. Repulsion again takes place and thus the motion is kept up.¹⁰

It would give me much pleasure to receive a line from you. We were strangers together in England and since then I have been interested in whatever concerns you. Give my kind regards to your Lady and accept the assurance for yourself that I am your

Friend and Serv.

Joseph Henry

Please to give my respects to your friend M Prevost¹¹ of London. He still lives in my remembrance and the portrait of his Father which he presented to me is now one of the embellishments of our parlor.

¹⁰ For this motor, designed in April 1840, see *Henry Papers*, 4:342-343.

¹¹ Henry had met John Lewis Prevost (1796-1852) in London in 1837. Son of Pierre Prevost of Geneva, John Lewis Prevost was a London merchant and served there as Consul General

of the Swiss government. Prevost was a Fellow of the Geological Society of London and was Treasurer at the time of his death. *Quarterly Journal of the Geological Society of London*, 1853, 9:xxv-xxvi.

TO ALEXANDER DALLAS BACHE

Mary Henry Copy, Henry Papers, Smithsonian Archives

Nov. 28. 1841¹

Please to put my name to the Report of the committee on the pendulum experiments. I think the offer should be accepted.²

¹ The date is clearly indicated as November 28, 1841. The nineteenth, however, was when the report referred to in the letter (and discussed in footnote 2, below) was due at the American Philosophical Society. It is conceivable that Henry wrote Bache on November 18, and that Mary Henry miscopied the date. This fragment is all that apparently remains of what was probably a longer communication.

² The report referred to the contents of a letter received by the American Philosophical Society from Charles (Károly) Nagy. Nagy (1797-1868) was a Hungarian mathematician and natural philosopher, and member of the relatively young (f. 1825) Hungarian Academy of Sciences. On a trip to the United States in 1832-1833, he coordinated the opening of correspondence between the Academy and the APS, and on April 19, 1833, he was elected an APS member. Nagy maintained an active cor-

respondence with the Society on subjects such as telescopes and microscopes, charts of Hungary, the Hungarian Academy's yearbook, calendars, and Hungarian arithmetic books. These items indicate the nationalist pride that was evident in the founding within the bounds of the Austrian Empire of an independent scientific society, which established its first corresponding relationship with a non-Germanic, even non-European society located in a country with a libertarian reputation. Constant von Wurzbach, *Biographisches Lexicon des Kaiserthums Oesterreich*, 60 vols. (Vienna, 1856-1891), 20:60-62; Francis S. Wagner, "The Start of Cultural Exchange between the Hungarian Academy of Sciences and the American Philosophical Society," *Hungarian Quarterly*, 1965, 5:90-97; Poggendorff, 3:954.

The report to which Henry referred was prepared by an APS committee which con-