1. The meeting of the National Academy of Sciences was held in New Haven from August 4 through August 6. True, *National Academy,* p. 385.

2. A quotation from Virgil's *Aeneid,* book I, line 26. The context of the quotation, meaning "stored deep in her mind," was the goddess Juno's grudge against Troy because of an insult that rankled her long after the event.

3. *Henry Papers, 7:*637, 638n.

4. Adrien Henri Laurent de Jussieu (1797–1853) was a third-generation botanist who had succeeded his father as professor of botany at the Muséum National d'Histoire Naturelle in 1826. *DSB.*

5. Gray's first significant international recognition would not come until his election to the Royal Society in 1873. A. Hunter Dupree, *Asa Gray, 1810–1888* (New York, 1968), p. 354.

6. Agassiz's reaction to his defeat has been interpreted by his biographer as an indication of how out of touch he was. He recognized neither Gray's influence within the American scientific community nor the growing unhappiness with his own dominance of natural history in the United States. Edward Lurie, *Louis Agassiz: A Life in Science* (1960; Chicago, 1966), p. 343.

7. John Call Dalton, Jr. (1825–1889), professor of physiology at the New York College of Physicians and Surgeons, was a European-trained researcher and medical education reformer. *ANB.*

8. S. Weir Mitchell.

9. Augustus Addison Gould was a Boston conchologist. *Henry Papers, 7:*492n.

10. Each of the two classes of the academy—mathematics and physics, and natural history—was further subdivided into sections. There were five sections under mathematics and physics and three under natural history. Nominations for vacancies were made by the sections. The classes then selected three candidates from among the section nominations and presented these candidates in preferential order to the full membership at the meeting for the final decision. If a particular section did not present any nominations, the academy as a whole could offer them. In the case of a tie among the voters in a particular section, such as the split between Gould and Agassiz over Baird, the nomination did not go forward to the class. *Annual of the National Academy of Sciences for 1863–1864* (Cambridge, Massachusetts, 1865), pp. 20–21.

Asa Gray viewed the events differently from Agassiz. He asserted that Agassiz was the only one of the eleven-member natural history class present at the meeting who was not in favor of electing Baird. As far as Gray was concerned, Agassiz and his friends among the physicists, chemists, and astronomers tried to obstruct the will of the naturalists. Gray claimed that the final vote was fifteen to eight, with eight physical scientists and mathematicians, including Henry, Stephen Alexander, and John Torrey (who was officially a chemist) joining seven naturalists. According to Gray's version of the final tally, Baird was supported by the naturalists at the meeting by a vote of seven to one; among the physical scientists and mathematicians, his margin of support was eight to seven. Gray to George Engelmann, August 16 and September 9, 1864, Englemann Papers, Missouri Botanical Garden Library.

222. TO LOUIS AGASSIZ

Smithsonian Institution
Aug. 13th[–28,] 1864

My Dear Professor

I have just returned to this city and find your letter[1] of the 8th awaiting my arrival. At the Depot at Phild I met our friend Mr. Felton[2] who after some remarks relative to the family of his lamented Brother,[3] turned the conversation to yourself; and said, that when he saw you, a short time before, he thought you were looking very ill,—that you were too much occupied, with various matters, and that he had strongly urged you, on[A]

your own account, and on that of your family, to give up all care, and for a time to think of nothing but the reestablishment of your health.

The perusal of your letter has rendered the importance of the advice of Mr. Felton strikingly evident to me; and in view of the present condition of our much esteemed friend Professor Bache, whose malady, I trust may be but temporary, I beg that you will take a more cheerful view of the proceedings at New-Haven; or rather that you will banish them entirely from your mind. It is of much more importance to the science of the world that your health and life should be preserved than that the academy should be rapidly advanced to your ideal standard of perfection. In this Democratic Country we must do what we can, when we cannot do what we would. We must expect to be thwarted in many of our plans and learn to bow before defeat with the consolation of knowing that if we have not succeeded in our aim we have at least deserved success.

After a calm review of the proceedings at New-Haven I think them much more favourable than under all the circumstances of the case there was reason to expect they[B] ↑would↓ be at the commencement of the meeting.

Permit me to give you a candid and free exposition of my views of the matter and for this purpose to go back to the beginning of the Academy— Several weeks before you and the other originators of the academy came to Washington Professor Bache asked my opinion as to the policy of organizing a national association under an act of Congress. I stated, in reply; First that I did not think it possible that such an act could be passed with free discussion in the House—that it would be opposed as something at variance with our democratic institutions. Second—that if adopted it would be a source of continued jealousy and bad feeling—an object of attack on the part of those who were left out— Thirdly—that although it might be of some importance to the Government yet it would be impossible to obtain appropriations to defray the necessary expenses of the meetings and of the publication of the transactions. Fourthly that there would be great danger of its being perverted to the advancement of personal interest or to the support of partizan politics. With these views, I thought, Professor Bache was impressed—he said no more to me on the subject and I heard nothing farther in regard to it until after the whole scheme was organized and in charge of Mr Wilson of the Senate.

Besides the objections I had presented to Professor Bache I did not approve of the method which[C] was adopted in filling the list of members. It gave the choice to three or four persons who could not be otherwise than influenced by personal feelings at least in some degree; and who could not possibly escape the charge of being thus influenced. I did not

however, make any very strenuous objections to the plan because I did not ↑believe↓ it could possibly become a law; and indeed there are very few occasions when acts of this kind could be passed without comment or opposition. After, however, it had become a law I resolved to give the academy my hearty support; and I have since faithfully and industriously endeavoured to advance its interest.

My anticipations in several particulars have been realized—an antagonism, such as I feared, has been produced in the minds of those who think themselves ill used in being left out; while a considerable number of those who were elected feel that they ought to have been consulted in making up the list of names. The feeling also exists, to a considerable extent, that the few who organized the academy intend to govern it; and I think this was the animus which excited the determination to elect Professor Baird. He was the choice of a large majority of the cultivators of Natural History; and although your opposition was honest in intention, and your position correct in general principle yet I think that had you prevailed in your opposition, a majority of all the naturalists would have resigned; and a condition of affairs would have been produced deeply to be deplored. I fully agree with you in opinion, and I presume the philosophical world would also concur with you, that as a class of investigations ↑those↓ which relate to Physiology and the mode of production and existance of organic forms are of a higher order than those which belong to descriptive Natural History. The good however which two persons may have done to science in these two classes ~~of~~ will depend on the relative amount, as well as, on the character of their labours. Besides this you ought to have commenced with the application of the principle of the higher investigation, in the formation of the academy, for you could not reasonably expect that any member would vote to disparage his own persuit.

It is true I voted for Mr Baird and taking all things into consideration I am sure I did right in doing so. I do not agree with you in thinking that my having voted for him will give him the power to control the policy of the Institution; neither do I think that the proposition you made at the meeting of the Board of Regents has any connection whatever with the vote in the Academy. It is the same which I have advocated from the first, and which I doubt not will meet the approval of the majority of the intelligent naturalists of the world. If Mr Baird should attempt to interfere with the policy of the Institution I would not hesitate to ask him to resign, and to insist on his doing so; as I did in the case of Mr. Jewett. But I have not the least idea of any trouble with him in this way; or that for many years to come any thing can be done in the way of carrying out your

proposition. Had the war been brought to an end last spring we might have indulged a hope of this kind; but the immense additions which have been since made to the national debt will induce a very cautious policy in regard to the appropriation of the public funds.

You do me but simple justice in supposing that I would not willingly join in any intrigue to advance personal or party ends. In the whole course of my life I have never engaged in any thing of the kind and it is now too late for me to change my character in this respect. It is necessary however sometimes to have an eye on the acts of others in order[D] to thwart their improper designes.

I think you are regarding this matter of the academy in so serious a light that it will unfavourably affect your health and spirits. I fully agree with you in opinion as to the desirableness of elevating the standard of American science; but we must recollect that great changes are seldom or never produced per Saltum[4] and that we frequently waste our strength in indeavouring to suddenly overcome an obstacle which will gradually give way under a gentle but constant pressure. I fear had you succeded in excluding Baird from the Academy on the ground of the character of his investigations you would have aroused[E] a large amount of personal opposition and have been subjected to criticisms and other annoyances which to a nature like yours, craving love and sympathy, would have been exceedingly painful. Why trouble yourself so much about the character of American science which can only be improved with the social and political conditions which tend to encourage and develope it. You have already done good service by your presence in this country,—by your immediate instruction and by the enthusiasm and sympathy which you never fail to awaken. You are formed to lead men by the silken cords of love rather than to urge them ↑on↓ by the rough method of coercion. Let me beg of you therefore, my Dear Professor, to first take care of your health and secondly to devote yourself for the remainder of your life to those investigations which have given you so wide and permanent a reputation and in which at every step you can elevate ~~elevate~~ yourself in your own self esteem as well as in the admiration of the world, and afford to look down with complacency on the means to which ordinary men resort to raise themselves ↑into↓ temporary notoriety.[5]

It is lamentable ↑to think↓ how much time, mental activity, and bodily strength have been expended among us during the last ten years, in personal altercations, which might have been devoted to the discovery of new truths;—to the enlargement of the bounds ↑of↓ knowledge, and the advancement of happiness. There is a cause for this which might be discovered; and I will venture just to mention a principle of action which

may ↑have had↓ some influence in producing the results. I allude to the the principle of supporting our friends right or wrong. I grant that this principle of action springs from the generous impulse of a warm heart; but it does not receive the approval of the moral judgement of a cool head. We are not true to our friend if we follow, or assist him, in a single step in the wrong direction. You lost an invaluable friend in Professor Felton ↑who↓ with his unselfish disposition, and expanded sympathy ~~he~~ ↑ever↓ acted as a bond of harmony ~~among~~ ↑and union between↓ all the varied characters that constitute the Faculty & associates of Cambridge;[6] and should it be the design of Providence to remove Professor Bache, which Heaven in its mercy forbid, a similar[F] change, though of a somewhat different character will be felt in the circle of which he is the controlling center.

August 28th Thus far I had written on the day of the date of the first part of this letter; but I was a little doubtful as to how you might receive some parts of the communication and amidst an unusual pressure of engagements I have suffered it to remain in my portfolio until tonight, when I am on the eve of leaving this city with my family. On[G] reading ↑however↓ what I have written I am sure that you will receive it in the same spirit in which it is written and although you may not agree with me in all the positions I have taken I trust you will find, in none of them, cause of offense.

I have never been more severely worked than I have been since I last saw you in New-Haven. On account of the illness of the wife & daughter of Professor Baird he was obliged to leave this city about the first of July; and the unexpected and very sudden death of the wife of Mr. Rhees[7] has rendered him unfit to discharge the duties of his office and he has gone to the western part of the state of N.Y. I have therefore been alone in the Institution, and with the call upon my time from the Light-House Board—the permanent commission and other business connected with the Government I have scarcely had a moment of rest, except while in bed, for some weeks past.

I start tomorrow morning at six oclock to take Mrs. Henry & Helen to Chesnut Hill near Phil[d] and Mary and Caroline to Shelter Island, to pay a visit to Professor Horsfords family which ~~they have~~ ↑has been↓ long owed. Helen is not very well though I think she is somewhat better—certainly not worse than when you were last in Washington.

I have written to Professor Baird to give him a statement of your course in regard to his election.[8] I shall give him, when we meet a more full exposition of your views. He should know that his election was not entirely a compliment to him since some voted to sustain a principle, and

others voted for him because he was the ostensible choice of the majority of the naturalists present. I shall probably visit Boston some time before the middle of Oct. and will then confer with you on the topics of this letter. With kind regards to Mrs Agasiz I remain your

Friend &c
Joseph Henry

Professor Agassiz

Benjamin Peirce Papers, Houghton Library, Harvard University.

The portion of the letter dated August 13 was previously printed, with variations in the text, in Nathan Reingold, ed., *Science in Nineteenth-Century America: A Documentary History* (1964; Chicago, 1985), pp. 212–216. Reply: Retained copy, November 15, 1864, Agassiz Letterpress Books, Museum Archives, Library, Museum of Comparative Zoology, Harvard University.

1. Doc. 221.
2. Samuel Morse Felton (1809–1889) was a Harvard graduate and railroad engineer and executive. During the Civil War he aided the Union cause by facilitating the transportation of troops by railroad. *DAB.*
3. C. C. Felton.
4. At a single bound.
5. In his reply, Agassiz agreed to "let bygones be bygones if nothing worse groes out of it than the premature election of a gentlemen who sooner or later should have been elected."
6. In addition to the conflict between Gray and Agassiz over evolution, there was a rivalry between Benjamin Peirce and George Bond over control of the Harvard College Observatory. This led to the exclusion of Bond from the National Academy of Sciences. Bessie Zaban Jones and Lyle Gifford Boyd, *The Harvard College Observatory: The First Four Directorships, 1839–1919* (Cambridge, Massachusetts, 1971), pp. 110–114, 126–131.
7. Laura O. Clarke Rhees. *ANB,* s.v. "Rhees, William Jones."
8. See Doc. 225.

223. TO ALEXANDER DALLAS BACHE

Washington Aug 15th
1864

My Dear Professor

I reached home on Wednesday[1] in a tremendous hot term, in which there has been scarcely no let-up of any consequence for several weeks— I came in the cars with Henry Carey who made kind enquiries for you, and amused me very much with [---] ↑his↓ very ingenious and novel though partial views in Political Economy.[2]

I found wife and daughters well, but almost melted with the extreme heat. The vegitation of the Smithsonian grounds are as scorched as if a fire had passed over it and every where the indications of an extreme drought is more striking than I ever before beheld them.

The meeting of the Academy went off on the whole, very well; although our friends, from Cambridge, were much displeased because they did not suceed in preventing the election of Professor Baird. They