to be favored with your promised course of Lectures. Please answer this last inquiry at your earliest convenience.⁵

I am very respectfully Your obedient Servant Joseph Henry Secrtary S.I.

Guyot Papers, Collection of the Historical Society of Princeton. In Edward Foreman's hand with Henry's signature.

- 1. Henry is responding to Guyot's letter of November 24, 1852, Incoming Correspondence, Meteorological Project, RU 60, Smithsonian Archives.
- 2. Metcalf & Company was a printing firm that did work for the Smithsonian, including the printing of Guyot's meteorological tables and forms. Smithsonian Daybooks, vol. 1, p. 335; Guyot to Henry, November 24, 1852.
- 3. The Massachusetts data was not published.
 - 4. Henry is referring to W. H. Dove, "Tem-

perature Tables," British Association Report for 1847, pp. 373–376 and tables; Dove, "Supplement to the Temperature Tables Published in the Report of the British Association for 1847," British Association Report for 1848, p. 84 and tables

5. Guyot agreed to lecture beginning February 1, 1853. He gave a course entitled "The Harmonies of Nature and History." Guyot to Henry, January 26, 1853, Incoming Correspondence, Meteorological Project, RU 60, Smithsonian Archives; Smithsonian Report for 1853, p. 25.

249. JOSEPH HENRY AND ALEXANDER DALLAS BACHE TO JOHN PENDLETON KENNEDY

Smithsonian Institution December 1 1852

Hon John P Kennedy Secretary US Navy Sir

In compliance with your request we have the honor to address you in relation to the importance of the expedition proposed for renewed search for Sir John Franklin by the Greenland route and the supposed open Polar sea north of Baffins Bay.

You have been made aware of the intention of Mr Grinnell¹ and others to prosecute the search for Sir John Franklin and his parties in this direction, and have already shown your interest in the expedition in which you will have the sympathy of the country by detailing Dr EK Kane MD, Surgeon, US Navy, to take part in it. The enthusiasm which this officers manifested on the occasion of the former expedition commanded by Lt De Haven,² US Navy, his peculiar qualities as an explorer, his varied resources of knowledge and the valuable results which he brought back as his contribution to those of the Expedition, point him

out as eminently fitted for the task which he proposes to undertake

under your auspices.

The facts set forth by Dr Kane in the breif3 which we present herewith and his reasoning upon them seem to give a basis of strong probability of success to his proposed search in the direction of Greenland; in his view of the value and importance of a land expedition, and especially from this region which presents so many resources further north than

any other is well sustained by both fact and argument.

Every facility compatible with the power of the executive part of our government should be afforded an expedition the object of which is prompted by the best feelings of enlightened humanity; for however small may be the probability of the present existence of the missing explorers, search should be continued until their fate has been definitely settled. Should the expedition prove unavailing with reference to its primary object it cannot fail to solve scientific problems of very considerable interest to science. Such as the physical geography of Greenland itself and the supposed existence of the open polar sea; the geology north of previous expeditions; the meteorology especially in reference to the pole of climate, and the further investigation of the causes which remove it from the geographical pole; the magnetism of a region lying between the American and the Asiatic magnetic north pole, and influenced unequally by them in consequence of their very different intensities as well as their relative positions. The further investigation of the currents which keep open the northern part of the Baffins Bay while the middle is occupied by ice; the temperature of these polar waters at the surface and at considerable depths where they are beleived to shew anomalies connected probably with their degree of saltness, and the different laws affecting the expansion of fresh and salt water at temperatures above but near the freezing point, the law of change of temperature with the depths. The collection of specimens of general Natural History which of itself may always repay the cost of an expedition to portions of the polar regions not fully explored. New observations of solar and terrestial radiation, of refraction and the like in regions where they present very strongly marked phenomena.

An outline of these various objects will be found in the breif of Dr Kane to which we have before referred. They present so many salient points of interest as to justify us fully in recommending the expedition to your notice, and for every assistance which you may be able to give it, by the executive action of your department, or through a recommen-

dation to Congress.

When the scale of the expedition and the general outline of its pur-

poses have been determined, minute instructions for its guidance in reference to scientific observations would no doubt be furnished by the Smithsonian Institution, the American Philosophical Society, and the American Academy of Sciences.

With the liberality already shown by individuals in respect to the expedition and especially the determination of Mr Grinnell to do all in his power for its success, a moderate aid from Congress and such facilities as the executive department of the Navy could afford would enable it to realize important scientific results in addition to its special benevolent object.⁴

Very respectfully Your obedient Servants A. D. Bache Joseph Henry

Kennedy Collection, Archives of the Peabody Institute of The Johns Hopkins University. In Edward Foreman's hand, with Henry's and Bache's signatures.

1. Henry Grinnell (1799–1874) was a New York merchant and a founder of the American Geographical and Statistical Society. He had financed an American expedition to the Arctic in 1850–1851 to search for missing English explorer Sir John Franklin. *DAB*.

2. In addition to his command of the Grinnell Expedition, Edwin J. De Haven (1816–1865), a career naval officer, had served with the Wilkes Expedition and on the staff of the Naval Observatory. He joined the staff of the Coast Survey in 1853. DAB.

3. Copy, Kane to Kennedy, Kane Papers,

American Philosophical Society.

4. Although Kennedy was willing to allow Kane to go on the expedition, Congress refused to provide an appropriation for supplies and equipment. Eventually, Grinnell funded this ex-

pedition, as he had Kane's first exploration of the Arctic.

Perhaps the best measure of Henry and Bache's influence is the difference between the orders Kennedy issued to Kane on November 27, 1852, and those issued on February 9, 1853, after Kennedy received this letter. The former simply commanded Kane to look for Franklin. The latter also authorized Kane to pay attention

to objects of scientific inquiry; particularly to such as relate to the existence of an open Polar Sea, terrestrial magnetism, general meteorology, and subjects of importance in connection with natural history.

Vincent Ponko, Jr., Ships, Seas, and Scientists: U.S. Naval Exploration and Discovery in the Nineteenth Century (Annapolis, 1974), p. 189.

250. FROM J. D. PARKER¹

Steuben Decr 1st 1852

Prof Henry, Dear Sir,

I herewith send my Nov^r Return, but am not sure of its correctness as to the Baratomical part, as^A I am not sure of understanding of its Reading, So I will give you how I read it & if you wrong, you can correct my Return & me—take for instance the Sunrise Observation of the 30th