

THE GENESIS OF THE NATIONAL MUSEUM.

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When, in 1826, James Smithson bequeathed his estate to the United States of America "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men," he placed at the disposal of our nation two valuable collections, one of books and one of minerals.

In the schedule of Smithson's personal effects, as brought to America in 1838, occurs the following entry:

Two large boxes, filled with specimens of minerals and manuscript treatises, apparently in the testator's handwriting, on various philosophical subjects, particularly chemistry and mineralogy; eight cases and one trunk filled with the like.

This collection and the books and pamphlets mentioned in the same schedule formed the beginnings, respectively, of the Smithsonian library and the Smithsonian museum. The minerals constituted, so far as the writer has been able to learn, the first scientific cabinet owned by the Government of the United States. Their destruction in the Smithsonian fire of 1865 was a serious loss. Our only knowledge of their character is derived from the report of a committee of the National Institution, who in 1841 reported upon it as follows:*

Among the effects of the late Mr. Smithson is a cabinet which, so far as it has been examined, proves to consist of a choice and beautiful collection of minerals, comprising probably eight or ten thousand specimens. The specimens, though generally small, are extremely perfect, and constitute a very complete geological and mineralogical series, embracing the finest varieties of crystallization, rendered more valuable by accompanying figures and descriptions by Mr. Smithson, and in his own writing. The cabinet also contains a valuable suite of meteoric stones, which appear to be suites of most of the important meteorites which have fallen in Europe during several centuries.

* Proceedings of the National Institution. July, 1841, II, p. 95. Francis Markoe, jr., Secretary of the National Institute, in a letter written to the American Philosophical Society in 1841, described as a part of this cabinet "a superb and very large collection of precious stones and exquisite crystallized minerals * * * decidedly the richest and rarest collection in the country."

For a catalogue in general terms see Alfred Hunter's "Popular Catalogue of the Extraordinary Curiosities in the National Institute, etc.," published in 1855, and William J. Rhee's "Account of the Smithsonian Institution, etc.," 1859.

This report was made in July, 1841, at the time when, by order of the Secretary of the United States Treasury, the minerals, books, manuscripts, and other articles forming part of the Smithsonian bequest, were deposited in the custody of the National Institution, where they remained until 1858.

A room had been planned for their reception in the Smithsonian edifice, which was to be made fireproof,* but if this was ever constructed it was not occupied, and the collections having been displayed for some years in the Regents' room, were destroyed by fire January 24, 1865.

The National Institution was for nearly eighteen years the official custodian of these and other museum materials belonging to the nation. This organization, ten years before the Smithsonian Institution was prepared to receive any collections whatever, fourteen years before its buildings were ready for the exhibition of museum objects, and in after years, until its charter expired by limitation in 1862, held many objects whose proper place was in the National Museum. Indeed, the retention of many historical objects in the Patent Office hall until 1883, was an evidence of a lingering uncertainty as to the proper location of responsibility for the care of the national collections. •

In order to understand the genesis of the National Museum of the United States it seems necessary to examine the history of this society, at one time so enterprising and influential.

The National Institution for the Promotion of Science, organized in Washington May 15, 1840, was for some years the most prominent exponent of the idea of a national museum.† The establishment of this society was doubtless to a very great degree due to the stimulating and inspiring effects upon public opinion of the Smithsonian bequest. The germs of the idea which it represented seem, however, to have been existing in Washington at a much earlier period, for in 1816, or before, a similar society had been organized in the capital under the name of The Columbian Institute for the Promotion of Arts and Sciences.‡

The Columbian Institute received on May 20, 1818, a charter from Congress which expired in 1838, after which its members "were invited to become members of the National Institution, and to deposit in its cabinet their effects, books, and papers." §

* Report of the building committee to December 1, 1847, in Report of the Board of Regents, January 6, 1848, Thirtieth Congress, first session, Mis. Doc. 23, p. 8.

† The National Institution was organized at the seat of government on the 15th of May, 1840, by the adoption of a constitution and the declaration of the objects of the institution, which are to promote science and the useful arts, aiding to establish a national museum of natural history, etc." Bulletin of the Proceedings of the National Institute, 1840, 1, p. 3 (introduction).

‡ Before 1816 an organization known as "The Metropolitan Society" was in existence in Washington, and the Columbian Institute was an outgrowth of it or replaced it. The United States Military Philosophical Society met in Washington and New York as early as 1805.

§ Proceedings of the National Institution, July 12, 1841, Vol. 1, p. 94.

This invitation was accepted July 17, 1841,* in a letter from Asbury Dickins, secretary, and although no record of any transfer is to be found in the Bulletin of the National Institution, I have before me a letter from Messrs. John J. Abert, A. O. Dayton, and F. A. Markoe, committee of that society, addressed to the Secretaries of the War and Navy Departments, January 1, 1842, in which, among the other collections in their custody, they mention "the books, minerals, and works of art belonging to the late Columbian Institute," and also the "books, papers, and proceedings of the late American Historical Society," an organization to which also the National Institution stood in the position of an heir.

To Dr. Edward Cutbush is due the preservation of the only statement extant of the objects of the Columbian Institute, embodied apparently in its constitution, and quoted as follows in his address as its president, delivered January 11, 1817, in Congress Hall, Washington.†

To collect, cultivate, and distribute the various vegetable productions of this and other countries, whether medicinal or esculent, or for the promotion of arts and manufactures.

To collect and examine the various mineral productions and natural curiosities of the United States, and to give publicity to every discovery that the institute may have been enabled to make.

To obtain information respecting the mineral waters of the United States, their locality, analysis, and utility, together with such topographical remarks as may aid valetudinarians.

To invite communications on agricultural subjects, on the management of stock, their diseases, and the remedies.

To form a topographical and statistical history of the different districts of the United States, noticing particularly the number and extent of streams, how far navigable, the agricultural products, the imports and exports, the value of lands, the climate, the state of the thermometer and barometer, the diseases which prevail in the different seasons, the state of the arts and manufactures, and any other information which may be deemed of general utility.

To publish annually, or whenever the institution shall have become possessed of a sufficient stock of important information, such communications as may be of public utility, and to give the earliest information in the public papers of all discoveries that may have been made by, or communicated to, the institute.

A remark significant in this connection may be found in a letter written by Edward Cutbush, M. D., dated Geneva, N. Y., January 20,

* Proceedings of the National Institution, July 12, 1841, Vol. I, p. 113.

† Cutbush, Edward. An address | delivered before the | Columbian Institute, | for the Promotion of Arts and Sciences, | at the City of Washington, | on the 11th January, 1817. | — | By Edward Cutbush, M. D., | Hon. Member of the Philadelphia Medical and Chemical Societies; | Corresponding Member of the Linnean Society of Philadelphia; | and President of the Institute. | — | Published by the request of the Columbian Institute, | — | Washington. | Printed by Gales & Seaton. | Six parts | 1817. 8vo. pp. 1-29.

A copy of this rare pamphlet is in the library of the Surgeon-General's Office, as well as a nearly complete series of the publications of the two brothers Cutbush.

1842, accepting his election to corresponding membership in the National Institution. After thanking the institution "for this memento of their friendship and recognition of past services in the cause that had been so favorably revived at the seat of government," he continued thus: "I most sincerely hope that all the objects which engaged the attention of Thomas Law, esq.,* and myself in 1816 in establishing the Columbian Institute will now meet the approbation and support of the Government and of the scientific men of the District of Columbia." †

* Thomas Law was a member of an English family of talent and influence. His father, Edmund Law, D. D., born in Cartmel, Lancashire, in 1703, educated at St. John's College, Cambridge, was author of several theological and philosophical works, and in 1769 became Bishop of Carlisle, holding this office till his death in 1787. Of his younger brothers, one was Bishop of Elphin, another, George Henry Law, D. D., (1761-1845) was Bishop of Chester, 1812, and later, 1824, of Bath and Wells. [Biographical Sketch in Gentleman's Magazine, 1845, Part II, p. 529.] His elder brother, Edward Law—Lord Ellenborough—(1750-1818) was an eminent lawyer, principal counsel for Warren Hastings in the great impeachment trial before the House of Lords, Attorney-General and Lord Chief Justice of the King's Bench, and was father of Edward Law, Earl of Ellenborough (1790-1871), Governor-General of India.

Thomas Law was born in 1756, and in 1773, at the age of 17, entered the service of the British East India Company in Bengal, and was rapidly promoted, becoming member of the revenue board of Hugli before he was 21, later judge of Poonah, and in 1783 collector, judge, and magistrate of Behar, a province with more than 2,000,000 inhabitants, an office which he administered for six years with great success, afterwards, at the request of Lord Cornwallis, the Governor-General, then engaged in his campaign against Tippoo Saib, serving for two years on the revenue board at Calcutta. In 1791, his health having failed, he sailed for England, where he remained until 1793, the year of his removal to America.

While in India he was the friend and associate of Lord Cornwallis, Lord Terguennett, and Sir William Jones, and was the author of what was known as the *Mocurrery system and permanent settlement*, a great legislative reform, the accomplishment of which was the principal feature of Cornwallis's administration, which the board of control of the East India Company described as "forming a new epoch in Hindostan, from which, they predict, will be derived security and permanent prosperity, and consider it as an important and most beneficial change to 50,000,000 of people, and full of beneficial consequences."

William Duane, the editor of the Philadelphia Aurora, who had known Mr. Law in India, wrote thus concerning him in 1815:

"We have known Mr. Law now more than thirty years. We knew him when he was inferior to no man in eminence and in power, the third or fourth in degree in a great empire; and this was at a time, too, when, by his own generous efforts, pursued with zeal and talent that commanded general admiration and esteem, he brought about a revolution, the influence of which now extends to one hundred and twenty millions of people, as great in its moral and political influences as the extinction of the feudal system. In Hindostan, under the Mogul government, the tenure of land was in the Empire and reverted upon the demise of the holder. The afflictions produced by such a system can not be conceived by those who have not been eye witnesses of them. Upon the death of a *zaindar*, or landholder, where polygamy prevails and the children and females are numerous, the death of the head of the family, where no provision has been otherwise made, can not be well imagined. Mr. Law, who held the government of a rich and populous province under the Bengal administration, proposed what has been called the *Mocurrery system*, that is to

† Proceedings of the National Institution, 1, p. 156, 1842.

The idea of a subsidy from the General Government seems to have been prominent in the minds of the founders of the Columbian Institute. In the closing portion of the same address Dr. Cutbush naïvely remarked as follows:

I cannot refrain from indulging in the pleasing hope that the members of our National Government, to whom has been confided the guardianship of the District of Columbia, will extend their fostering care to this establishment, and that a part of the public grounds, reserved for national purposes, may be vested in the Columbian Institute. I would also with due deference suggest that a small pecuniary aid would enable the Institute at an earlier period to extend its benefits to all parts

make the land personal property and not to revert to the sovereign. This plan, pursued through several years of zeal and devotion to humanity, he accomplished. The Norman conquest, the revolution in England in 1688, were great events and they mark epochs in history and are treated as such, while Mr. Law's revolution without bloodshed eventually changed the whole moral and social condition of Hindostan, settled estates in persons and as personal property, and put an end to all the calamities which were consequent of the old system; yet the event is scarcely heard of; perhaps there are not three men in this country who ever heard of it yet."

In a letter written to Law by Marquis Cornwallis in 1796 he said: "We labored together for the security of person and property to the subjects of the British Government in Asia," and referred to "that plan of which I shall ever with gratitude acknowledge you as the founder."

Another reform suggested by Mr. Law was in connection with the commercial relations of India with England. Concerning this Mr. Law writes in 1824:

"The augmented wealth and prosperity of many of the natives of India since I quitted Bengal is evinced by commercial events and improvements, some of which have fulfilled my anticipations, when I proposed to the company, and was urgent with them, to throw open and enlarge new branches of trade originally in India. Cotton and sugar are now imported thence into England, and British manufactures have been exported to pay for these new and rich Asiatic cargoes, and this to an amount that in 1815 was estimated at £870,177. Five years afterward, in 1819, the value of such manufactures exported to India exceeded three millions sterling."

One of the results of this Indian reform was doubtless the abolition at so early a day of negro slavery in the British West Indies.

Another of his reforms was that effected when at an early age he was governor of Behar, and which was perhaps his chief popular title to the appellation of "Father of the People." The Capital of Behar is as much venerated by the Hindus as Mecca by the Mohammedans. Pilgrims annually resort to it from all parts of India. These pilgrims had been oppressed by heavy taxes ever since the establishment of the Mohammedan government—taxes imposed according to the apparent dignity of the pilgrims, which was rated by the number of their animals, and the palanquins, horses, or elephants which accompanied them. When Mr. Law became collector the exactions were so onerous that many Hindus were deterred from fulfilling their religious usages, but through his efforts the taxes were diminished to a moderate sum, a greater number of pilgrims would pay it, and, while the demands of the revenue were fulfilled, "purposes of humanity were forwarded and the pious feelings of the natives were gratified." [Law's "Reply," p. 7.]

Mr. Law's removal from England was due in part to an act of injustice on the part of the East Indian Company, which resulted in considerable financial loss to himself, and in part to his "decided disapprobation of an impolitic and exhausting war that the administration was then carrying on against France."

He conceived a great admiration for the character of Washington, and when he

of the United States, and to render an essential service to the nation by perpetuating an establishment worthy of the metropolis bearing the name of our illustrious Washington, where at some future period the youth of our country will repair to complete their education at the national seminary, to which the Botanical Garden and Mineralogical Cabinet would be important appendages.

Outbush's address before the Columbian Institute, nearly three-quarters of a century ago, is well worthy of study at the present time.

knew of the efforts being made to establish a national capital he became anxious to identify himself with its growth from the very beginning.

He invested all of his property in houses and lots in Washington, and for forty years was one of the most zealous and enlightened citizens.

S. L. Knapp (Ignatius Loyola Robertson, LL.D.) wrote of him in 1830 in his *Sketches of Public Characters*:

"He purchased largely of the soil, built on an extensive scale, suggested ten thousand plans for the improvement of the city and for the prosperity of the nation; but the slow, doubtful, and often strange course of Congress came not only in his way, but in the way of all those deeply interested in the welfare of the city; and he has spent the days of his maturity and wisdom in unavailing efforts for the improvement of it. It is happy for him, however, that he has lived to see the dawn of a better day for Washington, and, if he cannot stay here long to enjoy it, he will rejoice in the hopes of his friends and descendants."

Among the enterprises in which he participated at an early day was the erection of the great building south of the capitol which has for so many years borne the inscription "Law House."

Three sons, born in India, accompanied Mr. Law to America, one of whom, Mr. John Law, a lawyer in Washington, died before 1824, and all before 1834.

Mr. Law married, as second wife, Miss Custis, daughter of George Washington Parke Custis, the stepson and adopted son of Washington, thus allying himself by family ties with the man whom he so much revered.

Mr. Law was a zealous advocate of a national paper currency and published a book on currency.

He also wrote poetry and contributed to general literature.

He was one of the leaders in the intellectual life of the infant capital, and notwithstanding his personal eccentricities was universally respected. As one of the founders of the first learned society in Washington, he is worthy of our veneration; and since he has been ignored by the biographical dictionaries this notice of his life has been written.

He died in 1834.

Reference to Mr. Law's character and career may be found in an obituary in the *National Intelligencer*, 1834, quoted in the *New England Magazine*, September, 1834, in *Sketches of Public Characters*, by "Ignatius Loyola Robertson" (S. L. Knapp) in the biographical sketch of William Winston Seaton, by his daughter, and in Faux's *Memorable Days in America*, the review of which in No. 68 of the *Quarterly Review* evoked Mr. Law's "Reply" which contains much autobiographical matter.

The following are titles of some of Mr. Law's publications, for the verbal accuracy of which no responsibility is taken, since they are usually given second-hand:

1792. LAW, THOMAS. Sketch of some late arrangements and a review of the rising resources of Bengal. London, 1792. 8°. Lib. Cong.
1794. LAW, THOMAS. "On Bengal," etc. Perhaps another ed. of that printed in 1792. Quoted by Allibone.
1806. [LAW, THOMAS.] Ballston Springs. [A poem.] New York, 1806. Boston Ath.

It is full of enlightened patriotism and of hopeful prophecy for the United States and for Washington. "Where genius and talent are respected, rewarded, and promoted," wrote he "the arts and sciences will flourish and the wealth and power of the nation increase."

The wisdom of such men as Cutbush opened the way for the organization of the National Institution, which in its turn, as we shall see, had an important influence toward shaping the course of the Smithsonian Institution.

Indeed the germ of the Smithsonian idea may be found in Cutbush's address—and his spirit was kindred to that of Henry and his associates, who worked under more favorable conditions thirty years later.*

1820. LAW, THOMAS. Remarks on the report of the Secretary of the Treasury, March 1, 1819. Wilmington, 1820. 8°. Boston Ath.
1824. LAW, THOMAS. A reply to certain insinuations, published as an article in the sixty-eighth number of the Quarterly Review. Washington, 1827. 8°. pp. 1-27. (1.) Lib. Cong. Refers to a libelous article; a review of Faux's *Memorable Days in America*.
1827. LAW, THOMAS (and others). Report of the proceedings of the committee appointed in Washington in 1821 to present a memorial to Congress, praying for the establishment of a national currency. Washington: Way & Gideon. 1824. 8°. 40 pp. Lib. Cong.; Boston Ath.
1825. LAW, THOMAS. Address before the Columbian Institute. Washington, 1825. 8°. Boston Ath.
1826. LAW, THOMAS. Considerations tending to render the policy questionable of plans for liquidating, within the next four years, of the 6 per cent stocks of the United States. Washington: S. A. Elliott. 1826. 8°. pp. 22. Lib. Cong.; Boston Ath.
1827. LAW, THOMAS. Propositions for creating means for commencing the Chesapeake and Ohio Canal, with report of committee thereon. [Washington, 1827?] 1 folio sheet. Lib. Cong.
1828. LAW, THOMAS. Address to the Columbian Institute on a moneyed system. Washington, 1828. 8°. Lib. Cong.; Boston Ath.
1830. LAW, THOMAS. Address to the Columbian Institute on the question, "What ought to be the circulating medium of a nation?" Washington, 1830. 8°. Lib. Cong.; Boston Ath.
1833. LAW, THOMAS. Synopsis of a plan for a national currency. Washington, 1833. 8°. Lib. Cong.

* The two brothers James and Edward Cutbush were among the most active of the popular teachers and promoters of science and education at the beginning of the present century, and it would be unjust to allow their names to drop out of the history of American science.

Both were physicians, both teachers of chemistry, both enthusiastic in the work of founding schools and learned societies. They were born, certainly in Pennsylvania, probably Philadelphia, somewhere between the years 1750 and 1770. Edward entered the medical department of the University of Pennsylvania in 1790 and graduated in 1794, and his brother James at about the same time or a little later. James Cutbush at the beginning of the century, and for a few years subsequent, was engaged in delivering courses of chemical lectures in Philadelphia, presumably for the benefit of medical students.

He appears to have enlisted as a volunteer in a Pennsylvania regiment at the beginning of the war of 1812, and at its close, on the 12th of August, 1814, was appointed Assistant Apothecary General in the regular army of the United States,

The National Institution began its career at a time when the country was chafing under the irritation of the delays of Congress in organizing the institution of learning provided by Smithson, whose legacy had for some years been deposited in the Treasury.*

which position he held until 1820, when he was appointed post surgeon and chief medical officer of the Military Academy at West Point. In November, 1821, he was made assistant surgeon and acting professor of chemistry and mineralogy in the academy, in which capacity he served until his death, which occurred on December 15, 1823.

His most important work, *A System of Pyrotechny* (8vo, Philadelphia, 1825, i-xliv, 1-612), was published in Philadelphia after his death by his widow, aided by a subscription from the cadets of the Military Academy.

Another work, entitled "The Philosophy of Experimental Chemistry," in two volumes (Philadelphia, 1813, 12mo, (1) pp-xii, 1-356 (2) i-viii, 1-339) appears to have been the earliest general work or text book on chemistry written in America, although Benjamin Rush had printed a syllabus of his lectures which gave him the title to be considered "the father of chemistry in America," and James Cutbush himself had, as early as 1807 or 1808, prepared an *Epitome of Chemistry*, for the use of St. John's College, in which he was a teacher, of the publication of which, however, I have found no record.

In 1812 he delivered an "Oration on Education" (Philadelphia, 1812, 8vo, pp. 1-50), before the Society for the Promotion of a Rational System of Education, of which he was vice-president—an enlightened and eloquent address full of historical information. He also published in 1808 a book called "The Useful Cabinet," a treatise "On Hydrostatics and Specific Gravity," and also certain papers in the *American Journal of Science*.

Besides holding a corresponding membership in the Columbian Institute at Washington, which was founded by his brother, he was president of the Columbian Chemical Society and member of the Linnæan and Agricultural Societies of Philadelphia. Rafinesque, enumerating in 1817 those of the American scientific men whom he considered entitled to rank as philosophers, mentions the name of Cutbush along with his own and those of Jefferson, Clinton, Vaughan, Bentley, Winthrop, Patterson, Williamson, Griscom, Wood, Dupont, Woodward, Rush, Mitchell, Ramsay, and Priestly.

Edward Cutbush, after his graduation at the Philadelphia Medical School in 1794, became attached to the militia of Pennsylvania, first as hospital surgeon and subsequently as surgeon-general. On the 24th of June, 1799, he was appointed a surgeon in the U. S. Navy, in which capacity he served until June 20, 1829, when he resigned. In the years 1816 and 1817 he appears to have been stationed in Washington, and at this time participated in the foundation of the Columbian Institute for the Promotion of Science. I can find no record of his whereabouts after 1829 until 1835, when he was a resident of Geneva, N. Y., and participated in the establishment of the medical institute of Geneva College, in which he became professor of chemistry. On the occasion of its formal opening, on February 10, 1835, he delivered a discourse "On the history and methods of medical instruction" (Geneva, 1835, 8vo, pp. 1-24). In 1842 he appears to have been still at Geneva, and at this time was probably a man seventy or eighty years of age. His Washington address and his Geneva address appear to be his only literary remains, with the exception of a book which was published in Philadelphia in 1808 entitled "Observations on the Means of Preserving the Health of Soldiers and Sailors," etc. (Philadelphia, 1808, 8vo, pp. i-xvi, 1-316, 1-14).

* Smithson had died in 1829, but the legacy did not become available until after the death of his nephew, the residuary legatee, in 1835, after which, in August or September of that year, the Government of the United States was first apprised of

It has already been suggested that the National Institution owed its origin to the influence of the Smithson bequest. Indeed it may not be altogether impossible that it was founded with special reference to some plan looking toward securing the control of this bequest.

Although less than fifty years have gone by, I can not learn that any of those who were active members at the time of its organization are still living, and unfortunately no one seems to have left any written record of the secret history of this very significant movement.

It seems possible, however, to read between the lines, in the official publications of the society, and the utterances of its friends, and thereby to acquire a certain additional insight into their meaning.

With this in mind, it is instructive to review briefly the history of the discussions which preceded the final organization of the Smithsonian Institution—not with reference to its entire policy, for this has already been well done by others, but in connection with its relations to the national institution, and the custodianship of the National Museum.

In 1835, as we have seen, the fact was first made known that Smithson, who had died in Genoa, six years earlier, had bequeathed the reversion of his whole estate to the United States of America “to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men.”

The bequest was communicated to Congress by the President on the 17th of December, and was accepted by Congress by an act approved July 1, 1836, pledging “the faith of the United States” to the due application of the fund to the purposes of the bequest.

On the first of September, 1838, the proceeds of the estate, amounting to \$508,318.46, was paid into the United States mint, and shortly after the convening of Congress in that year, in a message dated December 6, President Van Buren informed both Houses that the amount received having been invested, he deemed it proper to invite the attention of Congress to the obligation devolving upon the United States to fulfill the object of the bequest.

Eight sessions of Congress passed by before any definite plan of organization was decided upon, and suggestions from all parts of the country were liberally forthcoming. Strange to say nearly every suggestion, no matter how humble its source, seems to have had its weight in the deliberations, and almost every one was embodied in one or more of the provisions of the numerous bills brought up for the consideration of Congress.

In 1836, when this matter first came to the notice of the Senate, it seems to have been the generally accepted opinion of those who took

the fact of the existence of such a bequest. The legacy was brought to New York in August, 1838, but no definite action was taken concerning its application until eight years later, when on August 10, 1846, the act of Congress establishing the Smithsonian Institution was passed. The Regents held their first meeting September 7, 1846, and elected a secretary, who accepted the trust on December 14, and entered upon his duties a week later.

part in the discussion that the intention of the testator was the establishing of a university.

In this direction, too, was the tendency of the advice of those "persons versed in science and in matters relating to public education," to whom in July, 1838, the Secretary of State addressed letters, asking advice as to the most advantageous mode of applying the proceeds of the bequest.*

Of these, three favored a school of high grade. President Wayland, an institution which should occupy "the space between the close of a collegiate education and a professional school; Dr. Cooper, "an institution of the character of a university;" President Chapin, "an institution for liberal and professional purposes and for the promotion of original investigations—to carry through a range of studies much above those of the ordinary collegiate course."

Horatio Hubbell, of Philadelphia, also in a letter to President Van Buren urged a university on the German plan, with numerous professorships, chiefly scientific, and Prof. Dangleson, of the University of Virginia, in two very favorable letters in the "Southern Literary Messenger" (under the signature "A," Vol. V, 1838, p. 828, Vol. VI, 1840, p. 25), proposed the foundation of "a central school of natural science," to be supplemented in time by a botanical garden, an observatory, a zoölogical institute, or analogous means (including, doubtless, in his mind, museum collections), for prosecuting in a proper way the great sciences of astronomy and general physiology—"a school where natural philosophy, chemistry, geology, mineralogy, philosophy, and all other sciences could effectually be taught—a school which, so far from clashing with others, would aid them—which, although it might be helped by a gift of funds from the nation, could nevertheless go into operation without them—which under a wise management could be speedily brought to yield results of the utmost practical importance, and fulfill to the very letter the wishes of the testator."†

Mr. Rush objected to a school of any kind, and proposed a plan which more nearly than any other of the early ones corresponded with that which was finally adopted. In a shadowy way he outlined a system of scientific correspondence, of lectureships, of general coöperation with the scientific efforts of the Government, of a liberal system of publication, and even of collections of geological, zoölogical, botanical, ethnological, and economical objects.

The fifth response was from the venerable Senator and ex-President, John Quincy Adams, who, from 1835, when he was appointed chairman

*These are the names of the persons thus addressed:

The Hon. John Quincy Adams, Senator and ex-President; Thomas Cooper, M. D., Columbia, S. C.; Hon. Richard Rush, Sydenham, near Philadelphia, Pa.; Prof. Francis Wayland, President of Brown University, Providence, R. I.; Hon. Albert Gallatin, Rev. Stephen Olin, Phelan Lindsley, and others.

† Southern Literary Messenger, *l. c.*, and also Rhees, "Documents," etc., pp. 864-890.

of the select committee of the House, to report upon the Smithsonian bequest, appears to have taken a deep interest in its fate, and to have felt personally responsible for its judicious administration. In his letters to the Secretary of State, October 8 and 11, 1838, he brought forward with great vigor the proposal that the first use to be made of the fund was the establishment of a great national astronomical observatory, and in January, 1839, as chairman of the House committee, acting jointly with a similar committee from the Senate, he reported a bill (House bill 1161, Senate bill 293) providing for the establishment of an observatory fully equipped, with provision for the publication of its observations, and the annual composition and publication of a nautical almanac.

This bill, which was evidently a minority report of the joint committee, was reinforced by two sets of resolutions, proposed by Mr. Adams in the House, one reported from the committee, January 26, providing—

That the first appropriation from the interest or income of the Smithsonian fund ought to be for the erection and establishment, at the city of Washington, of an astronomical observatory, provided with the best and most approved instruments and books, for the continuing observations, calculation and recording of the remarkable phenomena of the heavens, for the periodical publication of the observations thus made, and of a nautical almanac for the use of the mariners of the United States and of all other navigating nations.

The second, reported February 6, recited the opinion—

That the education of the children of these United States is a duty of solemn and indispensable obligation incumbent upon their parents and guardians, not for the increase and diffusion of knowledge among men, but to qualify them for the enjoyment of their rights, and the performance of their duties throughout life (and therefore), that no part of the Smithsonian fund ought to be applied to the education of the children or youths of the United States, nor to any school, college, university, or institute of education.

The latter resolutions were evidently intended as a counterpoise to the view still held by many members of the Senate, which was brought forward by the speech of Senator Asher Robbins, of Rhode Island, January 10, 1839, in which he urged "that this institution should make one of a number of colleges, to constitute a university, to be established here, and to be endowed in a manner worthy of this great nation and thus increase resources."

On the 18th of February Senator Robbins produced an antidote to Mr. Adams's anti-university resolution in the following:

1. *Resolved*, That it is the duty of the United States, they having accepted the trust under the will of Mr. Smithson, of London, to execute that trust bona fide according to the true intent and meaning of the testator.

2. *Resolved*, That the trust being to found an institution in the city of Washington for the increase and diffusion of knowledge among men, the kind of institution which will have the effect intended and described, in the most eminent degree, will be the kind of institution which ought

in good faith to be adopted as being most in accordance with the true intent and meaning of the testator.

3. *Resolved*, That all experience having shown scientific and literary institutions to be by far the most effectual means to the end of increasing and diffusing knowledge among men, the Smithsonian Institution should be a scientific and literary institution, formed upon a model the best calculated to make those means the most effectual to that end.

4. *Resolved*, That to apply said trust fund to the erection and support of an observatory would not be to fulfill bona fide the intention of the testator, nor would it comport with the dignity of the United States to owe such an establishment to foreign eleemosynary means.

Neither of the bills was received with favor, and the Twenty-fifth Congress came to an end without any decision having been reached. Senator Robbins retired from public life at this time, and the university idea was not subsequently brought promptly forward. During this session, however, various petitions were received. One was from Prof. Walter R. Johnson, urging the foundation, advocating the claims of "an institution for researches in practical science."*

Another was from Charles Lewis Fleischmann, of the United States Patent Office, proposing the establishment of an institution for the promotion of agriculture, with experimental farms of 1360 acres, manufactories, mills and workshops, a considerable staff of teachers and instructors, and one hundred students at the commencement.†

The Kentucky State Agricultural Society petitioned for the endowment of an agricultural school or college out of the legacy, and the Superintendent of the Coast Survey, Mr. Hassler, was urging the foundation of an astronomical school.

In the meantime public interest was becoming awakened. The matter was agitated in the newspapers and reviews, petitions were coming in from individuals, urging speedy action, and the corporation of the city of Washington, through their mayor, Peter Force, presented a vigorously worded memorial to Congress.‡

Early in the first session of the Twenty-sixth Congress, 1839-'41, Mr. Adams again brought up the Smithsonian bequest, introducing again his bill for the establishment of a national observatory and reënforcing it by his famous report of 1840§ and a speech of considerable length, supplemented by an elaborate statement from the astronomer royal of Great Britain concerning the observatories at Greenwich and elsewhere.

Mr. Adams seems to have been alone in his advocacy of the observatory and his bill and report produced no results.

* Presented to the House of Representatives May 21, 1838.—See Rhees. Documents, pp. 171-186.

† Reported to the House of Representatives January 9, 1839.—See Rhees's Documents, etc., pp. 186-198.

‡ Rhees's Documents, etc., pp. 200, 201.

§ First session, House of Representatives Report No. 277. Smithsonian bequest. (To accompany amendatory bill H. R. No. 1). May 5, 1840. Washington: Blair & Ross, printers. 8vo., pp. 155.

It was just at this time that the National Institution was organized on the 15th of May, 1840, by the adoption of a constitution and a declaration of its objects, "which are to promote science and the useful arts and to establish a national museum of natural history, etc."

The constitution of this society in its first form was somewhat meager, but as printed on the cover of the second bulletin of proceedings is decidedly prophetic of the future act of incorporation of the Smithsonian Institution.

Its plan, however, was conceived in a broad and liberal spirit, its membership was a strong one, including at the beginning about ninety representative men of Washington, members of Congress, scientific men, clergymen, and prominent citizens, and as many more corresponding members, among whom were all the leading men of the country. Among its principal officers were the Secretary of War, the Secretary of the Navy, ex-President Adams, the Chief of Engineers of the Army, and other prominent officials. The meetings were well attended, the membership was enthusiastic, gifts of books and specimens began to flow in, and the prospects of the society looked very bright.

In his discourse* on the objects and importance of the National Institution, delivered January 5, 1841, its president, Mr. Poinsett, referred pointedly to the Smithsonian bequest, saying that it offered a favorable occasion for carrying into effect all the important objects connected with a national institution, such as that just being organized in Washington, enabling the Government to afford all necessary protection to the promotion of science and the useful arts† without the exercise of any doubtful power, etc.

Soon after this, in February, Senators Linn and Preston, both members of the National Institution, proposed new bills for the organization of the Smithsonian Institution, at the same time reporting a bill to incorporate the National Institution for the Promotion of Science.

By these bills the entire management of the Smithsonian fund was to be intrusted to the National Institution. Its officers, a superintendent, and six professors were to be nominated by that society, which was also to prescribe their duties. Provision was made for joint occupancy by the two institutions of buildings to be erected at the cost of the Smithsonian bequest, and finally it was required—

That all collections of works of art and of natural history owned by the United States, not otherwise assigned (or "all works of art, and all books relating thereto, and all collections and curiosities belonging to the United States in the possession of any of the Executive Departments and not necessarily connected with the duties thereof") shall be deposited in said buildings (or "shall be transferred to said institution, to be there preserved and arranged").

In these bills, drawn up in 1840, may be found the germ of the National Museum idea, even to the extent of a proposition for an appro-

* Discourse, p. 49.

† The avowed objects of the National Institution.

priation from the National Treasury, to be expended under the direction of the officers of the National Institution, the president and directors of which were the prototypes of the Smithsonian Chancellor and Regents for purposes connected with the administration of the collections such as it was not deemed proper to pay for out of the Smithsonian fund.*

The object of the National Institution was *the promotion of science and the useful arts*, but the principal agency chosen for accomplishing this object was *a national museum of natural history*, etc.

This was stated clearly in its declaration of objects at the time of its organization in 1840, as well as in its constitution.†

The sections relating to the Museum in the proposed act of incorporation of the Institution of 1841 corresponded precisely to Articles XIV and XVI of the constitution of the society, except that the provision for the appointment of curators by the Institution is omitted.

It was evidently the intention that the Board of Managers should control the national collections by virtue of the authority vested in them in their proposed control of the Smithsonian Institution.

The act to incorporate the National Institution did not receive the approval of Congress until 1842,‡ when new proposals for the organization of the Smithsonian Institution were brought forward, very similar in many respects to those which had developed within the National Institution.

The idea of a national museum to be administered in connection with

* And for the transportation and arrangement of the same, the sum of \$5,000 is hereby appropriated out of the Treasury of the United States, to be expended under the direction of the president and directors of the National Institution. (Senate Bill, No. 245, Twenty-sixth Congress, 1839-41., Section No. 4.

† Constitution, May, 1840, January, 1841:

ARTICLE XIV. The resident and corresponding members shall exert themselves to procure specimens of natural history, etc., and the said specimens shall be placed in the cabinet, under the superintendence of a board of curators to be appointed by the directors. All such specimens, etc., unless deposited specially, shall remain in the cabinet, and in case of the dissolution of the Institution, shall become the property of the United States.

Constitution, February, 1842:

ARTICLE XIV. The Institution shall have power to appoint curators and others for the preservation and arrangement of its collections. The resident and corresponding members shall exert themselves to procure specimens of natural history, etc., and the said specimens shall be placed in the cabinet under the superintendence of a curator or curators. All such specimens, etc., unless deposited specially, shall remain in the cabinet, and in case of a dissolution of the Institution, shall become the property of the United States.

ARTICLE XVI. The various collections of the Institution shall be placed in the apartments which may be designated for that purpose by a majority of the directors.

‡ Senator Preston, April 11, 1842, reintroduced his bill of the previous year.

the Smithsonian organization had been suggested by no one in the five years of discussion which preceded the organization of the National Institution.

It is true that there had been plans proposed, especially those of Duglison and Rush, which might have led up to the development of a museum, but the value of the museum as an educational agency and as an aid to research was not understood in those days. In its former aspect, it needed the teachings of the great exhibitions from 1851 to 1876, in the latter the vivifying influence of the Darwinian scientific renaissance of 1859.

The subject of the Smithsonian legacy and its proper disposition was henceforth one of those most frequently discussed by the founders of the National Institution, and for years it was the opinion of many influential men that this society should be made the custodian of the Smithson fund, and that the interests of the two establishments should be united.

A suggestive indication of the sentiment of the officers of the Institution is found in the letter of the committee of management to the Secretaries of War and the Navy in 1842, in which they remark that the object of the National Institution is "*to increase and to diffuse knowledge among men*"—making prominent the words of the Smithsonian bequest instead of the official definition of the objects of their own society, and deliberately indicating the fact of quotation, by the customary symbols.

The influence of this society was strongly and continuously present in Congress, for the six years which followed its organization, until the Smithsonian act was finally bound, and it seems very appropriate to try to ascertain whose was the master mind which not only prevailed in finally ingrafting the development of the National Museum upon the Smithsonian project, but which directly or indirectly led to the formation of the various features of organization which have become such characteristic elements in the Smithsonian plan.

The controlling mind was evidently that of Joel R. Poinsett, of South Carolina, who was Secretary of the Navy in 1840, and at whose house the society was organized, by eight persons, among whom were, of course, Mr. Poinsett, Col. Abert, Mr. Markoe, and Col. Totten. Mr. Poinsett was senior director, under the first plan of organization, and occupied the chair at every meeting until, under the amended constitution, he was elected its first president in 1841. The amendment to the constitution was doubtless made in order to retain his official leadership, for he became director *ex officio* while Secretary of the Navy. With the close of Van Buren's administration he became a private citizen, but the constitution was amended before his retirement from the Cabinet, and the position of presiding officer was never proffered to his successor.

Although from this time on absent from the city, he was retained in the presidency and reëlected in 1841, the vice-president of the society, Col. Peter Force, continually presiding in his absence.

Although the society elected its officers annually, Mr. Poinsett told Mr. Adams soon after his election that he should for two years come to Washington to preside over the National Institution for the Promotion of Science. He was in fact reelected to the presidency at every annual meeting until that of 1845, when, having declined candidacy, Senator Levi Woodbury was chosen president and Mr. Poinsett was unanimously elected an honorary member of the Institution.

From this period the decline of the society's prosperity was marked. It is more probable, however, that Mr. Poinsett's lack of interest was a result of the weakness of the society than that the weakness resulted from his lack of interest.

Perhaps, however, if Mr. Poinsett had been a resident of Washington rather than of South Carolina during the four years of his presidency, the result would have been different.

That Mr. Poinsett, as early as 1838, was thinking seriously about the disposition of the Smithsonian bequest is evident from an entry in the diary of John Quincy Adams, under date of December 8.* Mr. Adams was evidently suspicious, and believed that Mr. Poinsett did not give him his entire confidence. In April, 1839, he talked to him again, and in 1841 he wrote again in his diary: "April 17. Mr. Poinsett called upon me and now fully disclosed his project, which is to place the investment and disposal of the Smithsonian funds under the management of the American Institution for the Promotion of Literature and Science.† * * * He said that he had at present no other occupation on hand, and would be willing to devote two years entirely to organizing the establishment and getting it into full operation."

"I know not," continued the aged statesman, "that it could be accomplished more effectively, and think I must acquiesce in this arrangement and endeavor to carry it through."

Since the bills of Messrs. Linn and Preston had been already for two months before the Senate, it seems strange that Mr. Adams should have looked upon Mr. Poinsett's communication as a revelation—still more so when it is remembered how clearly he had expressed himself in his "Discourse" in January.‡

* "Extracts from the Memoirs of John Quincy Adams": Rhees, Documents, etc., p. 769.

† Evidently meaning the National Institution.

‡ Mr. Poinsett was not only the first to publicly suggest the union of the Smithsonian with the National Institution, but was constant in his advocacy of the project. (See remarks, March 8, 1841, Proc. Nat. Inst., 1, p. 69, and letter, February 7, 1842, Proc. Nat. Inst., 1, p. 157.) Dr. Peter S. Duponceau, president of the American Philosophical Society in a letter to the institution in November, 1840, remarked: "Congress can not find a better opportunity to execute the will of that beneficent testator than by laying hold of your institution and making it its own." (Proc., p. 12.) The Hon. Virgil Maxey, Charge d'Affaires at Belgium, wrote in December, 1840, that in his opinion no better use could be made of the bequest than "to place it under the direction of a society organized for the proper carrying into effect views

Poinsett, when elected to the presidency of the National Institution, was a man sixty-two years of age, who had lived an eventful life, full of opportunities for observing the institutions of Europe, Asia, and South America. His culture was broad and sympathetic, and he was, perhaps, better fitted than any of the public men of his time to appreciate the necessity of organizing our public institutions on the most liberal and comprehensive plan.

In his interviews with those who advocated the establishment of an observatory as the first result of the Smithsonian legacy, he showed full appreciation of the value of such an institution, but seems to have kept before his own mind a much more comprehensive ideal.

Poinsett was the first to suggest the idea of a great national museum at the capital of the nation.

In his address upon "The Objects and Importance of the National Institution for the Promotion of Sciences," delivered at the first anniversary meeting of the society, January 4, 1841, he advocated boldly the formation of a national museum as one of the most important features of a "central establishment at the seat of government, such as is maintained in every country in Europe for the advantage of those who cultivated the arts and sciences."

To one who reads this address it will become evident that it was Poinsett who put in words the definition of the objects of the National Institution—"to promote science and the useful arts, and to establish a national museum of natural history."

The following is an extract from this address:

The lovers of science, literature, and the fine arts residing in the District felt sensibly the absence of those resources which are found elsewhere and are necessary for the attainment of knowledge. They were mortified to perceive that the great advantages possessed by the public authorities at Washington were neglected, and that, at the seat of government of this great nation, there existed fewer means than in any other city of the Union of prosecuting those studies which, while they impart dignity and enjoyment to existence, lead to the most useful practical results. They believed it to be their duty to arouse the attention of Government to these deficiencies, and, at all events, to address themselves to the task of supplying them, as far as could be done by their individual and combined exertions. For these purposes they have formed an association and applied themselves to collect

identical with those contemplated by the philanthropical and philosophical testator." (Proc., p. 46.)

See in this connection letters from Richard Rush, on the Smithsonian Bequest (Second Bulletin of Proceedings Nat. Inst., 1842, pp. 201-204); from Peter S. Duponcean, on the Smithsonian Bequest (*op. cit.*, 204-208); from Hon. Virgil Maxey, chargé d'affaires of the United States to Belgium (First Bulletin, pp. 46-47); Opening Address by John Tyler, President of the United States, patron of the National Institute (Second Bulletin, pp. 437, 438); letter from the Hon. Levi Woodbury, United States Senate (*op. cit.*, pp. 451-453); Smithsonian Bequest, by the Hon. Richard Rush (*op. cit.*, pp. 455-460); address of Hon. Mr. Preston, of the United States Senate (*op. cit.*, p. 236); letter of John Pickering, of Boston, September 1, 1841 (*op. cit.*, pp. 109-110).

specimens of geology and mineralogy and other objects of natural history, and, for the short period of its existence, the efforts of the Institution have been eminently successful.

They have entered into correspondence with other learned societies and have been encouraged to proceed by their approbation and profited by their generous coöperation. They have invited the assistance of their fellow-citizens in the most distant States and Territories, and hope, by their aid, to collect documents and facts illustrative of the early history of our country, specimens of its geology and of its mineral and vegetable productions, and, if not to preserve the animals and plants themselves, which are passing away before the progress of settlement and cultivation, at least to perpetuate their forms and the memory of their existence. They hope to be able to illustrate these subjects and others connected with them by a series of gratuitous lectures, and entertain a confident expectation that numbers whose duties compel them annually to assemble here will view with interest collections of the natural productions of America, drawn from every State and Territory in the Union, and, becoming sensible of their utility, will contribute on their return to swell their amount and to spread throughout the country a taste for literary and scientific pursuits.

In another place in the discourses of Mr. Poinsett we find avowals of plans and ambitious aspirations for the future of the National Museum which would satisfy the most ambitious of its supporters of today. He spoke thus:

Specimens of natural history are rapidly accumulating. The exploring expedition has already sent home a large collection, which remains packed away in boxes in a room belonging to the Philadelphia museum, generously loaned by the company for that purpose; and we may anticipate from the ability and well-known zeal of the naturalists who accompanied it by order of Government that the squadron itself, shortly expected, will return richly freighted with objects of natural history. I can not believe that after all the labor, pains, and expense incurred in procuring them these specimens are not to be brought to Washington, to be arranged and exhibited here. A geological survey of the Territory of Iowa was made a few months since by order of the Government, and numerous valuable specimens collected by Mr. Owen. Mr. Nicolet has brought with him interesting collections made in the country he visited, and Dr. King, of Missouri, lately sent to the lead region on business connected with the ordnance office, while there collected specimens of minerals which are likewise destined for Washington. The ordnance officers who have lately returned from Europe have brought with them numerous specimens of the iron ores used in the foundries there, and measures have been taken to procure, as objects of comparison, those of the United States.

Several individuals have transmitted donations to the Institution, while others have deposited their collections with us from a desire to have them preserved and, at the same time, to benefit science. We have reason to believe that this will be extensively done as soon as the Institution is firmly established. There are many of our countrymen who, like Sir Hans Sloan, the founder of the British Museum, look forward with regret to the sale and dispersion of their collections, made at great cost and pains, and, desiring to have them preserved entire, would deposit them with an institution which will be as stable as the Government that protects it.

In every country in Europe those who cultivate the arts and sciences

enjoy the advantage of finding in each capital a central establishment, such as we propose.

In London, the Royal Museum, which was commenced by the enlightened liberality of an individual, and subsequently enriched by similar bequests, and now liberally patronized by Government, possesses all that is necessary to protect and encourage literature, science, and the arts.

The Society for the Promotion of Science and the Useful Arts in Dublin, having an extensive museum of natural history, a botanic garden, and school of design, fulfills effectually the objects of its institution and justifies the very liberal patronage of the British Government. There students in every branch of science find the means of improvement, and some of the most accomplished artists in England have been instructed in this school.

In this country we are best acquainted with the museum, botanical and zoölogical gardens, and liberal course of instruction at the *Jardin des Plantes*, in Paris, where strangers resort from every quarter of the world to consult the collections and listen to lectures, which are open to all who choose to attend them. These courses of lectures are delivered by the ablest and most eloquent men in France, on every branch of science. In the summer botany is taught in a garden abounding in all the vegetable productions of the world; zoölogy in the midst of specimens of every known animal, and other branches of natural history, with the advantage of extensive collections, which are augmenting daily by an enlightened and active system of exchanges; chemistry and technology are illustrated by well-conducted experiments and admirably adapted apparatus, and every branch of natural philosophy taught with clearness and precision and explained by the most ample means of illustration. These lectures are attended by students who have completed their academic course and by men of science who seek to increase their knowledge.

There can be no doubt that a national institution, such as we contemplate, having at its command an observatory, a museum containing collections of all the productions of nature, a botanic and zoölogical garden, and the necessary apparatus for illustrating every branch of physical science, would attract together men of learning and students from every part of our country, would open new avenues of intelligence throughout the whole of its vast extent, and would contribute largely to disseminate among the people the truths of nature and the light of science.

A fortunate occurrence of circumstances offers a favorable occasion to carry all these important objects into immediate effect. A liberal and enlightened Englishman, foreseeing the benefits which would result to science throughout the world by its successful cultivation in the vast and extensive field offered by these States and Territories, with enlarged views and praiseworthy philanthropy has bequeathed a fund to be employed for the sacred purposes of increasing and diffusing knowledge among men. This bequest will enable the Government to afford all necessary protection to the promotion of science and the useful arts, without the exercise of any doubtful power, by the application of the annual interest of this fund to the establishment of an observatory, the erection of suitable buildings to contain the collections, and for lecture rooms, the purchase of books and instruments, and the salaries of professors and curators.

Poinsett's enthusiasm was contagious, and his arguments, based as they evidently were upon careful observations and judicious reasoning,

and inspired by hopeful patriotism, brought him many sympathizers. Among these the Hon. Levi Woodbury, who had been a member of the same Cabinet with Mr. Poinsett, and subsequently was in the Senate, Senator W. C. Preston, one of the directors of the Institute, Senator R. J. Walker, of Mississippi, Senator S. P. Linn, of Missouri, corresponding members, appear to have been especially friendly to the plans of Mr. Poinsett, and on various occasions promoted the interests of the National Institution on the floor of the Senate from 1841 to 1846.

In June, 1842, Mr. Poinsett was again in Washington, and on the 11th presided at a meeting at the home of Mr. Francis Markoe for the purpose of connecting the organizations of the National Institution with that of the Smithsonian Institution.

"Mr. Preston," wrote John Quincy Adams, "has introduced into the Senate a bill for combining these two institutions, and now stated to the meeting his views on the subject, embracing an appropriation of \$20,000 and the occupation by law of a large portion of the Patent Office building for the preservation and arrangement of the objects of curiosity collected by the exploring expedition under Lieut. Wilkes, now daily expected home; and he called on me to say how far my purposes may be concurrent with these suggestions.

"I said I had the warmest disposition to favor them, and thought there was but one difficulty in the way, which might perhaps be surmounted. I had believed that the whole burden and the whole honor of the Smithsonian Institution should be exclusively confined to itself, and not entangled or commingled with any national establishment requiring appropriations of public money. I exposed the principles upon which all my movements relating to the Smithsonian bequest have been founded, as well as the bills which at four successive Congresses I have reported, first, for obtaining the money and then for disposing of the fund.

"At the motion of Mr. Walker, of Mississippi, the president, Mr. Poinsett, was authorized to appoint a committee of five members of the Institute, to confer with Mr. Preston and me upon the means of connecting the Smithsonian Institution with the National Institute."

Nothing seems to have resulted from these deliberations.

On the 13th of June, at a stated meeting of the National Institution, Senator Preston was present, and delivered, as the records inform us, "an eloquent speech, in which he descanted at length on the history and labor of the Institution, what it had done, and what it proposed to do, its capacity to be eminently useful to the country and Congress, the advantage of uniting the Smithsonian Institution with it, etc., and appealed to Congress and to the liberal citizens of the United States to come forward in aid of a glorious cause and in the accomplishment of the great national objects which the Institution has in view,"* etc.

* Proceedings of the National Institution (3d Bulletin, 1845) vol. i, p. 236. A copy was requested for publication (*l. c.*, p. 241) but I can not learn that it was ever put in type.

Senator Preston's bill for the union of the two institutions came to naught.*

During this session, however, the act to incorporate the National Institute, as it was henceforth to be called, passed in a much modified form, and was approved July 27, 1842,† and the society now seems to have felt much more secure in its project of retaining the control of the National Museum, and either of gaining eventually the management of the Smithsonian fund or of obtaining an appropriation from Congress.

Senator Woodbury,‡ in commenting upon the form of the charter, remarked that—

Care was taken originally to make the institute different from all other chartered bodies even in the District, so as to elevate it above every motive of personal gain, dedicating its labors exclusively to objects of a public character and vesting all the property possessed for this purpose in the Government itself; and thus by rendering it national in substance as well as in name, to obviate any constitutional objection which might arise against measures in its behalf.

The change of the name from *Institution* to *Institute* seems to have been made in deference to a suggestion by Dr. Duponceau in a letter written April, 1842, in which he said:

I have seen with great pleasure the bill brought into the Senate by the Hon. Mr. Preston. It fully coincides with the views that I have expressed. The object, in my opinion, is to preserve the superiority of the National Institution over the Smithsonian, and of the Government over both.

I would beg leave to suggest whether it would not be advisable to make some small alteration in the name of the National Institution so that it should not bear exactly the same name with the Smithsonian, but one expressive of some degree of superiority. I would recommend, for instance, that of Institute, which appears to me more dignified than that of institution, which is equally applicable to a school or college as to a great national establishment for the promotion of science. My idea would be to call the national establishment the "National Institute for the Promotion of Science," and the subordinate one the "Smithsonian Institution," without more.

No appropriation came, however, and the charter and changed name failed to make the society more prosperous.

At a meeting June 20,§ 1842, a resolution was passed appointing a committee to solicit private contributions of money and property.

*It was laid upon the table July 18, 1842, and never again taken up.

† See Charter of Incorporation, Constitution and By-Laws in Appendix to this report and in Proc. Nat. Inst., 1, pp. 388-392. See also "Bill to incorporate the National Institution," etc., reported by Senator Preston (S. No. 258) February 17, 1841, in Rhee's Documents, etc., pp. 239-341. See also Memorial of the Officers of the National Institution for the Promotion of Science, January 21, 1842 (House Docs. No. 59, Twenty-seventh Congress, second session, 11), submitting draft of a bill of incorporation.

‡ See remarks of Senator Woodbury in full, Proc. Nat. Inst., 1, pp. 336, 337.

§ Evidently not June 13, though so stated in one portion of minutes. See Proc. Nat. Inst., 1, pp. 236, 241, 335.

At another meeting, August 8, 1842, a report* was made by this committee in which they proposed to institute an annual scientific convention at Washington, during the session of Congress, and under the auspices of the institution, and also recommended an extensive system of exchange of specimens for the benefit of the museum.

At the meeting of September 12, 1842, Mr. Poinsett, the president, proposed a series of resolutions† intended to put the recommendation of the report into effect.

All of these resolutions and reports were issued in the form of circulars (October 15, 1842, and February 24, 1843), but the appeals "to the liberality and public spirit of our countrymen," were without avail.

Consequently a special meeting of the board of management was held December 23, 1843, at the office of the Secretary of State. That the society was regarded at that time as one of national importance is shown by the presence at the meeting of Mr. Upshur, the Secretary of State, who took an active part in the proceedings; the Hon. John Quincy

* The committee appointed to devise and execute such measures as should be deemed expedient to obtain contributions and other aid to the Institute would make an informal report.

They propose making an appeal to the public, by disseminating an account of the Institute, its past efforts, its condition, and its prospects, and an exhibition of the many reasons why it should be sustained and encouraged by the citizens of the United States. In their judgment the best means of doing this will be the publication of the remarks addressed to the Institute by the Hon. Mr. Preston, Senator from South Carolina, on the evening of the 13th of June last.

They also propose to address circulars to prominent individuals in the different States, inviting their coöperation, particularly in receiving and transmitting contributions.

They recommend that the Institute authorize the president and secretaries to sanction their circulars by their official signatures.

They propose that a meeting of the learned men of our country, distinguished for their attainments in the different sciences, particularly in those termed physical, should be held annually at the seat of the General Government, at some early period of the session of Congress, under the auspices of the Institute, to communicate the results of their inquiries, to compare their observations, and to promote the general interests of science. It has seemed to the committee that this Institute affords an opportunity, which ought not to be neglected, of concentrating the genius and learning of our country at a common center, from which the beams of intelligence will radiate to gladden and bless the land.

They recommend that, in addition to the powers already conferred, the committee be authorized to make arrangements for such a meeting, at a day as early as may be found practicable, and to invite the attendance of those who desire to participate in its proceedings.

They think that a system of exchanges of mineral and geological specimens, and perhaps of other articles, with the private and public collections in different parts of the Union, may be established with reciprocal advantage; and that the Museum of this Institute may, by these and other means, be enabled in time to exhibit the various treasures of our different soils; and they would suggest the appointment of a committee to whom this subject should be given specially in charge.—Proc. Nat. Inst., 1, 335.

† Proc. Nat. Inst., 1, 336.

Adams, who presided; Senator Levi Woodbury, late Secretary of the Treasury, who agreed to represent the meeting in Congress; the Hon. J. R. Ingersoll, who acted as secretary, and who wrote out in his preamble to the minutes of the meeting a forcible statement of the needs of the society; the Hon. C. J. Ingersoll, Senator R. J. Walker, besides Col. Peter Force, Col. Albert, Col. Totten, Lieut. Maury, and the officers of the society.

The issue of this meeting was the decision "to memorialize Congress on the subject of the condition and wants of the Institute."

The memorial was presented in due course of time, and in June, 1844, Senator Choate presented a report upon the character and uses of the institute, recommending that its property should be vested in the United States and an appropriation made for its benefit.

I have not been able to find a copy of this memorial, but since it was evidently prepared by Mr. J. R. Ingersoll* it is safe to assume that the grounds for asking aid were essentially those named in his "preamble" read to the society December 28, 1843.†

In the meantime, on the occasion of the first annual meeting of the National Institute (under its new name and in its capacity as a corporation) in April, 1844, the meeting of the friends of science, including, besides all the members and patrons of the National Institute, the members of the American Philosophical Society and of the "Association of American Geologists and Naturalists" (the predecessor of the American Association for the Advancement of Science), had been held in Washington. The occasion was a brilliantly successful one. The President of the United States presided at the first meeting and some prominent public men at each of the others.

The National Institute received its full share of encomium. President Tyler lauded it highly, held out the hope that the Government would "continue to it a fostering care," and expressed in a general way the hope that it should be identified with the future National Museum and the future Smithsonian Institution.

"Where can the Government find," said he, "a safer depository for the fruits of its expeditions, fitted out to explore distant and unknown regions, than the National Institute? What can it better do for the 'increase and diffusion of knowledge among men' than by patronizing and sustaining this magnificent undertaking?"

Senator Walker, of Mississippi, one of the directors of the institute, delivered a very appreciative introductory address on the present condition and history of American science, ending with an appeal to scientific men to come forward and unite with the people in sustaining and advancing the National Institute.

* At the meeting of May, 1844, the Hon. Joseph R. Ingersoll offered remarks upon the pecuniary embarrassments of the Institute, and expressed a hope that Congress would furnish the required aid. Proc. Nat. Inst., 1, p. 359.

† Proc. Nat. Inst., 1, p. 332.

Senator Woodbury, in a letter to the secretary of the institution, expressed himself strongly in favor of making the society the agent of the Government in the matter of caring for collections, patents, and copyrights, and also in the execution of the Smithsonian trust.

John Quincy Adams closed his address in these words:

I avail myself of this occasion to express my regret that, having taken an humble part in the establishment of this Institution from its first foundation, under the auspices of Mr. Poinsett, I have been able to contribute so little to its promotion and advantage, and to add my heartfelt satisfaction at the prosperity which, by the untiring exertions and fervid zeal of its executive officers, it has attained. I believe it eminently deserving of the fostering care and liberal patronage of the Congress of the United States, and could anticipate no happier close to my public life than to contribute, by my voice and by my vote, to record the sanction of the nation's munificence to sustain the National Institute devoted to the cause of science.

The Hon. Richard Rush, in a paper on "The Smithsonian Bequest," submitted to this meeting, urged that the Smithsonian fund should be "engrafted upon the National Institute," and submitted an elaborate argument in favor of his proposal.

It was a gala week for the National Institution. The meeting was in every respect a success, and there was every reason to believe that Congress would share in the general enthusiasm, and take the society under its patronage.

In the circular of invitation dated March 5, 1843, the objects of the meeting as a means of strengthening the position of the society had been boldly stated, and the committee did not hesitate to say that "should the meeting prove as successful as the hopes of the managers in relation to it are ardent, they will expect hereafter to welcome all who may visit the association in apartments peculiar to itself, stored with the objects of its honest pride and worthy of its distinguished visitors."

Such a paper signed by such influential names as those of John C. Spencer, Secretary of the Treasury, R. J. Walker, W. C. Rives, Rufus Choate, of the Senate, J. R. Ingersoll and W. C. Preston, of the House of Representatives, A. D. Bache, Superintendent of the Coast Survey, and Abbott Lawrence, of Boston, was surely a powerful campaign document.

None the less weighty was the "Memorial of the Friends of Science who attended the April meeting of the National Institute," signed by nearly forty representative scientific men and college presidents from all parts of the United States, speaking in terms of high commendation of the National Institute, and particularly of the extent and value of its museum material, and expressing the hope "that the enlightened and intelligent members of Congress will distinguish the present session by the appropriation of funds to an object so truly national and so truly republican.

This indorsement of the museum work of the institute is very cordial and comprehensive, and very significant; is indicative of a decided growth in public opinion in regard to museums—a growth largely due in the first instance to the suggestions and later to the fostering care of Mr. Poinsett and his society, the National Institute.

The hopes of the promoters of the institute were doomed to disappointment. Congress adjourned without making any provision for its needs.

On the 12th of July a new scheme was proposed for collecting money from private sources by the efforts of trustworthy agents, and in December a committee was appointed to again memorialize Congress.*

The movement had received its death blow, however. The failure of the tremendous effort of April, 1844, disheartened all its friends. At the next annual meeting Mr. Poinsett declined reelection to the presidency. The society's publications were discontinued, and even the annual address of Senator Woodbury, solicited for publication by the society, seems to have remained in manuscript unprinted.

No more meetings were held, no more bulletins printed, the magnificent list of 350 resident and 1,250 corresponding members began to grow shorter. An effort was made to revive it in 1847, and a meager report was made once afterward by the corresponding secretary. In 1855 it was brought into existence for a time as a local scientific society, and issued a new series of proceedings.† Its glory departed, however, with the first annual meeting in 1844, and the attention of Congress was directed toward the organization of the Smithsonian Institution.

The influence of the National Institute upon the history of science in the United States, and particularly in educating public opinion and the judgment of Congress to an application of the proper means of disposing of the Smithsonian legacy, can not well be overestimated.

If the Smithsonian had been organized before the National Institute had exerted its influences, it would have been a school, an observatory, or an agricultural experiment station.

In 1846, however, the country was prepared to expect it to be a general agency for the advancement of scientific interests of all kinds—as catholic, as unselfish, as universal as the National Institute.

The National Institute, after nearly five years of activity, suddenly ceased to be a center of public interest. The struggle over the Smithsonian bequest, however, still continued. During the Twenty-seventh Congress, 1841-'43, the Senate did nothing. The House of Representatives appointed a select committee on the subject, and Mr. Adams as its chairman reported a new bill, providing still more thoroughly for the erection of an observatory and the publication of a nautical almanac to be called the Smithsonian Almanac. Petitions continued to come

* Proc. Nat. Inst., 1, p. 375.

† Prof. Henry was for a time an officer, and endeavored to have its name changed to "Metropolitan Institute."

in, some urging action, and asking for the establishment of prizes for scientific essays, another for the establishment of an agricultural school and farm in the District of Columbia. The National Institution had perhaps fallen somewhat into disfavor with Congress—or, it may be, had become so prominent as to awaken feelings of opposition.

The Twenty-eighth Congress (1843-45) brought their deliberations more nearly to an issue.

The astronomical observatory bill (H. R. 418, Twenty-eighth Congress) was again presented by Mr. Adams, but not acted upon. In the Senate, both in the first and second sessions, a bill for the Smithsonian Institution was reported, June 6, 1844, by the Committee on the Library, through Senator Tappan, which, before it was finally brought to a vote, was brought into a form somewhat resembling that which finally was adopted. It provided, however, for the appointment of various professors and lecturers for a school of agriculture and mechanical arts, as well as for experimental gardens, a library of science and economics, and a museum,

The museum clause of this bill was much the same as that finally agreed to, and contained a provision that the natural history objects, and geological and mineralogical specimens belonging to the United States, "in whosoever custody the same may be," should be transferred to the custody of the board of managers of the Smithsonian Institution.

This was evidently worded with the purpose of withdrawing from the possession of the National Institution the various collections, including those which had belonged to Smithson, which had fallen into the hands of that society between 1840 and 1845. Indeed, the national institution seems to have already become the object of some distrust and prejudice. A proposition that two of the seven "managers" not ex-officio members of the board should be selected from the membership of the national institution caused a vigorous debate in the Senate, in the course of which at least two Senators objected strongly to placing the administration of the Smithsonian Institution, even to so slight a degree as this, in the hands of a private corporation.

The act finally passed the Senate, but was not acted on by the House.

In connection with Mr. Tappan's bill, in January, 1845, Senator Choate, of Massachusetts, first appeared in advocacy of the establishment of a great library, and delivered his famous oration upon the influence of books. The amendment at that time proposed, together with the amendments urged by Mr. George P. Marsh, in connection with the Owen-Hough bill, brought forward in the following session, had a great influence upon the final adjustment of the plan of administration.*

To the Twenty-ninth Congress (1845-47) belongs the honor of finally formulating the act of incorporation by which the Smithsonian Institution was established.

* See report of Hon. James Meacham, 1854, pp. 10-12.

This was done through Robert Dale Owen, of Indiana, who reported the bill nearly in its final form. John Quincy Adams was a member of the select committee to whom it was referred, together with Mr. Owen, chairman, Mr. Jenkins, Mr. George P. Marsh, Mr. Alexander D. Sims, Mr. Jefferson Davis, and Mr. Wilmot.

Mr. Adams was now for the first time willing to omit his advocacy of a Smithsonian Astronomical Observatory, the Naval Observatory having now been organized, and being, as Mr. Owen remarked, "at least equal in everything but the experience of its observers to the Royal Observatory at Greenwich."

It is not my purpose to describe the growth of the Smithsonian plan of organization, except in its bearings upon the development of the museum idea.

In the bill proposed by Robert Dale Owen in 1846 the National Institute was recognized to the extent of placing two of its members on the Board of Managers, an arrangement which was continued in the Board of Regents in the Hough bill which finally passed.

An amendment to the Owen bill, proposed by Joseph R. Ingersoll, and passed, and which, had it not been superseded in the Hough bill, would have given the National Institute a strong and perhaps permanent hold upon the national collections, read as follows:

SEC. 5. *And be it further enacted*, That, in proportion as suitable arrangements can be made for their reception, all objects of art and of foreign and curious research, and all objects of natural history, plants, and geological and mineralogical specimens belonging or hereafter to belong to the United States, which may be in the city of Washington, in whosoever custody the same may be, shall be delivered to such persons as may be authorized by the Board of Managers to receive them, and shall be arranged in such order, and so classed, as best to facilitate the examination and study of them, in the buildings so as aforesaid to be erected for the institution; and the managers of said institution shall afterwards, as new specimens in natural history, geology, or mineralogy may be obtained for the museum of the institution, by exchanges of duplicate specimens belonging to the institution (which they are hereby authorized to make), or by donation, which they may receive, or otherwise, cause such new specimens to be also appropriately classed and arranged. And the minerals, books, manuscripts, and other property of James Smithson, which have been received by the Government of the United States, and are now placed in the Department of State, shall be removed to said institution, and shall be preserved separate and apart from the other property of the institution.

SEC. 6. *And be it further enacted*, That the managers of said institution shall appoint a Superintendent, whose duty it shall be to take charge of the ground, buildings, and property belonging to the institution, and carefully preserve the same from injury; and such Superintendent shall be the Secretary of the Board of Managers, and shall, under their direction, make a fair and accurate record of all their proceedings, to be preserved in said institution; and the said Superintendent shall also discharge the duties of librarian and of keeper of the museum, and may, with the consent of the Board of Managers, employ assistants; and the said managers shall appoint a professor of agricul-

ture, horticulture, and rural economy; and the said professor may hire, from time to time, so many gardeners, practical agriculturists, and laborers as may be necessary to cultivate the ground and maintain a botanical garden; and he shall make, under the supervision of the board of management, such experiments as may be of general utility throughout the United States, to determine the utility and advantage of new modes and instruments of culture, to determine whether new fruits, plants, and vegetables may be cultivated to advantage in the United States; and the said officers shall receive for their services such sum as may be allowed by the Board of Managers, to be paid semi-annually on the first day of January and July; and the said officers, and all other officers of the institution, shall be removable by the Board of Managers, whenever, in their judgment, the interests of the institution require any of the said officers to be changed.

In the Hough bill there was an attempt of another kind to weld together the fate of the Smithsonian Museum and the National Cabinet of Curiosities, by giving to the Board of Regents the authority to erect a building by the side of the Patent Office, so as to form a wing of that structure, and to connect it with the hall then containing the National Cabinet, so as to constitute that hall in whole or in part the depository of the cabinet of the institution.

This was discretionary, however, with the Regents, who fortunately did not look upon the plan with favor.

Reference has been made to the marked similarity between the plans of organization of the National and Smithsonian Institutions. In addition to the feature of museum custody, which has already been discussed, there were others no less significant.

The National Institution, like the Smithsonian Institution, had a superior board of officers, composed of the President of the United States and the members of his Cabinet. It had also a board of directors, which included in its membership delegates from the Senate and House of Representatives, corresponding in function to the Smithsonian Board of Regents. In other respects, still more markedly than in the constitution of its governing board, the Smithsonian seems to have been organized with the plan of the National Institution in view. The objects, as defined in the Congressional act of establishment (sections 5 and 6), correspond very closely to those announced in the early publications of the National Institution.

The institution at its foundation divided its members into eight classes, as follows:

- I. Astronomy, Geography, and Natural Philosophy;
- II. Natural History;
- III. Geology and Mineralogy;
- IV. Chemistry;
- V. The application of same to useful arts;
- VI. Agriculture;
- VII. American History and Antiquities;
- VIII. Fine Arts;

and in all these classes, except the fourth, made plans for the collection of museum material. Ethnography was grouped by Mr. Poinsett with geography, with which he states that it is "intimately connected, and indeed forming a part of it until it was lately erected into a separate science."

It is worthy of remark that the term "manager,"* to designate a member of the governing board, was employed in every bill, except in the substitute which was proposed only a few hours before the final action, and that when the election of the first Secretary was held Francis Markoe, jr., who had been for six years Secretary of the National Institution and was more than any one else perhaps identified with its interests, received four votes against seven cast for Prof. Henry. Dr. Charles Pickering, the Curator of the National Institution, also received one vote.

The term "curator," as applied to an officer in charge of the national collections, then came into use for the first time.

THE NATIONAL CABINET OF CURIOSITIES.

The formation of a "national museum" was one of the professed objects of Poinsett and his associates in the National Institution, but it does not appear that they ever dignified with that name their collections, which were usually modestly referred to as constituting the "cabinet"† of the Institution, both in the constitution and in the proceedings of the society.

In the Hough bill for the organization of the Smithsonian Institution in 1846, the collection in the Patent Office was officially designated as the National Cabinet of Curiosities, a name which though never in general use is very appropriate and convenient for use in designating the as-

*The term *regent* was undoubtedly suggested by the organization of the University of the State of New York, a term peculiar to Mr. Hough, the mover of the substitute, who was a representative from that State and who in all probability had been one of the board of regents of that University.

The Hon. W. J. Hough was the first Secretary of the Institution. Having been elected to that office September 7, 1846, he served until the election of Prof. Henry on December 3. Mr. B. B. French was elected assistant secretary, and appears to have served until the election of C. C. Jewett, and at a meeting of the board in December submitted a report for the Secretary.

† In 1790 a law was passed by Congress "to promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." [Sec. VIII, par. VIII.]

In this was gathered a collection of models, which was sometimes by courtesy called "The American Museum of Arts," but which had no title to the name either by law or by courtesy. This was destroyed by fire December 15, 1836.

In "An act to promote the progress of the useful arts, etc.," approved July 4, 1836, provision was made for the preservation and display, under the charge of the Commissioner of Patents, not only of models, but of "specimens of compositions and of fabrics and other manufactures and works of art." [Sec. XX.]

semblage of miscellaneous objects for a time exhibited in the Patent Office building.

From 1847 to 1851, however, there was no use of the term National Museum, the collections of natural history which were accumulating under the care of Prof. Baird constituting for the time being the "Museum of the Smithsonian Institution."

The National Cabinet of Curiosities, carrying with it a certain official atmosphere as well as an annual appropriation, was, however, one of the parents of the greater establishment yet to come. Of its marriage with the Smithsonian Museum, the National Museum of the United States was the offspring.

The Smithsonian cabinet of minerals and meteorites was, as we have seen, the first scientific collection which belonged to the United States, coming into the custody of Mr. Rush in June, 1838.

Of all the expeditions sent out by the Government, none previous to the Wilkes exploring expedition, sent out in 1838, was instructed to bring back collections of natural history.

In the earliest days of our Republic the cabinet of the American Philosophical Society of Philadelphia was doubtless the official museum, and this was enriched by the efforts of the only naturalist President, Thomas Jefferson.

The first exploring expedition, that of Lewis and Clarke, in 1803, was sent out by Jefferson, who twenty-three years before, in 1780, began to agitate the question of exploring the unknown West, and who at that time offered to raise 1,000 guineas for the purpose from private sources. Lewis and Clarke returned in 1806, bringing with them some valuable scientific material, zoological and ethnological. Some of the animals appear to have found their way to Peale's Philadelphia Museum. Godman in his *American Natural History* mentions a sable which had been obtained from this source and was to be seen there in 1823. I have been told that within a few years Indian garments and weapons, brought back by this party, were to be seen in St. Louis. Pike's expedition in 1805, the second of the exploring enterprises, yielded little in the way of scientific material. Whatever there was went undoubtedly to the Philadelphia Museum, and in 1808 there were still on exhibition at that place two grizzly bears which as cubs had been brought by Maj. Pike from the region of the Rio del Norte and presented by him to President Jefferson, who gave them to Mr. Peale for his museum. Other specimens appear to have found shelter in the University of Virginia, where two sets of antlers, brought back by Capt. Lewis, are still preserved.

In 1820 a third expedition was sent by the General Government to explore the Northwestern Territory, especially the region around the Great Lakes and the sources of the Mississippi. This was under charge of Gen. Lewis Cass, at that time governor of Michigan Territory. Henry R. Schoolcraft accompanied this expedition as mineralo-

gist, and Capt. D. B. Douglass, U. S. Army, as topographical engineer; and both of these sent home considerable collections reported upon by the specialists of the day, most of whom were at that time concentrated in Philadelphia.

The fourth and fifth expeditions were those under Maj. Long, in the far West; the first, or Rocky Mountain, exploration in 1819-'20; the second, to the sources of the St. Peter's in 1823. In the first expedition Maj. Long was accompanied by Edwin James as botanist and geologist, who also wrote the narrative published in 1823. The second expedition was accompanied by William H. Keating, professor of mineralogy and chemistry in the University of Pennsylvania, who was its geologist and historiographer. Say was the zoölogist of both explorations, and the results of his labors went to the Philadelphia Museum.

The sixth Government expedition was that by G. W. Featherstonhaugh, in 1834-'35, to explore the geology of the elevated country between the Missouri and Red rivers and the Wisconsin territories. I have found no record of the disposition of his collections, but it is not improbable that he may have carried them with him to England.

The seventh expedition was that under Lieut. Wilkes, already referred to as having been sent out in 1838, under the direction of President Van Buren, who seems to have intrusted the plans very largely to Mr. Poinsett, who was the first to urge the formation of a national museum, and to whom was doubtless due the insertion of the clause instructing the officers to preserve and bring back collections in natural history, a precaution which might easily have been overlooked, since the expedition was organized professedly in the interests of the American whale fishery.

It was, perhaps, the fact that there was no suitable depository for collections at the seat of government that stimulated Mr. Poinsett to immediate action in 1840, when he founded the National Institution, the arrival of these collections from the Pacific being at that time expected.

The purpose of Mr. Poinsett's efforts is shown clearly in his first anniversary address.

"There are many of our countrymen," said he, "who, like Sir Hans Sloane, the founder of the British Museum, look forward with regret to the sale and dispersion of their collections, and desiring to have them preserved entire would deposit them with an institution which will be as stable as the Government that protects it. For these purposes, and especially if the National Institution be intrusted, as we hope it will be, with the specimens of natural history collected by the exploring squadron, it will be necessary that measures should be early adopted to have erected on a suitable site a plain, fireproof building, where the increasing and valuable collections may be displayed and examined by the scientific inquirer. We cherish the hope that they will form the foundation for a national museum and contribute to shed the light of science over our land."

"The exploring expedition," he continued, "has already sent home a large collection, which remains packed away in boxes in a room belonging to the Philadelphia Museum, generously loaned by the company for that purpose; and we may anticipate, from the ability and well-known zeal of the naturalists who accompanied it, that the squadron itself, shortly expected, will return richly freighted with objects of natural history. I cannot believe that, after all the labor, pains, and expense incurred in procuring them, these specimens are not to be brought to Washington to be arranged and exhibited here."*

Mr. Poinsett was at this time still Secretary of War, and had the power to effect at least the beginning of what he desired to see done, and one of his last official acts was to persuade his colleague, James K. Paulding, the Secretary of the Navy, to order these collections forwarded from Philadelphia.

In February the Institution was informed "that about one hundred and fifty boxes, the results as far as have been received of the exploring squadron's exertions, containing a variety of interesting objects of natural history, and destined for the cabinet of the Institution, have been shipped at Philadelphia, and are expected as soon as the navigation opens."†

Here, again, Mr. Poinsett's prompt action told in the interest of the future national museum. If he had waited till the navigation opened he would have been obliged to treat with the Secretary of the Navy.

The entirely unorganized condition of affairs in Washington and the lack of experience in museum administration is shown by the fact that Mr. W. McGingan, curator of the Philadelphia Museum Company, thought it necessary to write the following amusing cautionary letter, which was printed in the bulletin of the Institution:

It would be unadvisable to break open the cases containing the articles collected by the South Sea exploring expedition until such period as they are unpacked to be prepared for exhibition. The immense quantity of arsenic and corrosive sublimate necessary for their preservation requires, respectively, that very great caution should be observed, and that the handling and arrangements should be under either the immediate inspection or personal attention of one fully adequate to all the details connected with this subject.

In the hands of inexperienced persons, death might be the result.

W. MCGINGAN.

PHILADELPHIA, *February 6, 1841.*

Still another step was taken on March 3, 1841, the day before the final adjournment, which I am also disposed to attribute to the forethought and interest of Mr. Poinsett, which was the appropriation by Congress of \$5,000 "for defraying the expenses of transporting to the city of Washington and of arranging the collections made by the exploring expedition."

The committee, consisting of Col. Abert, Mr. Markoe, Mr. Dayton, and Dr. King, appointed under a resolution passed at the stated meet-

* Discourse, etc., 1841, p. 50.

† Proceedings, p. 48.

ing of the National Institution on the 13th December, 1841, which is in the following words:

Resolved, That a committee of four members be appointed by the chair to examine the subject of exchanges, to propose a plan for that purpose, and to report fully thereon to the institution for its further consideration and action—

beg leave, in pursuance of the directions of the said resolution, to report:

That the duty devolved on the committee by the resolution is, first, to examine the subject of exchanges; second, to propose a plan of exchanges; and third, to report thereon to the Institution. In reference to the first point, viz., “the examination of the subject,” the committee state that they have examined the subject, and that the result has been a full conviction of mind that a system of exchanges is of very great importance in the accomplishment of one of the primary objects for which the National Institution has been declared to be formed, viz., “the establishment of a national museum of natural history,” etc. Exchanges enter essentially into the plan of every society constituted by the National Institution and having like objects in view, and no occasion has been omitted to acquaint societies and individuals, whose correspondence has been sought by or offered to the National Institution, that a system of general exchanges would be entered upon as soon as the Institution should be able to mature a plan for that purpose. Under this assurance, and independently of it, also, it should be added, valuable collections of various kinds have already been received by the institution, which is thus already placed in a position which makes it incumbent on us to redeem the pledge that has been given. The committee consider it superfluous to dwell upon the advantages of exchanges, but they wish the members to know that for this object they have already in hands the most abundant materials—materials which are increasing and will continue to increase every day. These materials consist of contributions made by members, by individuals who are not members, by societies and institutions at home and abroad, and by foreign governments, as well as of those accessions that have been made by the exploring expedition, which has already sent home an inexhaustible quantity and variety of duplicates. It is well known to the institution that the collections received from all these sources are equally and absolutely the property of the Government, and that therefore the permission of the Government is indispensable to enable the Institution to part with the duplicates derived from all these sources. This permission, it is believed, will be cheerfully accorded. At the same time the committee, for obvious reasons, do not think it proper to ask the Government to allow the Institution to part with any of the duplicates of the exploring expedition until the squadron shall have returned.

In reference to the second point, viz.: A plan of exchanges, the committee do not feel called upon or competent to enter into details. These must be left in a good degree to those whom the Institution may see fit to charge with the execution of the plan, in which of course they will be governed by the practice of other institutions, and by such regulations as it may become expedient to adopt from time to time to suit our own convenience and peculiar circumstances. Here, however, on the threshold of the plan which the committee mean to propose, they regard it of consequence to suggest for the sanction of the Institution that in exchanges of all kinds the natural productions of our country shall first and always have a decided preference. A great and leading

design of the National Institution is to explore and develop our own resources, and to study and describe the natural history of the United States. To this end our exertions must principally be directed. It should be the pride of all connected with or interested in a *National Institution*, to see every State in the Union fully represented in a national cabinet established at the seat of government. This method, while it recommends itself to us and our interests, is calculated to extend benefits and encouragement to the societies and naturalists of our own country, who will thus have a central depository from which they may enlarge and vary their own collections; and thus, also, in due time, the duplicates of the exploring expedition may, with the greatest advantage, be diffused throughout the land, thereby fulfilling, in the amplest manner, the intentions of those who projected, and justifying the liberality of the Government which sanctioned that noble project.

With these preliminary remarks, and under the restrictions which are embraced in them, the committee recommend—

First. That a system of exchanges be entered upon without delay.

Second. That the curator and assistants be directed, for this purpose, to separate all duplicates, except those from the exploring expedition; and that they select and label such specimens as are to be sent to individuals or societies.

Third. That the first step taken be to discharge the obligations of exchange already incurred by the Institution.

Fourth. That a committee be appointed, to whom the curator shall submit all sets of specimens thus set aside for any given exchanges, who shall decide upon the equivalency before said specimens shall be boxed up and sent off.

Fifth. That in all cases of difficulty which may arise, reference must be made to the president or vice-president of the Institution for decision, who will, if they conceive it necessary, submit the question to the Institution.

Sixth. That a book be kept by the curator, subject at all times to the inspection of the committee, in which must be noted the contents of each box or package; lists of the articles for which they are the equivalents; the name and place of the society or individual to whom one set is to be sent, and from whom the other has been received.

In what the committee have now submitted, they conceive that they have done all that it was possible or necessary to do at present in reference to the third point of the resolution, viz: "reporting fully on the subject"; although they are perfectly sensible that in their report they have presented the subject in the most general manner, believing that experience and practice alone will enable the Institution gradually to settle upon a complete system. The committee beg leave to add that the present report is not to be regarded as final, but that it is submitted, with all due deference to the institution, to use the concluding words of the resolution, "for its further consideration and action."

Shortly after this, on March 8, in order to provide for the reception of these collections, Dr. Henry King* was elected curator of the Na-

* Henry King, M. D., was a geologist and mining expert who had been a resident of Missouri, who had lately been employed in an exploration of the lead mines of the West, and who at this time was employed by the War Department in Washington. He was the author of a manual of "Directions for making collections in Natural History," published in 1840 by the Institution, the first part of a long series of pamphlets of scientific instructors, printed at the capital. [1840. King, Henry.

tional Institution, the first in Washington to bear an official title which has since been the designation of a goodly number of worthy workers in science.

The curator, although an elective officer of the Institution, received his pay from the Congressional appropriation already referred to, an arrangement not unlike that which prevails to this day in the National Museum, where the officers, chosen by the Smithsonian Institution, are paid by the General Government.

The collections arrived some time in March, and in response to its request Mr. Badger, the newly made Secretary of the Navy, placed them under the care of the National Institution, and in April, as we learn from the unpublished letters of the curator, the taxidermists were preparing about fifteen bird skins a day, a rate of speed which quite explains the atrocious condition of the preparations which have come down to us from those days of the infancy of the National Museum. In May additional collections, brought by the ship *Suzanne* to New York and thence trans-shipped by the schooner *Palestine*, were received in Washington.

A new danger now threatened the integrity of the collections, which was that the curator found many of the boxes "marked in such a manner as to indicate that they belong to and are claimed by private persons," these constituting a large part of the whole.

Here, again, Mr. Poinsett had foreseen and provided against the danger, having instructed the curator, on a previous occasion, to pay no attention to private marks on collections received from a Government expedition.

The question was submitted to the Secretary of the Navy, who at once replied that, in his opinion, "all specimens collected by officers attached to the expedition belonged solely to the United States."

In April, 1841, the collections and library of the Institution were installed in the new Patent Office building, where they remained until removed to the Smithsonian, in 1857.

Extensive plans were made for a system of international exchange, and a committee formulated the policy of the society in an elaborate report.

Another Government collection soon came in consisting of the minerals and geological specimens gathered by David Dale Owen, during his survey under the direction of the United States General Land Office, also a collection of "Indian portraits and curiosities" transferred by the Secretary of War, and the Smithsonian cabinet, books and minerals, deposited by the Secretary of the Treasury, and a bill was passed by Congress, less important by reason of the appropriation of \$500, which

Directions for making Collections in Natural History. Prepared for the National Institution for the Promotion of Science; by H. King, M. D.—Washington. Printed by Gales & Seaton. 1840. 8vo., pp. 1-24.]

Dr. King was elected curator March 8, 1841, and held the office until September 12, 1842, when he was succeeded by Dr. Charles Pickering.

it makes, than from the fact that it justifies the Secretaries of War and of the Navy in transferring collections in their possession to the Institution.

On the 1st of January, 1842, a letter was written by a committee of the National Institution to the Secretaries of War and the Navy.

In February, 1842, another important paper was presented to the Institution by the same committee—important as marking the beginning of the system of exchanges and distribution of duplicates which had for nearly forty years been so important a feature of the work of the National Institution.*

With the exception of the papers already alluded to, which had reference to the relation of the society to the Government, and to the Smithsonian bequest, the bulletin of proceedings from this time on contained little more than the record of the receipt of donations of specimens and of letters asking information or proffering advice. The society retained the control of the exploring expedition collections, and in June, 1842, Lieut. Wilkes having returned to Washington, he, at three successive meetings of the Institute, gave a history of his voyage and its results. He was at first subjected to some opposition, and until after a court-martial, held in New York in August, seems to have been disposed to say very little. He, however, wrote, under date of July 16, 1842, a letter† to Senator Preston, in which he indignantly protested against the manner in which his officers and men had been received on their return.

When he was restored to favor and influence he at once took steps to gain control of the collections made by his squadron, provisionally under the charge of the National Institution, with results to be studied later.

* This is printed in Note A from the MS. report in the archives of the National Museum.

† This letter, now in the archives of the Museum and never published, is of so much interest historically, that after the lapse of nearly fifty years it is printed, in the certainty that its harsh significance has all vanished.

WASHINGTON CITY, 16th July, 1842.

MY DEAR SIR: Agreeably to your desire, I hasten to give you the information relative to the remaining duties of the expedition, and that are *absolutely* necessary to carry out the intention of Congress in passing the act authorizing the expedition, viz, "for the promotion of the great interests of commerce and navigation, and to extend the bounds of science and promote the acquisition of knowledge."

For the accomplishment of these great objects, there was required persons to attend to the different departments of science, and the following was the organization which I proposed, and was adopted by the Government, and the most economical one that could have been arranged to carry out the great view intended, and that the accommodations of the fossils would permit, viz:

The department of astronomy, hydrography, magnetism, meteorology, and physics, including the experiments with the invariable pendulum, was confided to myself with the officers under my command as assistant. Besides the above I was charged with the history or narrative of the voyage.

This at once greatly reduced the scientific corps which had been organized, viz, from 23 to 9. I felt the Navy was justly entitled to all these departments, embraced as they were within the limits or scope of the profession, and that they ought not to be attached to such an undertaking to act as the "hewers of wood and drawers of water," as was the case in its original organization.

Charles Pickering, naturalist; Titian R. Peale, philologist; Horatio Hale, geologist; James D. Dana, botanist; William Rich, horticulturist and assistant; William Brackenridge, botanist; Joseph Drayton, artist; Alfred Agate, artist; J. G. Anthony,

In September, 1842, Dr. Charles Pickering became curator. He had been a member of the Wilkes exploring expedition and was occupied during his connection almost entirely in the work of unpacking and arranging its collections.

conchologist, who was with the expedition until the end of November, 1839, after which period his duties were divided among the rest and successfully performed. These formed the nine; to these was added a mechanic for the repair of instruments and their proper preservation.

In all the above departments much remains to be done; indeed, I view the services of the above gentlemen as necessary now, and even more so than at any other period of the cruise, nor can their services be dispensed with, or the work concentrated, without great loss to the expedition and the reputation of the country. For my own departments I require the services of Mr. Stewart, who was a clerk in the expedition, but whom I have made hydrographical draughtsman, and some few of the officers, who have been my principal assistants. Mr. Stewart will be enabled also to assist me in copying, etc. He is one of my own scholars and is now engaged in the duties assigned him.

I truly regret that anything should have occurred to dampen the ardor of those who are attached to the expedition and absolutely necessary to the bringing out the results. The ardor that has been felt during the cruise has been all-important to our success, and has been in every way encouraged by me, and I did hope that it would have been kept alive until all had been accomplished. The reputation of our country is at stake, and if what has been attempted and succeeded in is not now finished, from any motive of economy, or derangement of the organization will be ruined, and it shall become the laughing stock of Europe, and all the praise that has been lavished on our Government for its noble undertaking prove but "satan in disguise."

What will be the reputation of those who have had the ordering of things since its return, on their becoming known on the other side of the waters? For the reception of myself I can easily account; but that of the officers and crews is truly unaccountable, particularly the want of any expression of thanks from the department to the latter on their discharge; it was felt by every officer and remarked by every man. On minor duties I have been gratified by it formerly, and I have with pleasure seen its effects upon many of the men that formed a part of the crew of this expedition when on other service with me. I have urged it all in my power, but without effect; every day develops some new opposition to the expedition. I am aware you think I want cause for this opinion; perhaps I am mistaken, but I cannot but feel myself bound up in it; indeed it would be strange if I was not, and I must say it is heartsickening to me to hear those who have shared its dangers and troubles complaining of a want of attention and courtesy and exhibiting the unceremonious discharges from their duties, with little or no prospect of consummating the labors in which they have been engaged for the last four years, and before they have even seen their families. Some are suffering under sickness contracted from their exposure in the service of their country. They are now suddenly cut off and destitute of support for themselves and families. These facts are well known. Such treatment is without precedent in the service of this or any other country.

Contrast our expedition with those of the French and English engaged in the same service and at the same time; honor and rewards are heaped on all at and before their return. Examine our results, compare them with theirs, contrast us in every way with them you please, or with expeditions that have gone before us, and then ask if we have not reason to feel mortified.

Do not misunderstand me. I ask nothing for myself at present, and will not as long as this mist hanging over me exists, but which any fair and candid examinations into my actions and conduct would have long since dissipated, neither do I ask impossibilities or undeserved praise; no greater punishment can be inflicted on the head of one who receives it. But I would ask: Is it not fully apparent and placed beyond cant that the men of the expedition have done their duty, and did deserve the thanks of the Department before they were disbanded?—it was openly complained of when they were paid off.

I have greatly to complain of the course the Department has pursued towards myself, but I forbear to touch on this subject at present.

In conclusion, my dear sir, I beg you will excuse this long letter and its tone. Whenever these subjects are brought to my mind I feel it acutely. All I do hope is that for the credit of the expedition, the honor and reputation of the country, you will not lose sight of what ought to be done. Fully confident I am that there is no subject in which the reputation of our country is so much at stake as the development of the results of the exploring expedition and on which its conduct will be so closely scrutinized abroad. I have the honor to be, with great respect,

Yours, most truly,

CHARLES WILKES.

Hon. WM. C. PRESTON, Senator, U. S., Washington.

In the meantime, in February, 1842, Dr. J. P. Couthouy, one of the naturalists of the expedition, having been detached from duty by Capt. Wilkes, was employed by the committee of the Institution to aid in the work upon their collections and in September Mr. W. D. Brackenridge, horticulturist of the expedition, was also taken upon the Museum staff and given charge of the plants,* and a little later Prof. James D. Dana seems to have been given charge of the arrangement of the geological and mineralogical collections, not only of the exploring expedition, but of the Institution cabinet, including the Smithson, Owen, Locke, and Totten collections, and Horatio Hale was performing a similar work upon the ethnographical collections of the Institution, which he reported upon as "chiefly from the exploring expedition."

The force at this time engaged upon the national collections, under the direction of the National Institution, consisted of Dr. Charles Pickering, principal curator, J. P. Couthouy, J. D. Dana, Horatio Hale, and W. D. Brackenridge, curators and assistants, and J. K. Townsend and John Varden, assistants. Thomas Nuttall, the well-known botanist, had in 1841 been engaged upon the herbarium, but had now gone away.

Here, then, in 1842, we find a strong museum force at work on the collections, a force fully as effective thirty years later, in 1873, when the writer first became acquainted with the operations of the Smithsonian Institution.

The report prepared by them at the end of the year 1842 was essentially the second official report upon the national collections, and since it has never been published it is printed in Note B, at the end of this memoir.

At the meeting of September 12 a resolution was passed in these words:

Resolved, That a committee be appointed to wait upon the Secretary of the Navy, and upon the joint committee of the Library of Congress, and to proffer to them the co-operation of the Institute in carrying into effect the intentions of the law lately passed by Congress, for the arrangement and preservation of the collections made by the Exploring Squadron, and for the publication of the results of that expedition; and that this committee be authorized to act in the name and behalf of the Institute in all matters relating to this subject.

In reply to the letter transmitting this resolution, the following letter was received:

NAVY DEPARTMENT, *September 17, 1842.*

SIR: I have received your letter of the 15th instant, transmitting a copy of the resolutions of the National Institute passed on the 12th instant, in relation to the arrangement and preservation of the collections made by the exploring squadron, and informing me that Dr. C. Pickering had been unanimously elected curator of the institute.

*Mr. Brackenridge, on the return of the expedition in 1842, brought the live plants and seeds to Washington, and there being no place for their reception hired a greenhouse and cared for them, apparently on his own responsibility, for several months. Eventually they were provided for at the Botanic Garden about 1859, after having been for many years kept in greenhouses in the rear of the Patent Office.

I shall be happy to receive the suggestions of the committee as to the proper course of proceeding.

I am, respectfully, your obedient servant,

A. P. UPSHUR.

GARNETT R. BARRY, Esq.,

Recording Secretary National Institute, Washington.

In the meantime a change in the status of the Government collections had been effected by the passage of an act of Congress, August 26, 1842, providing for the publication, under the supervision of the Joint Library Committee, of an account of the discovery made by the exploring expedition, the third section of which was as follows:

That until other provisions be made by law for the safe keeping and arrangement of such objects of natural history as may be in the possession of Government, the same shall be deposited and arranged in the upper room of the Patent Office, under the care of such persons as may be appointed by the Joint Committee of the Library.

By act of August 4, 1842 (Stat. v., 501), the sum of \$20,000 had already been appropriated for the transportation, preservation, and arrangement of these collections.

In the charter of the National Institute, passed a month before, there was a provision that all trusts "are vested and confirmed to the said corporation," and the supporters of the Institute were disposed to urge that this was applicable to the collections of the "exploring squadron" at that time in the custody of the Institution. The question did not come up in a troublesome way at this time, for the Library Committee, at that time unfriendly, simply confirmed the choice of curator made by the National Institute, and appointed Dr. Pickering to the position, Dr. Pickering being thenceforth subject to the Congressional committee, and only by courtesy acting for the National Institute.

Trouble was brewing, however, for it was evident that the links binding together the interests of the National Institute and the exploring expedition were not very tenacious. There was in fact no legal authority for the agency of supervision which the Institution was now exercising, the whole being the outgrowth of a very informal understanding between two or three successive Secretaries of the Navy and a committee of the Institution "appointed to correspond with the Departments of Government."*

This committee, composed of two of the most active directors and the corresponding secretary, soon began to perform the functions of a general executive committee—no doubt with the sanction of the society, but without direct authority.

The recent acts of Congress had taken the control of the collections away from the Navy Department, by whose act alone they had been placed in charge of the Institute. The committee of the Institute still believed itself responsible in an advisory way for the disbursement of the appropriation, but soon found expeditions in progress of which they had no knowledge. The committee filed a protest with Mr. Poinsett, their

* Proceedings 1, 71.

president, who seems to have at once taken steps to secure the only possible relief from the embarrassment that—of special legislation.

The following bill was accordingly introduced in the Senate by the honorable Robert J. Walker:

A BILL for the preservation of the collections of natural curiosities furnished by the Exploring Squadron, and from other sources.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the board of management of the National Institute be, and is hereby, invested with the custody of the specimens of natural history, and other curiosities, which have been received, or which may have been received, or which may hereafter be received, from the Exploring Squadron, and from other sources, with authority to make all necessary arrangements to preserve and exhibit the same, to regulate the number and compensation of persons employed on said duty, and to superintend the disbursements relating thereto.

SEC. 2. *And be it further enacted,* That the said board is hereby authorized to exchange any of the duplicates of said collections, with other institutions, or with State authorities, or with individuals.

At the request of Senator Walker two of the members of the committee had drawn up a statement of the relations which they deemed it desirable to have established between the Institution and the General Government in respect to the national collections. This statement was submitted by Senator Walker, not as an official document emanating from the Institute, but with the heading "Remarks submitted by Mr. Markoe and Col. Abert to the Hon. Mr. Walker." This was certainly an unfortunate form of introduction to Congress, and the opponents of the National Institute made the most of it. The bill with the accompanying statement was referred to the Joint Committee on the Library, and on the 28th of February was made the subject of a report presented by Senator Tappan*, in which he ridiculed the idea of placing the results of a great Government expedition in the hands of a "private corporation," and advised members of the National Institute to disabuse themselves of the idea that regular appropriations would ever be made for its benefit. "The case presents" he remarked "two officers of the Government, one the head of a bureau, the other a clerk in one of the public offices, *who ask as a matter of right that they should have the supervision of a very important literary and scientific work, the publication of which Congress has thought proper to intrust to one of its regular committees.*" The recommendation of the committee was that the responsibility of this work remain in the hands of the Joint Committee on the Library, where it had originally been placed by law. Senator Tappan's attack was evidently based upon a partial misunderstanding of the views of the members of the National Institute, who simply asked the custody of the collections and the authority to supervise their arrangement. Col. Abert and Mr. Markoe were indignant at the injustice, and addressed to Senator Walker a letter, in further explanation of their views.

This letter, with the comments upon it by Senator Walker and Sena-

* Senate Document, 233, see note to this paper D.

tor Preston, is printed in a note appended to this memoir,* accompanied by a hitherto unpublished letter from Senator Woodbridge, of Michigan, who, as a member of the committee, was able to explain the real significance of its action.

All of these papers are given in a pamphlet published at the time, which is, however, now exceedingly rare, and almost forgotten.

The versions of the papers here given are for the most part from the originals or verified copies in the archives of the National Museum.

Senator Tappan's speech and the subsequent action of Congress did much to undermine the foundation of the Institute, which was evidently scarcely solid enough to sustain the structure which it had been proposed to rear upon them.

After this it was inevitable that there should arise conflicts of authority, and they were not slow in coming.

It is possible that they were precipitated by Capt. Wilkes, who naturally may have felt some irritation at the manner in which the control of the collections made by his expedition were taken out of his control while he himself was for a time under charges.

The Commissioner of Patents too seems to have been irritated by the occupation of a hall in the Patent Office controlled by alien authority.

In July, 1843, Dr. Pickering resigned his curatorship, and the Library Committee, now hostile, and acting in the spirit of their report, made use of the authority vested in them by the act of August 26, 1842, and appointed to the custodianship of the Government collections the Commissioner of Patents, Mr. Ellsworth, and in August placed Capt. Wilkes in special charge of the gatherings of the exploring expedition.

The action of the committee does not appear to have been known to the officers of the Institute, except by rumor, but they were left to find out the change of policy by an unpleasant series of experiences.

The first serious friction was in connection with Capt. Wilkes. Its character is shown by the following correspondence, which is here printed on account of the new light it throws upon the condition of the National Cabinet of Curiosities in the years 1843-'44 and upon the otherwise inexplicable circumstances which led to the collapse of the National Institute shortly afterwards:

Letter from Col. Abert to Capt. Wilkes, September 5, 1843.

DEAR SIR: Reports of a painful character, involved in the questions of the inclosed letter, have reached the ears of many of us, and I have been urged as chairman of the committee having charge of these matters to bring them before the directors. But I refused, on the ground that I would not be the medium of bringing forward misunderstood or exaggerated facts, for discussion or action, preferring the course of the enclosed letter, as it will procure the desired information from the best authority and under its true aspect. It seems to me that the Institute is the last which should receive unkindness from any one whose fame is

* Note E, I, II, III, IV.

+ 1843. [Abert, John J., and Francis Markoe, jr.] Reply [of] Col. Abert and Mr. Markoe [to the] Hon Mr. Tappan, [of the] United States Senate.—Washington,—Wm. Q. Force, printer. | 1843. | 8 vo. pp. 1-18.

connected with the results of the exploring squadron, for without the interference of the Institute where would these results have been. And without its future care what will become of them, for what other body in whose care they can be placed has a permanent domicile at Washington.

J. J. ABERT.

Capt. WILKES.
SEPT. 5th, (1843.)

Letter from Col. Abert to Capt. Wilkes, September 5, 1843.

SIR: It is contemplated soon to have a meeting of the directors of the National Institute, at which matters of much interest to the Institute will be brought up. Understanding that you have been placed in charge of the room in which both Institute and ex. expedition curiosities are deposited, and anxious that at our meeting the directors should be fully and correctly informed, allow us to beg of you the favor of an early answer to the following queries:

1. Have directions been given to remove the property of the Institute and that under its care, except exploring expedition specimens, from the room in which they now are or from the cases in which they have been deposited, or are such directions contemplated?

2. Are the persons employed at the room and paid by the U. S. prohibited from bestowing any attention upon any other than ex. exp. specimens, from opening the boxes of presents sent to the Institute, cleaning, arranging, and attending to the same?

3. Will any of the persons employed at the room and paid by the U. S. be allowed to bestow any of their time and talents upon the preservation and arrangement of the collections, except those of the ex. squadron?

4. Can the Institute count with sufficient certainty upon the services of any person so employed so as to invest him or them as curators or assistants with the requisite authority from the Institute?

You will readily perceive the importance of these questions to the Institute, and how eminently they invoke the security and preservation of the valuable and extensive collection under its care, you will, therefore, I hope, pardon us in the request of an early answer.

J. J. ABERT.

Capt. CHARLES WILKES,
U. S. Navy, Washington.
SEPT. 5, 1843.

Letter from Capt. Wilkes to Col. Abert, September 16, 1843.

WASHINGTON CITY, 16 Sept., 1843.

MY DEAR SIR: Your friendly letter was received on my return to the city after a short absence, which will account for your not having an earlier reply.

I can not acknowledge any right in a committee of the Nat. Inst. to call upon me for any explanation whatever relative to my official duties or actions, particularly when such a call is based upon (as you inform me) painful reports of which I have no knowledge and little regard, and can not help expressing my astonishment that any members of a scien-

tific society should have given credence to them, to have authorized an action on the part of one of their committees before they had ascertained that they were true.

I cannot but admire your course in refusing to act, or to the wisdom of bringing them forward for discussion or action before an appeal was made to the best authority. I therefore feel much pleasure in answering the questions as coming from yourself, and do it particularly with a view that you may communicate it to any of the gentlemen, your associates, who may have been instrumental in getting up and giving currency to the reports which you inform me are in circulation.

1st. The law places the collection of the United States exploring expedition in the upper hall of the Patent Office building and under the care of the Joint Library Committee of Congress for the purpose of arranging the whole for description, publication, and exhibition. The Library Com'ee have appointed me to superintend them to this end. In pursuance of my duties the whole is undergoing arrangement. When I took charge on the 1st of August a few specimens and articles were pointed out to me as belonging to the Nat. Inst.; those have not been disturbed further than became necessary in the arrangements, and an equal care has been bestowed upon them that others have received.

2d. All the persons employed and paid by the Government are required to devote themselves entirely to the Government work; when there is no longer employment for them, or they do not give satisfaction, they will be discharged. It is believed that their time is now fully employed, and that their duties require all their attention and talents to be devoted to the collection of the expedition in order to perform them to the satisfaction of the Library Committee and myself. They are under the same system as if employed elsewhere by the Government. From this it follows that their time and services for which the Gov't pays can not be devoted to or divided with any incorporated association.

Although believing that the above embraces an answer to all the enquiries made of me I will go further and assure you that there is every disposition on the part of the Library Com'ee of Congress and myself to have things belonging to the Nat. Inst. that are now in the hall taken care of, and due notice will be given to the Institute should the little room they occupy be required for collection of the exp'g expd., which it is now confidently believed will entirely fill the hall when they are fully arranged. I will now close with a few words respecting the last clause of your letter relative to my feeling any "unkindness" towards the Nat. Inst. It is rather improbable that any unkindness or hostility would exist on my part considering that the labour of the expedition, combined with the exertion of your gifted president (Mr. Poinsett), were the origin of it, and that in all probability it may one day become the depository of the large and valuable collection of the exp'g expedition, therefore I can not but feel deeply interested in its welfare—everything compatible with the performance of my public duties will always be done to accommodate and assist its rise and progress.

Believe me, with great respect, your obt. svt.,

CHARLES WILKES.

Col. J. J. ABERT,

N. I. Corp. Top. Engrs., Washy.

Letter from Col. Abert to Capt. Wilkes, September, 1843.

DEAR SIR: Your letter has been duly received. As well for our own justification and for your satisfaction, I will go into some length in a reply.

Abstractly speaking there may be no right in the Institute to enquire into the course of your official action, but if under any circumstances this action be hazardous to the property of the Institute, or to that deposited and placed under its care, there can be no doubt, I think, that the Institute has a right to enquire if such be the case and why.

You can, if you choose, give us a very short reply—that what you have done was in the execution of your official duties for which you can account only to your official superiors. Yet, nevertheless, the Institute would have the right to make the enquiry and to expect an answer of some kind. But allow me to call your attention to the reflection that it is in your civil relation of an agent of the Library Committee, in which you are now temporarily acting; and it is only in that capacity that any accountability can attach to you, or that any was supposed by the committee of the Institute to exist.

As an officer of the Navy you can not now be acting; your course is not by virtue of your commission or rank in the Navy, or orders from your constitutional or legal superiors, or of any duties connected with your profession. No official responsibility can exist between Capt. Wilkes, of the Navy, and the Library Committee; or official penalties be incurred by a neglect of its directions. Your position, if I understand it correctly, is by virtue of the authority in the Library Committee, to place the collection under the care of such persons as they may appoint. The executive or the constitutional session of the Army, as well as Navy and War, etc., to assign you to a ship to-morrow, you would have to go and abandon the care assigned to you by the Library Committee, which shows, I think, that it is not the official relations of the offices which are involved in your present position. Dr. King once had the place, then Dr. Pickering, to whom you succeeded—both of these gentlemen were civilians, and as you succeeded them in your present place, it is clear, I think, that it is not in any official relation which Capt. Wilkes can claim, or to which he can be assigned, that he is now acting, but in the civil relation of a person appointed by the Joint Library Committee to take charge of matters the publication of which has been made a duty of that committee. I make these explanations of our views, that you may feel relieved from the supposition that we had the most remote idea of encroaching upon your official rights, for which I assure you, as well as for your well established professional abilities, we all entertain the greatest respect.

The specimens of the exploring squadron are to be deposited and arranged in the upper room of the Patent Office. This, however, does not, we think, give the exclusive possession of that room for that purpose, unless such exclusive possession be necessary. Whether it be or not I am willing to admit is the right of the Library Committee to decide, and if they so decide others must give way. The sign lately put over the door would seem to indicate that such decision was in contemplation. The Institute has also possession of part of that room of the eastern half by direction of the Secretary of State, under whose care the whole building was then placed. The Institute has property there of great amount, and in our judgment of great value, and if it has to move its property, by virtue of a decision by the Library Committee, the courtesy of notice from the agent of that committee is not, I think,

too much to expect, and our right to enquire, if we shall have to move, should be viewed as a duty on our part as the curator of so much property. I assure you the enquiry was made with these impressions only, your assurance that notice will be given, if we should have to move, leaves us satisfied in this respect.

All that belongs to the exploring squadron is under the care of the Library Committee or its agent. But the Institute is a legal body, regularly chartered with defined right over its property, gifts, and deposits. (See Law of 27 July, 1842.) Now, what is this property? Gifts and deposits from members from foreign governments, from distinguished foreigners, from our diplomatic agents, from foreign societies, from domestic societies, from departments of our own Government, from our own citizens. In a word, all the property in the room, except that of the exploring squadron and that of the Patent Office, which (Institute) property, unless I am very much mistaken, far exceeds the impression you have of it, and judging from some remark about the few things of the Institute.

Now, this property requires care, watching, and cleaning.

I have at this time in my office twenty-four cases of the most valuable specimens sent from Asia and Mexico to the Institute which we have not sent up, because we were informed they would probably not be received, and would certainly not be allowed to be opened and exhibited, as some 60 boxes or more of Institute specimens are now in the room unopened and unattended to. Surely it was proper that such matters should be enquired into if only for the future government of the course of the Institute. We can not be without anxiety for our valuable collection nor unmindful of our obligations to preserve it.

I feel satisfied you will see with me only matter of lamentation in such a state of things. Science and national pride must bitterly regret any seeming necessity for it.

All the labor, all the contributions, from whatever branch of service, civil, diplomatic, navy, military, are for the scientific reputation of our common country, and a hearty union of all is necessary to form a good collection. Deprive it of the charm of being national, deprive it of that halo of interest with which the name national has already covered it, and it will soon cease to increase, will be no longer worthy of a thought, and will rapidly degenerate to the insignificance of a local collection.

Such are at least my views, and such were also the views which brought the National Institute into existence, when about eight of us had our first meetings at Mr. Poinsett's. We then digested a scheme in which we thought all persons could unite, because it was national; which all parties could befriend, because it was national; to which all conditions and branches of service could contribute, because it was national; to which the Government might extend its patronizing hand, because it was national, because it aided and elevated the national character, and because it would furnish a broad platform of national feeling upon which all parties, all sects, all conditions of life could, on principles cherished by all, meet and unite in erecting a temple to national fame. And how charmingly have we gone on; look at our great accumulations for so short a time, and yet it is all but a good beginning; look at the feeling which exists throughout our country and throughout the world in our favor evidenced by contributions and letters from all quarters, and then ask the question whether to aid or to embarrass a design so glorious and so free from objections will give the most individual fame?

But we must know our condition, and what we have to depend upon. It is essential that we should, and you, as the agent of the Library Committee, are the only person from whom we can obtain the desired information. Therefore, of necessity, we had to address ourselves to you, and if I understand your answer correctly it is: That you do not consider yourself at liberty to allow any of the persons receiving pay from the United States to give any of their time or attention to the affairs of the Institute, to overhaul or arrange or look after its specimens.

Both of your predecessors, Dr. King and Dr. Pickering, were also, with the approbation of the executive, curators of the Institute, and gave some attention to its affairs. We did not, of course, expect that you would take a similar trouble upon yourself, and one question in my previous letter was to ascertain if you would allow any of those under you to attend to the Institute collection and property. I understand you also as thinking this beyond your power. Under these circumstances the Institute must act, and promptly, or its valuable collection will be injured. The board of management will soon meet and the matter will be brought before them.

If in anything I have misunderstood you, I beg that you will not delay to correct me, for be assured that I have no desire to put anyone in the wrong, and least of all the eminent commander of the exploring expedition.

J. J. A.

Soon afterwards a more serious conflict of authority began—this time with the Commissioner of Patents, who was actually the official guardian, not only of a portion of the collections, but of the hall in which the entire cabinets, both of the society and the Government, were lodged.

The correspondence referred to in Mr. Ellsworth's first letter evidently related to the great mass of native copper of the Ontonagon (still a prominent feature in the National Museum), which the Secretary of War had placed in the custody of the Institute at its meeting in October previous. Mr. Ellsworth was evidently bent upon dislodging the National Institute from the Patent Office. To effect this he pursued the not altogether ingenuous course of belittling the Institute, its work, and the extent of its cabinet, and laying claim to the official possession of more important collections of models, fabrics, manufactures, which, in accordance with the act of 1836, reorganizing the Patent Office, he designates as the "National Gallery," a name which he also applied to the great hall in which all the collections were deposited.

The Commissioner of Patents was evidently legally in the right, and the Institute found itself bereft not only of its command of Government collections, but also of its hall.

The correspondence is here printed.

Letter from the Commissioner of Patents to the Secretary of War, December 7, 1843.

PATENT OFFICE,
Washington, December 7th, 1843.

SIR: I have the honor to acknowledge the receipt of a letter from the Secretary of War of the 2d inst., communicating the information that my letter to his Department of 1st inst. had been referred to a committee of the National Institute for answer.

Permit me to enclose a copy of the correspondence with said committee. I have ventured to say in my reply that I did not believe their letter to myself had met your approval.

The Hon. Sect. will imagine my surprise at the letter of the committee when he is informed that the Commissioner of Patents has the custody of the Patent Office building; that he holds a special appointment under the Joint Committee of the Library to take charge of all the property of Government mentioned in the act of August 26, 1842, and more especially as the National Institute has omitted to appoint a curator to protect the other articles received from the War and Navy Departments, or even their own effects in this building since July last, and hence the care has devolved upon myself as an act of courtesy if not of duty.

Under these circumstances, and having interested myself in the exhibition of the copper rock at the seat of Government, I offered to take charge of it, under the direction of the Secretary of War, if he desired it.

The disappointment expressed by many members of Congress at not finding this beautiful specimen in the National Gallery prompted me, at the date of my letter, to make, as I hoped, a respectful offer to the Hon. Secretary of my services. Nor would I have replied to the committee had I not supposed that silence might seem to admit that I had been guilty of great presumption.

Let me add that I am a member of the Institute and cherish its welfare.

I remain, with highest respect, your's, obediently,
H. L. ELLSWORTH.

Hon. J. M. PORTER,
Secy. of War.

Letter from Col. Abert to the Commissioner of Patents, December 5, 1843.

WASHINGTON, Dec. 5, 1843.

SIR: The honorable Secretary of War has referred to the committee of the National Institute your letter of the 1st inst.

Being uninformed by any law or regulation of the existence of a "National Gallery" or of any other collection under your care than the models of the Patent Office, you will pardon me if I do not fully appreciate the views or reasoning of your letter.

At one period, by order of the Executive, the upper room of the Patent Office was made the place of deposit for the effects of the "National Institute," a society known to our laws and regularly chartered by Congress. This room thus became the hall of the Institute. In this room the Institute had deposited the collections from the exploring squadron, and those from all other sources which were placed under its care by order of the Executive. But from a supposed necessity, Congress vested the care of the deposit from the exploring squadron

for the purpose of preparing an account of it, in such person as the Joint Library Committee should appoint. This committee appointed Capt. Wilkes, of the Navy, for that purpose, who is now exercising the functions of his office, and who may with propriety be considered as in the regular official possession of the room.

In all this one sees nothing of the Patent Office or of the "National Gallery" or of any charge direct or indirect of the Patent Office over the deposits referred to. If therefore by "National Gallery" is intended to designate the room in which are now placed the deposits of the Institute and of the exploring squadron, it is not a room over which the head of the Patent Office can exercise control.

By a law of the 20th July, 1840, the Secretaries of the War and Navy Departments were placed in charge of the specimens of natural history, received and to be received by them, and funds were appropriated for their preservation. The officers have deposited such articles as were then in their possession, and such have since been received in the care of the National Institute, as that law and the practice under it are considered as prescribing the course on these subjects, and in the 2d section of the law of July 27, 1842, all these deposits and the principle upon which they were made were confirmed and legalized. When therefore the copper work arrived, to which your letter refers, the honorable Secretary of War, in conformity of law and usage, placed it under the care of the National Institute.

As it was understood to be rather an inconvenience to Capt. Wilkes from the want of space to receive any more articles of the Institute in the hall under his care, and as the Institute has at present no curator there, those boxes and articles which have come to hand within the last few months have been temporarily deposited elsewhere, and among others the copper rock. The committee of the Institute which received this rock had it deposited in the War Office yard, where it is accessible without impediment to all who are disposed to examine it, and where it is under the efficient protection of the guard of the War and Navy Department buildings.

Very respectfully, your obt. svt.,

J. J. ABERT,
Ch. Com. Nat. Inst.

H. L. ELLSWORTH, Esqr.,
Commr. of Patents, Washington.

Letter from the Commissioner of Patents to Col. Abert, December 7, 1843.

PATENT OFFICE, *December 7, 1843.*

SIR: I have to acknowledge the receipt of yours of the 5th inst.

The Honorable Secretary of War has, it seems, referred to the Chairman of the Committee of the National Institute the answer of my letter to his Department, offering to receive for exhibition at the National Gallery the "Copper rock".

I can not withhold my surprize or the expression of my regret that the Committee of the Institute on the reference of my letter deemed it necessary to declare their unwillingness to recognize any such place as the "National Gallery" under my care and to question the right of the Commissioner of Patents to the use of the large Hall in the Patent Office building, and still more at *their* claim of right to use that Hall when their accommodations were only enjoyed at the *convenience* of the

Commissioner of Patents. To this unexpected reply to my letter I can not believe the Hon. Secretary of War has given his approval.

Permit me to refer the Committee to the Act of July, '36, reorganizing the Patent Office. The first section gives the Commissioner of Patents the care of the models of Patents, records, books, &c., &c.

The 20th section establishes a "National Gallery," in which the Commissioner of Patents is bound to exhibit not only models but fabrics, manufactures, &c.

To carry out the design of this law cases have been erected at great expense and many articles collected, while additions are daily made.

It is true that the National Institute did seek to obtain the entire control of the large room in the Patent Office. A refusal was given because the Patent Office building was by law placed under the care of the Commissioner of Patents and because the room was needed, at least in part, by the office.

The law of August 26th, '42, to which you refer, simply enacts:

"That until other provisions be made by law for the safe keeping and arrangement of such objects of natural history as may be in possession of Government, the same shall be deposited and arranged in the upper room of the Patent Office under the care of such person as may be appointed by the Joint Committee of the Library." The act evidently did not contemplate the exclusive control of the room, but a supervision of the articles entrusted to the care of said Library Committee.

This Committee on advisement with the War and Navy Department appointed Dr. C. Pickering, who enjoyed the use of the Hall in common with the Patent Office in a manner I had supposed entirely satisfactory to all concerned.

To relieve this Bureau from care and responsibility I propose to the Hon. Secretary of State to transfer to Dr. Pickering the custody of the archives, jewels, etc., received from the Department, but the Secretary declined, observing the Commissioner of Patents was a branch of the State Department, and he could not consent to place the articles confided to him under care of a corporation or a stranger over whom he had no control.

In July last Dr. Pickering resigned his trust. The Joint Committee of the Library, upon whom alone devolved the right of filling the vacancy, entirely unexpected to myself, conferred the appointment on the Commissioner of Patents. Of course the Commissioner of Patents has now by law the custody of the large Hall, which in all official correspondence has been called the "National Gallery."

I will remark that the Hon. Secretary of State expressed a wish in the letter giving directions as to the large hall that the National Institute might be permitted to occupy any "empty cases" so long as this could be done without inconvenience to the Patent Office. In this request I most heartily acquiesced, and have permitted the Institute to enjoy from time to time a very considerable portion of the upper and lower stories. And while the Commissioner of Patents has the sole custody of the building the Institute may be assured that the articles deposited by them will receive the same care and watchfulness as those belonging to the Patent Office or those received from the Government.

It has given me pleasure to try to accommodate all parties, hoping that Congress would make further provisions as appeared to be necessary. The time has now arrived when the wants of the Patent Office imperiously require more of the large hall, and it remains for the National Legislature to determine who shall be accommodated when there is not room for all.

I regret your correspondence has compelled me to say thus much in defense of the position I have the honor to hold.

Yours, respectfully,

H. L. ELLSWORTH.

Col. J. J. ABERT,
Chn. Com. Nat. Inst.

Still another blow was in reserve. Statements were made in public to the effect that the collections of the Institute were of very trifling value, and one which appears to have been printed, though I can gain no information as to its nature, made certain charges in connection with the portraits in the possession of the Institute, intended to show that the Institute was "unworthy of the patronage of the Government."

This happened apparently during the great meeting of the friends of the Institute in April, 1844, evidently with the intention of counteracting any effect which the assemblage might produce upon Congress.

Mr. George P. Marsh, M. C., at this time (April 4) addressed a letter to the corresponding secretary of the Institute stating that its memorial had been referred to him as a member of the Library Committee of Congress, and asking for information to enable him to meet objections made by persons unfriendly to the Institution. The information given in the following letter in fact constitutes a third report upon the national collection, a little more than a year subsequent to the date of those already quoted:

Letter from Messrs Markoe and Abert to the Hon. George P. Marsh, April 8, 1844.

WASH'N, 8 April, 1844.

TO MR. MARSH, H. R.

DEAR SIR: Your letter of the 4 inst. has been received. It found me occupied by numerous & pressing engagements, and left so short a space of time for reply that I have been compelled to call for aid upon a friend, Col. Abert, with whom I was for a long time associated a member of an important committee of the Institute, whose business it was to understand its affairs.

It is to be deplored that there are persons so unfriendly to the Institute, as to state "that its collections are of very trifling extent and value, and that for this and other reasons not necessary now to be specified, the Institute is unworthy the patronage of the Government." Some consolation, however, is derived from the assurance, that you do not entertain these opinions, and from the opportunity which is now offered of correcting at least one of these erroneous opinions the only one that has been presented with sufficient distinctness to be met, namely, that which refers to the extent and value of the Institute's collections. We should have rejoiced if "the other reasons" had been as candid specifically and, so we seize this occasion to assure you of our readiness, our anxious desire, to meet any unfounded report or misrepresentation which may have led to the assertion, that the Institute is unworthy the patronage of the Government. We are the more anxious as the assertion seems to have grown out of other considerations than the supposed trifling extent and value of the collections of the Institute.

The property of the Institute is of two kinds: That which it owns, the result of donations & purchases, and that which it holds by Deposit. The latter kind, by our Charter cannot be withdrawn, even by depositors, till after due notice has been given. The statement which follows, made by Col. Abert, & wh. embraces a very inadequate description of the report, embraces gifts, purchases & deposits is taken from the records of the Institute, and it may be verified at any time by reference to the records, an attentive examination of wh. would show that the property of the Institute is of immense value, & of great American as well as general interest; & that it is increasing every day in a wonderful manner—a perusal of the two Bulletins of the proceedings of the Institute wh. have been published will give you the details for two years of these accumulated & accumulating materials, & the unpublished Records wh. go back for two years will supply the rest—Mr. Markoe begs leave to add that the MS. matter wh. accompanied the memorial to Congress, & wh. has happily been placed in your hands, embraces a very condensed view, wh. he prepared with great care & toil of all the contributions, donations & deposits which have been made to the Inst. since its foundation in May 1840, up to March 1844, & of the names of the contributors, donors, & depositors. For a refutation of such misstatements we refer you to these exact details, & sincerely hope that Congress, will publish for its own information as well as for the information of the world & as an act of justice to the Institute

The collections referred to are in the great hall of the Patent office, at the Treasury, War & State Depts., at Col. Abert's office & at the house of the Secretary of the Inst. Besides wh. letters have lately been rec'd. announcing the approach of great quantities of boxes of specimens of natural history, & other miscellaneous presents, from For. Govts. Ministers & Consuls of the U. S. from officers of the Army & Navy, & from many Societies & individuals both at home & abroad.

In conclusion, while we invite scrutiny in any shape, we take the liberty of suggesting our earnest & anxious wish to meet a committee wh. whenever appointed will find or prepare to explain the character & merits of the Inst. & effectually to defeat unfounded & irresponsible surmises.

With true regards, Yr. obt. humble svts

FRANCIS MARKOE.
J. J. ABERT.

Imperfect & hasty statement of the collections & specimens, being either the absolute property of the Institute, or specially deposited under its care. It is believed, that the greater part of these, will eventually become the property of the Institute; many of them having already become so.

Minerals—1st. About 6000 miscellaneous specimens from all quarters; 2d. A complete collection of about 10,000 specimens; 3d. In addition there are about 190 boxes or collections, not examined or opened. They are spoken of as “boxes” or “collections,” because the donors used these terms in their letters presenting them and they are accordingly so entered upon the Journals of the Institute. 4th. There are also 4 boxes of splendid minerals of Mexico, presented by His Exe. Mr. Tousey the Minister of War & Marine of Mexico, and one box Mex. Antiquities.

Fossils.—Upwards of 30 boxes and seven or 8 thousand miscellaneous specimens & casts of rare fossils.

Birds.—1st, 1368 separate specimens; 2d, nine large boxes, one of which contains 27 dozen skins of rare birds from Brazil.

Quadrupeds.—Between 4 and 500 specimens. Insects 74100 specimens, and more than a dozen boxes besides not opened. Most of these in a deplorable condition for want of funds to preserve & arrange them.

Shells.—1638 specimens, & more than 20 boxes and one barrel.

An immense number of fishes, reptiles mollusca, et cetera. One donor, Lt. Gedney, U. S. N. gave upwards of 600 specimens & a large & rare collection of reptiles, fishes &c. which composed a part of the munificent gift of Prince Monfanio, of Spain.

Coins, medals & medallions, antique & modern, embracing very many extremely rare & valuable series gold, silver & copper &c. 1st. 573 specimens; 2d, seven boxes.

Maps and atlases in great numbers; books & pamphlets, between 4 & 5000, many very rare, sent by the Russian, French, Belgian, Brazilian & other governments, & from Societies in various countries. About 1000 engravings, many extremely choice, by the first Artists in the world, and several large boxes & engravings not opened.

Specimens of woods, marbles, domestic manufactures, fossil teeth, megatherium bones, Ancient vases & vessels, electrotype pictures, mosaics, Egyptian & South Sea idols, large collections of human quadruped & bird crania, antique masks, rare collection of Indian dresses &c., daguerreotype pictures, corals & coralines, large collection of dried plants from all parts of the world. Specimens of art implements & an infinite diversity of contributions of every description too complicated & various to enumerate.

The Columbia Institute's collection consisting of a large number of books, works of art, specimens of Nat. Hist., all which are now the property of the Nat. Institute. Models of monuments, & of works of art etc. etc. Several hundred Indian Portraits, and other paintings, many very rare & valuable & some the production of the best masters.

Skeletons, Antlers, Horns, Teeth, Bones & casts of various quadrupeds & other animals.

Indian Musical & other Instruments & implements & Lithographic portraits & drawings in great numbers.

Large collection of objects of Natural History, idols, fabrics, antique work of art &c. from Egypt and Africa, many of great curiosity & rarity, from various persons, &c.

Collection of Statuary, busts & casts.

Large collection of tribolites & rare fossils

Dr. Franklin's printing press.

A collection of Bedowne war instruments, & a variety of oriental curiosities.

A series of fine Electrotype medals, embracing the British & French Sovereigns, from William the Conqueror to Victoria, and from Pharamond to Louis Philippe.

It is scarcely possible, in reply to your note wh. calls for an immediate answer to enumerate further, but we don't depend on so scant a list, given in terms necessarily somewhat vague. We call special attention to the minute & exact detail given in the abstract of the proceedings of the Inst. prepared by Mr. Markoe, & wh. accompanies the memorial to Congress, where every thing will be found exhibited & described. We believe that if the collections of the Inst. are not already as great in value as those brought home by the Exploring Expedition, they will become far more so in a very short time. In American interest the Institute's collections far transcend the other,

In answer, apparently to a subsequent inquiry from Mr. Marsh, as to the amount of the subsidy desired by the Institute, the following schedule seems to have been prepared. There is nothing, however, to indicate that it was ever submitted to Congress. It is of interest as showing the state of expenditures contemplated for the National Museum nearly half a century ago:

[Memorandum in Col. Abert's hand.]

DEAR SIR: In answer to your inquiry of this morning as to the probable amount and the division of it which will be requisite to preserve and arrange the various articles of natural history belonging to the National Institute, I have the honor to submit the following views to your consideration:

One taxidermist, who should also be a scientific ornithologist and well versed in natural history generally, per year.....	\$1,400
One assistant	600
One entomologist, who should also be capable of arranging and naming the reptilia	1,200
One assistant	600
One mineralogist	1,000
One assistant	500
One person in special charge of the articles, to watch over them, exhibit them, etc., who should also be a mechanic	600
Two laborers—these should be men of some ability in using tools, \$1 per day for each	730
Tools, implements, preserving liquors and ingredients, apparatus cases, and other fixtures	2,500
Freight, postage, stationery, and other contingencies	1,200
Arrearages due for freight, postage, printing, etc.	1,500
	11,830

Hon. Mr. MARSH, May 18, 1844,
House of Representatives.

Notwithstanding the extraordinary efforts at this time made and the favorable report of Senator Choate, Congress adjourned in the spring of 1844 without making any provision for the care of the collections of the Institute.

Another effort was made in 1845. Senator Levi Woodbury, president of the Institute, in the annual address delivered by him on January 15 in the Hall of the House of Representatives, made a most impressive appeal to Congress. After urging prompt action in the matter of the Smithsonian trust—"a trust so sacred and imperative that a longer delay to execute it might prove not a little derogatory to our national honor"—he continued:

Should the plan for this not be speedily matured, including the use of the Institute or its officers, then a grant at once of enough to defray the expenses attendant on the good preservation and collection of the public materials in our charge seems indispensable, and is believed also to be free from every doubt connected either with expediency or the Constitution, as many of the collections now belong to the Government and all of them are vested in it when the charter expires, and may be forthwith if desirable. What small sum then is granted for this object by the Government is granted for taking care of its own property, the title of which is public, the one public, the whole end and aim public; and that act of duty done, we hope, by the further help of

our own contributions, with those of liberal friends of science elsewhere, by the continued and generous assistance of the officers of the Army and Navy, of our foreign ministers and consuls, as well as the members of Congress and many in private life, I think it may be safely said we hope to advance still further and faster, till we render the Institute in many respects worthy its unrivaled position and the growing country to which it belongs.*

This was followed up by a memorial to Congress, which, having never before been published, is here presented,† and which was favorably acted upon by the Library Committee, who adopted the report submitted by Senator Choate concerning the similar memorial of 1844. No action was, however, taken.

Still another appeal was made‡ to the Twenty-ninth Congress, which was presented to the Senate by Lewis Cass, and to the House of Representatives by John Quincy Adams. This, too, was fruitless.

In 1846 also, as we have seen, Mr. Ingersoll, always a faithful friend of the Society, endeavored to establish a connection between it and the Smithsonian Institution in the administration of a National Museum, but the effort failed at the last moment, and the Regents of the Institution were not inclined to take advantage of the privilege of putting this building as a wing to the Patent Office, as they might have done.

In the organization of the Smithsonian Institution the National Institute was practically left out of account, and the hopes of many years were blasted. What was still more discouraging was that power had been given to the new corporation to take possession of all Government collections in the custody of the Institute, or the possession of which its chief claim to a subsidy was founded, and in connection with which a considerable debt had been contracted,§ as is indicated by Mr. Rush's letter of July, 1846.

In the "Notice to the Members of the National Institute" which served as an introduction to its fourth Bulletin, dated November 25, 1846, a pitiful statement of the condition of the society is given:

More than a thousand boxes, trunks, etc., embracing collections of value, variety, and rarity in literature, the arts, and in natural history, remain on hand unopened—the liberal contributions of members at home and abroad—of governments, of learned and scientific societies and institutions of foreign countries and of our own, and of munificent friends and patrons in every part of the world. For the preservation, reception, and display of these the Institute has neither funds nor a suitable depository.||

This was a fatal condition of affairs, for the formation of a museum was the one object which, out of the many specified, seemed to have

* Annual address, pp. 33, 34.

† Note F.

‡ Note G.

§ Col. Abert estimated the amount in 1844 at \$1,500 and it was now doubtless greater.

|| Proceedings I, p. 481. (Fourth Bulletin.)

finally absorbed the energies and the limited income of the National Institute.

It had evidently been the belief of its chief promoters that if a museum under the patronage of the Government and under the control of their society could be firmly established in Washington, all the other ends sought by them would follow in necessary sequence.

In accordance with this policy circulars had been sent out to the officers of the Army at distant posts asking their aid and pointing out the manner in which they might be useful in carrying out the objects of the Institution. "and others to the governors of States and to the diplomatic and consular representatives of the United States in foreign countries, announcing that they had been made corresponding members, and inviting their aid in the promotion of the objects of the Institution," and to each member of Congress, with a request that he bring specimens of the natural productions of his district on his return to Washington.*

WASHINGTON, February 9, 1841.

SIR: The National Institution for the Promotion of Science and the Useful Arts, established at the seat of government, is desirous of procuring specimens of the natural productions of every portion of the United States, and for that purpose respectfully asks your aid and coöperation. The district you represent doubtless possesses many important minerals and vegetable productions, which might prove of great value to the arts if they were generally made known. Specimens of such productions being brought to Washington will not only advance the objects of the institution, but will prove advantageous to the country whence they come. They will be described by the scientific members of the institution, and their uses and advantages pointed out, and the specimens exhibited to the public in its museum.

You are respectfully requested to bring with you, on your return, such specimens as you may collect during the ensuing recess. Even a single specimen from each member will be of great advantage to the Institution, and be thankfully received as a tribute to science.

We have the honor to be, sir, your most obedient servants,

J. R. POINSETT,

J. K. PAULDING,

Directors.

To the Hon. ———.

The assumption by a society of the important duty of organizing and conducting a national museum would seem at the present time somewhat strange, but it should be remembered that from the beginning it was announced that all the collections made were the property of the General Government, and that in the incorporation of the society by Congress all the property of the corporation at the time of the expiration of its charter, limited to twenty years, should belong to and devolve upon the United States. Still more important a factor in the influence of the society was the character of its membership, which included most of the leading men in political, scientific, and literary circles, and had upon its list of officers and directors such names as that of John Tyler, President of the United States, and his Cabinet, an ex-

[* Circular letter to members of Congress.]

Secretary of War, two leading Senators, Levi Woodbury, Peter Force, Col. J. J. Abert, Col. J. R. Totten, and Lieut. M. F. Maury, Rufus Choate, Abbott Lawrence, and A. D. Bache. Our Government functions were less centralized at that time, and the policy of allowing more scope to private effort in public matters was similar in this instance at least to that which prevails in Great Britain at the present time. It was not to have been expected, however, that its authority should have remained long unquestioned, and in the end its lot was that which very frequently befalls those who out of disinterestedness undertake, unasked, to forward the interest of others. Thus, as Rush aptly put it, the merit of the Institute was turned to its misfortune, and its "voluntary zeal" was thought totally unworthy of recognition.

The various invitations to members of Congress, army and Navy officers, consuls and citizens to collect and send in materials had, however, begun to bring in great quantities of material, and the inability to care for these properly was the cause of the appeals for Government aid which as time went on grew more frequent and urgent till 1846, when discouragement took the place of anticipation, and the society fell into a condition of inactivity and apathy.

The real cause of the decline of the National Institute was simple enough. Failing to secure grants of money from Congress, the society was overwhelmed by the deluge of museum materials, which in response to its enthusiastic and widely circulated appeals came to it from all quarters of the world. The annual receipts from the assessment of members were insufficient to pay for the care of the collections, and although by virtue of the long term of its charter the collections were kept together until 1861, there was little science and little energy manifested in this administration.

In the archives of the National Museum there are a number of unpublished papers which are of value as constituting a partial history of the collections during this period, and some of which appear to be worthy of permanent preservation are here presented.

One of them possesses a melancholy interest of its own. It is a list of the active members of the National Institute in arrears for dues up to December 12, 1843. The delinquents were one hundred and sixty-eight in number, including nearly one-half of the names on the membership roll, and the total arrearage amounted to \$1,300. No wonder that the managers were discouraged, for this sum represented a like deficit in the assets of the society, its only income being derived from membership fees.

From this time on, as we have already seen, the society languished. In 1848 its cabinet was almost the only evidence of its existence. At that time, however, an effort was made to resuscitate it, which seems to have been partially successful. The coming in of a new administration was in some degree beneficial—the President, Taylor, having

accepted the position of patron of the society, and some members of the Cabinet proving to be friendly.

About this time the society seems to have regained its control of the hall in the Patent Office, an apartment which now came to be known properly as "The National Institute"—a name which it retained until the hall was finally dismantled.

A visitor to Washington at the time of the inauguration of Taylor, in 1849, has left a record of his impressions of the capital city—at that time still very crude and unfinished. "All that meets the gaze in Washington, except the Capitol and the Departments, seems temporary," he wrote. "The city appears like the site of an encampment, as if it were more adapted for a bivouack than a home." And then he goes on to describe some of the principal characteristics of the city:

In the National Institution, like nearly all of our scientific and literary establishments, as yet in embryo, sea-quadrupeds from the Arctic zone, birds of rare plumage, the coat in which Jackson fought at New Orleans, the rifle of an Indian chief, plants, fossils, shells and corals, mummies, trophies, busts, and relics, typify inadequately natural science and bold adventure. * * * The foundation of the long delayed monument to him of whom it has been so admirably said that "Providence made him childless that his country might call him father," the slowly-rising walls of the Smithsonian Institution, the vacant panels of the rotunda, the sculptured deformities on the eastern front of the Capitol, and the very coin, freshly minted from California gold, awaken that painful sense of the incomplete, or that almost perplexing consciousness of the new, the progressive, and the unattained which is peculiar to our country.*

President Taylor placed in the custody of the Institute the Washington relics, and some other hopeful things occurred. The members, gained courage and proceeded to revise its constitution and by-laws to vote to print a quarto volume annually, to be entitled "The Transactions of the National Institute,"† and to memorialize Congress for financial aid, and to offer its services to the Government "as a referee in matters which involve scientific knowledge and investigation."

In 1850, at the request of the Secretary of State, the Institute undertook the appointment of the "Central Authority," a committee of twenty-one members to pass upon articles proposed to be sent to the World's Fair of 1851 in London.

The needs of the Institute in 1850, as summed up in the Secretary's report, were not extravagant—a medium of publication, a curator and librarian, who were to be paid sufficient salaries to enable them to give a considerable portion of their time to the work, new bindings for the books, and more room for library and meetings.‡

* 1849. Tuckerman, H. T. The Inauguration. < *The Southern Literary Messenger*, xv, pp. 236-40. Richmond, April, 1849.

† This series was never begun.

‡ None of these, however, were realized, save for a short time the publication of Proceedings in octavo in 1855-'57.

At this time there were twenty-seven paying members of the society, and its income was less than \$150 yearly.*

Mr. C. F. Stansbury, the Secretary of the Institute, acted as its agent for the World's Fair, and obtained there some specimens for its museum, and in 1856 others were received from the New York Exhibition.

It would appear from the records of this time that there was still a "Gallery of Curiosities" in the Patent Office not in the custody of the National Institute.†

In 1854 the Commissioner of Patents, for many years vested with a measure of authority by the Library Committee, was given by Congress‡ the administration of the collections and authorized to employ keepers, and a trifling appropriation was made to be expended under the Department of the Interior—an arrangement which continued for three subsequent years.

In 1857, the Smithsonian Institution having definitely accepted the responsibility of caring for the national collections, all the articles deposited with the National Institute were removed. In addition to these there were numerous objects directly under the control of the National Institute which the officers would not permit to be removed. There was evidently still a lingering hope that Congress would make provision for the care of the collections. In this same year, 1858, another memorial was sent to Congress, asking for an appropriation for preserving the collections of objects of natural history intrusted to their care. This was unfavorably reported upon by the Senate committee (see Bibliography under Brown) and in the House was referred to the Committee on the District of Columbia, whose report showed that "the collections are now in the Smithsonian Institution" [Rhees, Documents, p. 653].

Some of these were, it is true, but there was still a miscellaneous collection, including many valuable objects, in the hall of the Patent

The following letter will serve to explain the nature of the ties, by which a part at least of the members were held to the organization:

SMITHSONIAN INSTITUTION, *January 5, 1852.*

MY DEAR SIR: I beg leave through you to thank the members of the National Institute for the honor they conferred upon me by my election as one of the vice-presidents, and to request that I may not be considered a candidate for reelection.

I shall continue to be a member and hold myself responsible for my portion of the debt unavoidably incurred by the executive committee. It is my opinion that under its present organization the Institution can not advance the cause of American science, and that it may be productive of much evil.

I remain, very truly, your friend and servant,

JOSEPH HENRY.

PETER FORCE, Esq.

P. S.—I think it would be best to appoint a committee to inquire into the state of the Institution, and to advise as to what is to be done, and how the debts which have been incurred are to be paid.

J. H.

† Proc. Nat. Inst., new series, I, pp. 47-48.

‡ Act of August 4—Statutes X, 552.

Office, and known as "the National Institute." Of these a catalogue was published by Alfred Hunter in 1859.*

They were afterwards placed in some old cases in a passageway in the Patent Office, and many valuable specimens and books were destroyed or stolen, there being no one responsible for their safety.†

Prof. Baird told the writer that the books and specimens were placed on top of some file cases in a basement corridor, near an outer door, and that a person with a cane could at any time dislodge an armful and carry them away without impediment.

In 1861, shortly before the charter finally expired by limitation, the birds and insects were almost completely destroyed, and the library reduced to broken sets of periodicals and transactions. Such as they were, they were delivered by the Secretary of the Interior to the Smithsonian Institution.‡

This was the end of the National Institute and its efforts to found a national museum, the end of the National Cabinet of Curiosities, and of the National Gallery except so far as it continued in the possession of the Washington relics and the Franklin press exhibited in one of the halls of the Patent Office.

THE SMITHSONIAN INSTITUTION AND THE NATIONAL CABINET OF CURIOSITIES.

After ten years of discussion, a bill to incorporate the Smithsonian Institution received the approval of Congress and the President. The charter, in its final form, does not appear to have represented fairly the views of any one party, except that which favored the library and incidentally the museum. Several special provisions, not from our present point of view, harmonious with the spirit of Smithson's bequest, were eliminated, and the act, as finally passed, while broad enough to admit upon the foundation almost any work for intellectual advancement, was fortunately expressed in such general terms as to allow a large share of liberty to the trustees or regents.

The Smithsonian Institution has had upon its governing board many of the noblest and wisest of the men of the nation, and the Regents to whom, during the first four years of its corporate existence, the decision of its policy and its future tendencies was intrusted, were chosen from among the very best of those at that time in public life.

Among them were George M. Dallas, the first chancellor, at that time Vice-President of the United States; Chief Justice Taney; Rufus Choate, of Massachusetts; Robert Dale Owen, of Indiana; George P. Marsh, of Vermont; Lewis Cass, of Michigan; Jefferson Davis, of Mis-

* Hunter's Bibliography.

† It is said that some enlightened Commissioner of Patents, in power between 1850 and 1860, was annoyed by the presence of a collection of fossil vertebrates in one of the rooms in his building, and without consulting any one sent them to a bone mill in Georgetown, where they were transformed into commercial fertilizers—once for thought, they now became food for the farmers' crops.

‡ Smithsonian Report, 1862, p. 15.

Mississippi; James A. Pearce, of Montana; James M. Mason and William Winston Seaton, of Virginia; John McPherson Berrien, of Georgia; William C. Preston, of South Carolina; William J. Hough, of New York; Alexander Dallas Bache, Superintendent of the Coast Survey, and Gen. Joseph G. Totten.

The Regents soon realized that in order to carry out efficiently the trust which had devolved upon them, it would be necessary to decide upon a definite course of policy, and to settle for themselves the interpretation of certain of the provisions in the act of incorporation.

A committee was appointed at once to digest a plan to carry out the provisions of the "Act to establish the Smithsonian Institution," and on January 25, 1847, this report was made, signed by Robert Dale Owen, Henry W. Hilliard, Rufus Choate, and Alexander Dallas Bache, after having made a preliminary report December 1, which was re-committed to the committee December 21.

These dates are mentioned in order to afford opportunity for the remark that in the interval between December 1 and December 21 Prof. Joseph Henry had been elected to and accepted the Secretaryship of the institution, and that previous to his election he had submitted to the Regents a sketch of a proposed plan of organization, which appears to have been acceptable to the majority of the Board, and that in this sketch were printed opinions which had from that time on a most powerful, and in time a controlling, influence upon the policy of the Institution.*

The election of Professor Henry was in accordance with the view held by the Regents, and expressed in the report of the committee, and even more forcibly in the resolutions of the Board, that the Secretary must of necessity become the chief executive officer of the Institution, and "that upon the choice of this single officer, more probably than on any one other act of the Board, will depend the future good name and success and usefulness of the Smithsonian Institution.†

The choice of Prof. Henry was by no means the unanimous act of the Regents, and since in respect to personal qualifications he undoubtedly fulfilled the requirements of the resolution passed by the Board previous to the election of a Secretary, it is clear that some of the Regents did not look with favor upon his plan of organization.

* At a meeting of the Joint Committee on Public Buildings and Grounds in February, 1865, Prof. Henry said: "I have been from the first, now eighteen years, the Secretary or Executive Officer of the Smithsonian Institution. * * * Before my election I was requested by one of the Regents to give a sketch of what, in accordance with the will of Smithson, I considered should be the plan of organization, and after due consideration of the subject there was not the least shadow of a doubt in my mind that the intention of the donor was *to found a cosmopolitan institution, the effects of which should not be confined to one city, or even to one country, but should be extended to the whole civilized world.*"—(Rep. Com., No. 129, Thirty-eighth Congress, second session.)

† 1847. Smithsonian Institution. Report of the Organization Committee of the Smithsonian Institution, etc. Washington, 1847, pp. 18-19.

Of the twelve votes cast at the election December 3, 1846, seven were in favor of Prof. Henry, five for persons who had been officers of the old National Institute, and closely associated with its policy.

A bare majority—for the change of one vote would have made a tie—then placed itself on the side of the Henry policy. In its report the Committee on Organization speaks plainly of “two great conflicting opinions” in the Board, for the harmonizing of which the “compromise” so often referred to during the struggle of the following six years.

One party was in favor of devoting the larger part of the income to the library and museum.

The other party favored rather the publication of scientific memoirs, grants for the promotion of original researches, and the maintenance of a lecture system.*

The “compromise” consisted in the division of the annual income into two nearly equal parts, to be applied to the two classes of expenditures, \$15,000 to library and museum and the remainder (\$15,910) to publication, research, and lectures.†

On one subject, however, the Regents seem to have been unanimous, and to have given their opinion in the following resolution:

Resolved, That it is the intention of the act of Congress and in accordance with the design of Mr. Smithson, as expressed in his will, that one of the principal modes of executing the act and the trust is the accumulation of collections of specimens and objects of natural history‡ and of elegant art, and the gradual formation of a library of valuable works pertaining to all departments of human knowledge, to the end that a copious storehouse of materials of science, literature, and art may be provided, which shall excite and diffuse the love of learning among men, and shall assist the original investigations and efforts of those who may devote themselves to the pursuit of any branch of knowledge.§

The great building which, by the terms of this charter, the Smithsonian Regents were requested to erect and pay for was to be “of sufficient size and with suitable rooms or halls for the reception and arrangement *upon a liberal scale* of objects of natural history, including a geological and mineralogical cabinet, a chemical laboratory, a library, a gallery of art, and the necessary lecture rooms;” and this was coupled with the accompanying provision, that, “in proportion as suitable arrangements can be made for their reception,” all objects

To the library and museum party belonged without doubt Senator Choate, Mr. Owen, and probably Mr. Rush and Gen. Totten, who were both devoted to the interests of the National Institute. Mr. Bache was, I suppose, the leader of the opposition.

† Report of Committee on Organization, p. 21.

‡ In this resolution for the first time the term *natural history* is given its proper scope, as including not only zoölogy and botany, but geology, mineralogy, and ethnology, although in the report of the committee a distinction seems to have been made, probably for the purpose of better definition.

§ Report of Committee on Organization, p. 20.

suitable for a museum or gallery of art which the United States at any time might possess *shall be delivered* to the Regents and *shall be arranged* in the building.

The national collections then existing and those afterwards to accumulate, were thus transferred to the governing board of the Smithsonian Institution as a contribution from the United States to the resources of the Institution, and were evidently intended in a certain way to counterbalance the gift of James Smithson for the same purpose.

The intention of Congress is evident, and the law was almost mandatory in character. There was one phrase in the law, however, which gave opportunity for adjustment of terms.

The provision that the delivery of these objects should take place "in proportion as suitable arrangements could be made for their reception," was, it may be, intended to give the Institution time for careful and thorough preparation. This placed no limit upon the time for completing the buildings, and indeed gave to the Board of Regents the right to indicate the time when "suitable arrangements" could be made.

It was undoubtedly the wish of the members of the Twenty-ninth Congress that the expense and responsibility of organizing and maintaining a national museum should be transferred forever to the Smithsonian Institution, and it was quite far from their intention that the public treasury should ever be called upon for aid.

Not only the National Museum, the National Library, and a national chemical laboratory were thus assigned, but also the expense of keeping up the previously neglected public park in which the Smithsonian buildings were to be erected. It was only by accident that a national observatory and an institution corresponding to the present Department of Agriculture were not added to the burden.

That was the day of small beginnings. The theory of our form of government had not been settled in the minds of our public men, and every new project brought up for discussion in Congress became the subject of long and tortuous discussions. There were Congressmen who ten years after the acceptance of the Smithson legacy were in favor of returning the money to England to be given to anyone who could legally take it, while Andrew Johnson, of Tennessee, in 1845 endeavored to overthrow what had already been established and to substitute a "Washington University for the benefit of the indigent children of the District of Columbia in memory of and out of respect to George Washington, the Father of his Country."*

The will of the Twenty-ninth Congress was not necessarily that of the Thirtieth. Mr. Hilliard, of Alabama, made a bold and successful stroke for the independence of the Board of Regents, and defeated a motion to appoint a regular Congressional committee to supervise and report upon their proceedings. This was a step toward securing the

* Rhee's. Documents, p. 489.

recognition of the right of the Regents to interpret for themselves the true meaning of the charter.

The next Congress was still less disposed to exercise a minute system of control, and the Regents, through Senator Jefferson Davis, boldly asserted that it was improper for Congress to interfere with the administration of a fund which it has confided to a Board of Regents not entirely formed of members of Congress and not responsible to it.*

The attitude of Prof. Henry from the beginning to the end of the thirty-one years of his secretaryship was singularly independent and outspoken. Having before his election submitted to the Board of Regents a plan of organization which met with their approbation, he was elected with the understanding that he was to carry this plan into effect.

He was from the beginning in a certain way the authorized interpreter of the Smithsonian bequest, and, as every one knows who has studied the history of the Institution, his earnest and steadfast policy and the wonderful clearness and force with which he explained his views, supported by his scientific eminence and his grandeur of character, gave him a wonderful influence with the successive bodies of men who acted as regents.

His influence from the very start was on the side of publication and original research and in opposition to constant expenditure of what in time he began to designate as "local objects."

His attitude toward museum and library, especially the former, was at first a noncommittal one. He proceeded slowly, evidently not from lack of courage, but with the methods of a man of science, studying the results of different courses of policy, and, when he expressed an opinion, speaking from the standpoint of experience.

The history of the National Institution and its fate, hopelessly involved and crushed to death by the weight of the collections and books which had been given or lent to it, was constantly brought to his mind, for the Institution was expected to take up this burden, with the prospect of unlimited additions to its weight, and to bear it alone and perhaps forever.

To him, and to the Regents also, it must have been evident that this burden once assumed, the fate of the Smithsonian Institution would eventually be similar to that of the National Institute.

More directly threatening was the evil of the immediate absorption of a large part of the income, to the detriment of the plans which seemed to him more likely to accomplish the wishes of the Institution.

The wisdom of Prof. Henry's policy has been almost universally conceded, and the success with which for thirty-one years he directed the resources of the Institution toward the increase and diffusion of knowledge compels the admiration of everyone who studies the history of his life in connection with that of the Institution, and had done so for many years before his death.

* Rhees. Documents, p. 590.

It is now evident that but for his conservative policy the history of the Institution would have been comparatively insignificant.

In the light of subsequent events, it is safe to assert that, in all probability, had the Smithsonian Institution taken charge of the "National Museum" in the manner proposed in 1846, the result would have been even more detrimental to the Museum than to the Institution.

It did not seem so at the time, however, and for ten years the course of the Institution was under the subject of criticism of a very serious kind.

It is of course not essential to review at length the discussions which took place within the first ten years between the officers of the Institution, in the meetings of the Regents, in Congress, and in the public journals, as to the authority of the Board of Regents and the Secretary to deviate from a strict interpretation of the act of incorporation, which was presumed to embody the will of Congress. There was a party who was of the opinion that a large part of the income should be devoted to the accumulation of a great general library, and who fought boldly in defense of this project. The conflict culminated in 1856, with the dismissal of the librarian by Prof. Henry, a Congressional investigation, and the resignation of two of the most active Regents. The Board upheld the Secretary, and successfully maintained both in House and Senate the position that they as trustees of the Smithson bequest were not amenable to the advice or instructions of Congress, and were the only authorities qualified to interpret the meaning of the act of incorporation and the intention of Smithson, the founder.

The immediate cause of this final outbreak was the repeal in 1855 of the resolution passed in 1846 dividing the income of the Institution into two nearly equal parts for two specific objects, the advocates of a great library being of the opinion that the spirit of this resolution had not been regarded.

The resignation of Senator Choate and Mr. Meacham, and the unqualified indorsement of the Secretary by the other members of the Board greatly strengthened his position, and enabled him to cope more successfully with the question of the admission of the Government museum to the Smithsonian buildings, for the transfer provided for in 1846 had not up to 1856 been definitely arranged for.

The history of the treatment of this matter is very important, since it leads up to the origin of the present relationship existing between the Government, the National Museum, and the Smithsonian Institution.

The delay in the completion of the Smithsonian building afforded to the Regents an opportunity for a gradual development of the plan of organization. Until the building should have been furnished the resolution giving half of the income to library and museum was not obligatory, nor was it possible for the custody of the Government museum to be finally transferred.

The corner stone was laid May 1, 1847, but the work was in progress until 1855.

The delay was evidently intentional, for in 1848 Prof. Henry, in an exposition of Smithson's bequest before the New Jersey Historical Society, spoke as follows:

He regretted that in order to make provision for the accommodation of the museum of the exploring expedition, as directed by act of Congress, so large an amount of money was required for the erection of the buildings. The evil, however, which would result from this is in a measure obviated by the plan proposed by Prof. Bache, and adopted by the Regents, viz. that of deferring the time of completing the building, so that it might be erected in considerable part by means of the interest of \$240,000, which had accrued in interest on the original fund previous to the year 1846.*

As early as 1847 Prof. Henry seems to have entertained the hope of escape from the full acceptance of the terms of the charter, for in his first plans, as finally submitted to the regents, he expressed the hope "that in due time other means may be found of establishing and supporting a general collection of objects of nature and art at the seat of the General Government with funds not derived from the Smithsonian bequest."†

In the report for the year 1849, presented in 1850, Prof. Henry gave the result of his later observations and reflections, and for the first time took his stand in opposition to the transfer, advancing the theory that it was not obligatory on the regents to take charge of the Government collections. He wrote:

This law evidently gives to the Smithsonian Institution the museum in the Patent Office, the conservatory of plants, and all specimens of nature and art to be found in the several offices and departments of the Government. The act, however can not be construed as rendering it obligatory on the regents to take charge of these articles, if, in their opinion, it is not for the best interests of the Institution that they should do so. Though one of the reasons urged upon the regents for immediate erection of so large a building was the necessity of providing accommodation for this museum, I have been, from the first, of the opinion that it was inexpedient to accept it.

This museum was collected at the expense of the Government, and should be preserved as a memento of the science and energy of our Navy, and as a means of illustrating and verifying the magnificent volumes which comprise the history of that expedition. If the regents accept this museum it must be merged in the Smithsonian collections. It could not be the intention of Congress that an institution founded by the liberality of a foreigner, and to which he has affixed his own name, should be charged with the keeping of a separate museum, the property of the United States. Besides this, the extensive museum of the Patent Office would immediately fill the space allotted for collections of this kind in the Smithsonian edifice, and in a short time another appropriation would be required for the erection of another building.

Henry, Smithson, Bequest, p. 8.

† Report for 1847, p. 184; Report for 1848, p. 33; Rhees Documents, p. 958.

Moreover, all the objects of interest of this collection have been described and figured in the volumes of the expedition, and the small portion of our funds which can be devoted to a museum may be better employed in collecting new objects, such as have not yet been studied, than in preserving those from which the harvest of discovery has already been fully gathered.

The answer made to some of these objections has usually been, that the Government would grant an annual appropriation for the support of the museum of the exploring expedition. But this would be equally objectionable, since it would annually bring the Institution before Congress as a supplicant for Government patronage, and ultimately subject it to political influence and control.

After an experience of three years, I am fully convinced that the true policy of the Institution is to ask nothing from Congress except the safe-keeping of its funds, to mingle its operations as little as possible with those of the General Government, and to adhere in all cases to its own distinct organization, while it coöperates with other institutions in the way of promoting knowledge; and on the other hand, that it is desirable that Congress should place as few restrictions on the Institution as possible, consistent with a judicious expenditure of the income, and that this be judged of by a proper estimate of the results produced.

The regents and their secretary were in harmony.

In the Senate, April 15, 1850, the discussion of the bill for the completion of the Patent Office building elicited the following statement from Senator Jefferson Davis:

MR. PRESIDENT: What the wants of the Patent Office are now is one thing, and what those wants will be in a few years is another and an entirely different thing. Not only from the report of the last Commissioner of Patents, but from inspection, if anyone choose to make it, and see the condition of things in that department, I think it may be denied that there is room enough in the present building for the wants of the department. If I understand the report of the present Commissioner of Patents or the Secretary of the Interior, the argument against the want of further room by the Patent Department is based upon the supposition that all which now belongs to the National Institute, all connected with the exploring expedition which now fills the museum of the Patent Office, is to be transferred to the Smithsonian Institution. That seems to be the basis of the conclusion. Now, sir, I wish to state to the Senate that Congress has no power to impose upon that institution the duty of taking charge of this collection of the exploring expedition, we may infer from their act, nor did they ever intend to do so. They gave to that institution the right to take all such curiosities brought home by the exploring expedition as might be desired for that institution, and I will inform the Senate that it is not the intention of the present Board of Regents of the Smithsonian Institution to take charge of the museum of the Patent Office, and the room appropriated to these curiosities will be required hereafter as now.

By its action in directing at this time the enlargement of the Patent Office, Congress appears to have accepted the ideas of Senator Davis, or, as Prof. Henry expressed it, "concurred in the opinions expressed in

the Senate by the Hon. Jefferson Davis, that it was a gift which ought not to be pressed upon the institution."*

In his report for 1851, Prof. Henry, sure of his position, spoke still more boldly. "It is to be regretted," said he, "that Congress did not leave the entire choice of the plan of organization to those who were to be intrusted with the management of the bequest."

These plain words were called forth by the fact that the building was still unfinished, and that a large additional appropriation from the fund was required to make it ready for occupation.

It is worth while to remember that his previous impressions of museums, or at least of recent years, had doubtless been founded upon the cabinet in the National Institute, which, before Prof. Henry came to Washington, had become completely torpid. Its collections, housed in a hall not under its control, belonged to it only in name. The miscellaneous assemblage of specimens in the hall of the Patent Office had been well described in the Smithsonian charter by the name "National Cabinet of Curiosities," for it did not deserve to be called a museum.

Prof. Henry evidently had that in mind in protesting against "a promiscuous collection," but for the first time explains that he does not underrate "the (scientific) importance of collections in themselves."

The following quotation will show, however, that he was not so averse to the museum idea as he had formerly been, although very doubtful as to the advisability of accepting aid from Congress:

The museum is to consist, according to the law of Congress and the terms of the compromise, of "objects of art, of foreign and curious research, and of natural history; of plants, and geological and mineralogical specimens." It would, however, be unwise in the Institution to attempt the formation of full collections of all these objects, or, in other words, to form an establishment similar to that of the British Museum. The whole income devoted to this object would be entirely inadequate. The portion of the main building appropriated to the museum consists of a single room 200 feet long by 50 feet wide. This space may be entirely filled in the course of three years, without the purchase of a single article, if the means be adopted which present themselves at the seat of Government for making collections. But when this space is filled the accumulation of specimens must cease, or an addition be made to the building, which, to harmonize with the present edifice, would involve a large expenditure. The question then arises, from what source is this money to be obtained? It can not be derived from the annual income of the capital, for this would cripple the more important operations. It may be said that Congress will

*The National Museum, although the designation proposed in Mr. Ingersoll's amendment to the Owen bill for the Smithsonian Institution was never legally sanctioned, was understood to be under the charge of the Smithsonian from the time of its incorporation. The museum clauses of the charter were so understood by the first regents and by Prof. Henry, who, in his first programme of organization, in 1817, wrote: "When the building is completed, and when in accordance with the act of Congress the charge of the National Museum is given to the Smithsonian Institution, other assistants will be required."

furnish the means; but this is relying on a very uncertain source, and the policy of applying to Congress for any aid is doubtful.

Having said this much, it was easy to continue by expressing the opinion that the Regents had been in error in supposing it necessary to put up a building for the reception of the great museum of the exploring expedition presented by Congress.

The next year made some change in the views of Prof. Henry. The presence of his new assistant secretary, Prof. Baird, and the evidence of the collection that was now growing up under his own eyes, that museums may be made important agencies for scientific discovery, had perhaps increased his personal interest in such matters.

And again:

Though the formation of a general collection is neither within the means and province of the Institution, it is an object which ought to engage the attention of Congress. A general museum appears to be a necessary establishment at the seat of government of every civilized nation. * * * Indeed, the Government has already formed the nucleus of such a museum in the collection now in the Patent Office.

An establishment of this kind can only be by Government, and the proposition ought never to be encouraged of putting this duty on the limited though liberal bequest of a foreigner.

The Smithsonian Institution will readily take the mental direction of an establishment of this kind, give plans for its organization and arrangement, provided it be requested to do so, and the means for effecting the object be liberally supplied.*

In the report for the year 1852 Prof. Henry definitely stated that the Regents had concluded that it was not advisable to take charge of the great museum of the exploring expedition,† and also expressed the hopeful opinion that "there can be little doubt that in due time ample provision will be made for a library and museum at the capital of this Union worthy of a government where perpetuity depends upon the virtue and intelligence of the people."‡

In the report for the year 1853, presented January 14–March 11, 1854, another step toward the transfer of the museum is chronicled. The Secretary wrote:

I have been informed by the Commissioner of Patents that the space now occupied in the building of the Patent Office by the National Museum is imperatively required for the display of models; and he suggests that a part or the whole of the Smithsonian building shall be purchased for the deposit of this collection. If Congress will entirely relieve the Smithsonian fund from the expense of collecting and maintaining a museum, a large portion of the present building would be unnecessary, and the proposition to purchase a part or the whole of it might be properly entertained. [The Smithsonian Institution, if required, would take the supervision of a Government museum, and would turn over to it all the specimens collected after they had been examined and described. The importance of a collection at the seat of Govern-

* (Report for 1851, p. 25.)

† Sixth Annual Report, p. 253,

‡ *I. c.*, p. 253.

Henry

ment to illustrate the physical geography, natural history, and ethnology of the United States, can not be too highly estimated. But the support of such a collection ought not to be a burthen upon the Smithsonian fund.

The year 1854 was the stirring one in the history of the Institution, and little was done towards the transfer of the museum. The great lower hall, having been completed, was lying idle. The Smithsonian collections were rapidly increasing under the management of Prof. Baird, of whose work in this direction more will be said later, and a considerable number of Government collections had come directly into the custody of the Institution—in bulk and value more extensive than those in the Patent Office, those of the exploring expedition excepted.

In this year, too, the custody of the Patent Office collection was transferred to the Commissioner of Patents, and an appropriation made for their support.

In 1855, in his report, presented March 1, 1856, the Secretary said:

The lower story of the main building consists of one large hall, to be appropriated to a museum or library. It is at present unoccupied, but will be brought into use as soon as the means are provided for furnishing it with proper cases for containing the objects to which it may be appropriated.

In another place he expressed the hope that Congress would in due time relieve the Institution from the support of the building, and ultimately appropriate the greater part of it to a *national* museum.*

This was the first time that the term National Museum was publicly used by Prof. Henry or in the reports of the Smithsonian Institution—a significant fact, and one which shows a step in the progress of the museum idea and a revival of the plan promoted by the National Institute from 1840 to 1846.

The fact that the Smithsonian museum, in itself, could now claim to be the best general collection of natural history so far as North America was concerned probably stimulated the Secretary's enthusiasm, for he announced the fact in the report with evident pride.

In March, 1856, the subject of the removal of the collections from the Patent Office was presented to the Regents by the Secretary, but the minutes contain no record of their decision.

In the Secretary's report for 1856, presented to the Regents January 26-28, 1857, the matter came up again for remark, and Prof. Henry, as was his custom, spoke of the obstacles to the progress of the Institution caused by the restriction of the charter, and recurring to the museum, said:

The adverse effects of the early and consequently imperfect legislation ought, therefore, as far as possible, to be obviated; and this would readily be done if Congress would relieve the Institution from the care of a large collection of specimens principally belonging to the Government, and purchase the building to be used as a depository of all the

* Report 1855, p. 16.

objects of natural history and the fine arts belonging to the nation. If this were done a few rooms would be sufficient for transacting the business of the Institution, and a large portion of the income would be free to be applied to the more immediate objects of the bequest. Indeed, it would be a gain to science could the Institution give away the building for no other consideration than that of being relieved from the costly charge of the collections; and, for the present, it may be well to adopt the plan suggested in a late report of the Commissioner of Patents, namely, to remove the museum of the exploring expedition, which now fills a large and valuable room in the Patent Office, wanted for the exhibition of models, to the spacious hall of the Institution, at present unoccupied, and to continue under the direction of the Regents the appropriation now annually made for the preservation and display of the collections.

Although the Regents a few years ago declined to accept this museum as a gift, yet, since experience has shown that the building will ultimately be filled with objects of natural history belonging to the General Government, which, for the good of science, it will be necessary to preserve, it may be a question whether, in consideration of this fact, it would be well to offer the use of the large room immediately for a national museum, of which the Smithsonian Institution would be the mere curator, and the expense of maintaining which should be paid by the General Government. The cost of keeping the museum of the exploring expedition, now in the Patent Office, including heating, pay of watchmen, etc., is about \$5,000, and if the plan proposed is adopted the Institution and the Patent Office will both be benefited. The burden which is now thrown on the Institution, of preserving the specimens which have been collected by the different expeditions instituted by Government during the last ten years, will be at least in part removed, and the Patent Office will acquire the occupancy of one of the largest rooms in its building for the legitimate purposes of its establishment. It is believed that the benefit from this plan is so obvious that no objection to it would be made in Congress, and that it would meet the approbation of the public generally.

I can find no record in the minutes of the Regents, but have been informed by Mr. W. J. Rhees, of the Smithsonian Institution, that an urgent request for the use of the hall was made by the Commissioner of Patents and the Secretary of the Interior, and that the Board decided to grant this request on the condition that Congress should appropriate money for the construction of the cases and the transfer of the collections, and that the Secretary of the Interior should provide for the expenses of the care of the collections after their transfer in the same manner as before.

The question of the legality of the transfer of the collections was submitted by the Secretary of the Interior to the Attorney-General, by whom it was held that the provision in the eighth section of the act of August 4, 1854 (10 Stats., 572), placing the collections under the control of the Commissioner of Patents, and authorizing the employment by him of keepers therefor, was designed to be temporary only, and that the act establishing the Smithsonian Institution, as well as that making the appropriation in 1857, were to be regarded as indicat-

ing the purpose of Congress respecting permanent provision for these collections.*

The appropriation of 1857, referred to by the Attorney-General, was one giving \$15,000 for the construction of cases and \$2,000 for the removal of the collections. (March 3, 1857. 11 Stats., 219.)

In commenting upon this action, Prof. Henry, in his report for 1857, remarked:

At the last session of Congress an appropriation was made for the construction and erection of cases to receive the collections of the United States exploring expedition and others in Washington, and also for the transfer and arrangement of the specimens. This appropriation was granted in accordance with the recommendation of the late Secretary of the Interior and the Commissioner of Patents, in order that the large room in the Patent Office occupied by the museum might be used for the more legitimate purposes of that establishment. We presume that the other part of the recommendation will also be carried out, namely, that the annual appropriation be continued which has heretofore been made for the care of this portion of the Government property. While, on the one hand, no appropriation should be made which would serve to lessen the distinctive character of Smithsonian's bequest, on the other it is evident that the Government should not impose any burdens upon the Institution which would impair its usefulness or divert its funds from their legitimate purpose.†

In 1853, by the act of June 2 (11 Stats., 301), an appropriation of \$4,000, "for the preservation of the collection of the exploring and surveying expeditions of the Government," was made as a contingent expense in the office of the Secretary of the Interior.

The management of this appropriation and of all which followed it from year to year was always placed entirely in the hands of the Secretary of the Smithsonian Institution.

In the report for 1858, Prof. Henry gave the following concise history of the relations of the Smithsonian Institution to the national collections:

It will be recollected that by the law of Congress incorporating this Institution "all objects of art and of foreign and curious research, and all objects of natural history, plants, and geological and mineralogical specimens belonging to, or hereafter to belong to the United States which may be in the city of Washington, in whosoever custody the same may be, shall be delivered to such persons as may be authorized by the Board of Regents to receive them."

The law thus giving to the Smithsonian Institution all specimens illustrative of nature and art to be found in the several offices and departments of Government was not construed as rendering it obligatory on the Regents to accept these objects if they considered it expedient to do so. Inasmuch, then, as this collection was neither essential to the plan of organization nor directly subservient to the comprehensive purpose of the donor in regard to a world-wide benefit, it was the ultimate decision of a majority of the Board that it ought not to be ac-

* Letter of Hon. William F. Vilas, Secretary of the Interior, to the Secretary of the Smithsonian Institution.

† Smithsonian Report, 1857, p. 14.

cepted and that no part of the donation ought to be expended in the care of property belonging to the Government of the United States.

Previous to the discussion of this question it had been assumed that the Regents were under an obligation to take charge of the museum, and, on this account principally, a large and expensive building had been thought necessary. After it was settled, however, that the Regents were not bound to accept this trust the work of construction was carried on more slowly with a view at once to secure certain advantages to the building itself, and to increase the principal by funding the interest of the money which would be absorbed by its completion.

In the meantime a very large amount of specimens of natural history had accumulated at the Institution from numerous exploring parties, sent out by the General Government; and as these collections had been made under the direction of the Institution, and their preservation was of the highest importance to the natural history of the country, it was finally concluded that if Congress would make an appropriation for the transfer and new arrangement of the articles then in the Patent Office, and continue the annual appropriation previously made for their care and exhibition while in charge of the Commissioner of Patents, the Institution would, under these conditions, become the curator of the national collections. This proposition was agreed to by the Government, and the contemplated transfer has accordingly been made.

It is believed that this arrangement will be mutually beneficial to the Patent Office and the Institution, since the former will be relieved from a duty scarcely compatible with the design of its establishment, and will gain possession of one of the largest rooms in the city for the exhibition of a class of models to which the public have not previously had ready access; while the Smithsonian Institution will be able to present to the strangers who visit Washington a greater number of objects of interest, and appropriate that portion of the large building not required for its own most important operations to a useful purpose.

The cost of keeping the collections at the Patent Office, including fuel, was about \$4,000 annually, but the Regents might, with justice, have asked for an additional amount sufficient to pay the interest on the cost of that portion of the edifice occupied by the museum. It was, however, thought more prudent to restrict the application to the sum above mentioned, and to request that the appropriation might be continued under the charge of the Secretary of the Interior, thus obviating the necessity of an annual application to Congress by the Institution itself.

The cases at present required for the accommodation of the collections have been constructed at a cost within the appropriation made for that purpose; and the Institution is indebted to Hon. J. Thompson, Secretary of the Interior, and Hon. J. Holt, Commissioner of Patents, for the use of glass, sash, and shelving no longer needed in the room which formerly contained the museum in the Patent Office, but which have been applied to good purpose in supplying deficiencies in the Smithsonian building. The Regents are also indebted to Thomas U. Walter, esq., Architect of the United States Capitol Extension, for the beautiful design of the cases, and to Edw. Clark, esq., architect of the Interior Department, for the inspection of the work during its progress, and the examination of the accounts presented by the contractor.

In order to increase the capacity of the large room appropriated to the collection, the cases have been arranged in two stories, forming a series of alcoves, and a gallery on each side. By the adoption of this plan space can be provided for double the number of specimens which were exhibited at the Patent Office.

A considerable portion of the collections has been arranged, and a taxidermist employed to repair the specimens of zoölogy which have been damaged, and to prepare for exhibition others which had not previously been mounted. The museum will soon be an object of continued and increasing interest to the inhabitants of the city and to strangers who visit the capital of the United States.

An assent to the arrangement above stated for taking charge of the Government collections is by no means inconsistent with the regret expressed in previous reports that the law of Congress directed provision to be made from the Smithsonian fund for a public museum and library. It must be evident to any one who attentively studies the past history of the operations of the Institution that the interest of the money expended on the building intended for this purpose would have been much more efficiently applied in the development and publication of new truths. But, in all cases where many views are to be consulted, the question is not merely what *ought* to be, but what *can* be accomplished. From the first there has existed a clear conception of the means by which the idea of the donor could be best realized, and the aim of the majority of the regents has continually been to approximate, as nearly as the restrictions of Congress would allow, to the plan originally proposed. The policy has been invariably the same, and the present reputation and generally acknowledged success of the Institution are the result of this undeviating course.*

The portion of the Smithsonian income which can be devoted to a museum and the \$4,000 per annum appropriated by Congress would not together be sufficient to establish and sustain a general collection of specimens of the natural history of the world. It will therefore be the policy of the Institution, unless other means are provided, to confine the collections principally to illustrations of the products of the North American continent. For this purpose efforts have been made, principally through the various exploring expeditions, to obtain a large number of specimens of all the species of the different kingdoms of nature found in North America; and at this time the collection under charge of the Institution is more extensive in number and variety than any other which has ever before been made relative to this portion of the globe. It is not in accordance with the general organization of the Institution to form a museum of single specimens, interesting only for their rareness, but to collect a large number of specimens of each species, particularly of such as have not been described, and to distribute these among the several naturalists who may have the industry, ability, and the desire to study them; the primary object of the Institution, namely, the increase of the existing sum of knowledge, in this case as in all others, being kept prominently in view.

The Institution has now become the curator of the collections of natural history and ethnology of the Government, and by law is empowered, as it appears to me, to make the same disposition of the materials contained in these collections as it does of those procured at its own expense. The design will be to render the specimens in the greatest degree serviceable to the advance of knowledge. The Museum now consists of the following collections, of which, according to Professor Baird, about one-fifth were brought from the Patent Office.

First, those of the naval expeditions; second, those of the United States geological surveys; third, those of the boundary surveys; fourth, those of surveys for railroad routes to the Pacific; fifth, of miscellaneous

* Smithsonian Report, 1858, pp. 13-16.

expeditions under the War and Navy Departments; sixth, those of miscellaneous collections presented or deposited by societies and individuals; and lastly, of an extensive series of the results of explorations prosecuted by the Institution itself. By far the greater portion of the whole has been made under the stimulus and immediate direction of the Smithsonian Institution. A number of the special collections are still in the hands of those to whom they were intrusted for scientific investigation and description. The arrangement of the cases and the disposition of the articles intended for public exhibition has been a subject requiring considerable thought and experiment. It was not only desirable to obtain the largest amount of space for the accommodation of the articles, but also to arrange the whole so as to harmonize with the architectural embellishments of the large hall, and thus to produce a proper æsthetical effect.*

In 1859, the Guide Book, unoffical yet issued by an official of the staff, was published with the words Guide to the Smithsonian Institution and National Museum on its cover, and about this time the words National Museum of the United States were painted over the door of the exhibition hall.

Congress did not, however, give legal sanction to the use of this name until nearly twenty years later, when providing for the erection of the new building to receive the collections given to the Smithsonian Institution at the close of the Centennial of 1876.

WASHINGTON, *February, 1891.*

NOTE A.

JANUARY 1, 1842.

To the Hon. J. C. SPENCER and

The Hon. A. P. UPSHUR:

GENTLEMEN: The undersigned, a committee on behalf of the National Institution for the Promotion of Science, have the honor to submit to your consideration the following facts and remarks.

In a law of the 20th July, 1841, there is a provision in these words: "For the purpose of enabling the Secretaries of the War and Navy Departments to place in a state of safe preservation the specimens of natural history which are now deposited in their respective offices, or which may be brought there resulting from surveys of the unexplored regions of our own country, or from the exploring expeditions now in the South Seas, by the authority and at the expense of the United States or otherwise, a sum not to exceed five hundred dollars."

And in a law of March 3, 1841, there is another appropriation "For defraying the expense of transporting to the city of Washington and of arranging the collections made by the exploring expedition, five thousand dollars."

These laws are considered as having determined the principles which should govern in such cases.

First, that the expenditures should be made under the direction of the Secretaries of the War and the Navy Departments; and

Second, that the collections should be brought to Washington and arranged there.

In the discharge of these duties, the Secretaries of the two Departments named directed the collections referred to to be delivered to the care of the National Institution, for the purpose of being arranged under its supervision.

* *Op. cit.*, 1858, pp. 40, 41.

On these accounts, as well as because of your position of directors of the Institution, we have now the honor of addressing you.

The first appropriation of \$500 was expended under the personal superintendence of the Secretary of War, he approving all accounts; the second, under that of the Secretary of the Navy. But in the course of the business this duty assumed the following form:

The society appointed a committee to supervise the arranging of the collections. It was the duty of this committee to suggest the expenditures and employments which it considered necessary, to examine into the accounts, and if it found the same to be correct, to recommend them to the approval of the Secretary. Under this system the appropriations have been expended, and the Institution is now without further means.

It is proper to remark that the entire collections of the Institution, as well in books as in specimens of natural history and of the arts, and as well those deposited by the Government as those given by individuals and other institutions and from foreign governments, will in the end belong to the United States, there being a provision to that effect in the constitution of the Institution. The whole can therefore with propriety be considered as public property.

With this brief exposition we shall now lay before you the state of the affairs of the Institution in reference to the collections, deposits, gifts, and expenditures.

The entire collection is deposited in the upper rooms of the Patent Office; it consists of:

Donations from foreign governments.

Donations from other institutions, foreign and domestic.

Donations from ministers and consuls abroad, and from officers of our Army and Navy.

Donations from individuals and from members of the Institution.

The Iowa collection of mineralogical and geological specimens, made by R. R. Owen, esq., under the direction of the Treasury Department.

The collection of mineralogical and geological specimens which had been in deposit in the bureau of the Corps of Topographical Engineers.

The collection of portraits of distinguished Indians, and the collection of Indian curiosities which had been on deposit in the War Department.

The minerals, books, papers, and personal effects of the Smithsonian bequest.

The two shipments which have been received from the exploring squadron, consisting of minerals, specimens of natural history, works of art, implements of war and curiosities.

The books, minerals, and works of art belonging to the late Columbian Institute.

The books, papers, and proceedings of the late American Historical Society.

Cabinets and specimens, deposited by members in trust, for public use.

It can not be said that these materials are now arranged. The space which has been appropriated to the temporary use of the Institution—the eastern half of the upper room of the Patent Office—is entirely insufficient for such a purpose, as well as the means and time which have been devoted to them. But as more just conception in those respects, as well as the value of the collections, will be derived from an exhibition in detail of the latter, it will now be laid before you:

About 1,000 volumes of books and numbers of pamphlets.

About 50 maps and charts.

About 500 castings in plaster, medals, and seals.

Ten pieces of statuary, marble, or plaster.

One hundred and sixty-eight paintings.

About 1,600 bird skins, of which rather more than 400 have been cleaned, stuffed, and mounted, and deposited in cases, but which yet require eyes and to have labels properly written and affixed. They also require to be scientifically arranged, the first labor being necessarily limited to the preparing of the skins and putting them

under the protection of cases. It may be proper to remark that to clean, stuff, and put in position 6 bird skins a day, is the greatest result from the labors of an expert and experienced taxidermist, and that so much can be done only with skins in good order and of moderate-sized birds. Much less is the most that can be done with skins that have been twisted and for a long time closely packed, or with skins of large birds or of quadrupeds; a single skin of a large bird often requiring from one to two days.

About 160 skins of quadrupeds, about 50 of which have been stuffed, set up, and put in cases.

About 200 glass jars have been filled with mollusca, fishes, and reptiles, but these yet require to be divided into more jars and to be arranged, classified, and numbered; and there yet remains two barrels and ten kegs of wet and soft specimens, which have not been opened, except to replenish, when necessary, the preservative material.

There are about 50,000 botanical specimens, embracing many that are extremely rare and entirely new. An able botanist, Mr. Nuttall, who has had the examination of this collection, pronounced it equal, if not superior, to any in the world of the kind and from the same regions. He was for a short time employed to aid in the arranging of the specimens, and assigned them to orders and genera, but they yet require the greater labor of specific distinctions.

There are about 3,000 specimens of insects, the greater part of which have been arranged in genera, but yet require the further and more laborious arrangement into species. A large collection of insects, said to be one of the finest of Europe, has lately arrived in New York to be placed in deposit in the Institution for the benefit of the public. It is from that well-known and eminent naturalist, C. F. Castelneau, esq., a member of the Institution. We have also notice of a collection of minerals being on its way from the School of Mines of Paris, as a present to the Institution.

There are probably several hundred thousand shells, constituting a mass of from 30 to 40 bushels, all valuable and many of them very rare, entirely new and extremely beautiful. With these nothing has yet been done but to open the boxes and clean a few of them. Many conchologists have pronounced this the finest collection in the United States. It will require much labor and time to arrange it.

About 500 corallines have been cleaned and partially arranged. About 300 starfish, echini, radiati, etc., have received a like attention; also about 100 sponges and about 2,000 crustacea. And there are yet many more specimens of these, several hundred, which have not been examined.

About 50 fish skins. These are yet in the same condition as when received.

About 7,000 specimens of minerals are placed under the protection of cases, but require a great amount of labor to arrange and label. There are also upwards of 50 boxes of mineralogical and geological specimens which have not been opened.

Accessions are daily made to the collections of the Institution in the form of donations, and we are now looking with some anxiety for additional shipments from the exploring squadron. Nor can it be doubted that when the squadron returns it will be freighted in value and number of specimens equal to all it may have sent home during its long and interesting voyage.

Already the specimens which have been placed in cases nearly fill the space, one-half of the upper room of the Patent Office, which the liberality of the Secretary of State assigned temporarily to the use of the Institution; but these specimens are of necessity in a crowded state of imperfect arrangement. And the specimens now on hand, when put up and properly displayed, will fill the whole of the room. We already, therefore, and with much reason, anticipate being straitened for space.

The occupation of our present place is also merely temporary. The room will in a few years be required for the purposes for which it was erected. This consideration necessarily affects the character of the labors of the Institution in reference to the collection, which can not fail to partake of the character of its occupation of the

room, and in consequence its labors are limited to such as are necessary and preliminary to a permanent and scientific arrangement.

The same consideration has influenced the employment which has been authorized. The committee to which this matter was intrusted by the Institution, did not feel authorized to recommend to the Department having charge of the appropriation any system which should involve the Government in a liability for one day beyond the enduring of the appropriation.

The appropriation has become exhausted, but the persons employed have continued their labors under the hope that the great work upon which they have been engaged and which has progressed with such flattering activity will not now be abandoned. These persons are:

II. King, esq., curator of the Institution, who has the general care of the collections which have been intrusted to the Institution, and who is held responsible to the Institution for their safe-keeping. His particular attention has been devoted to the minerals, mollusca, echini, radiati, spongia, and crustacea, and to the construction of the cases, procuring of the glassware, and other requisite materials. His compensation was fixed at first at \$3 per day, but afterwards, in consequence of his being at much expense for trips he had to make to Philadelphia, New York, and Boston, and being liable to such trips in the execution of his duties, it was raised to \$5 per day.

A. R. Townsend, esq., taxidermist. His duty is to dress, stuff, prepare, and arrange the skins. His compensation is \$3 per day.

Mr. Nuttall, who was employed on the botanical specimens at \$3 per day. He is not at present in employ, having other engagements.

One assistant, Mr. Pollard, at \$1.50 per day. *

One other assistant, who is also a good mechanic and arranger, Mr. Vardin, at \$1.50 per day.

One messenger and laborer at \$1 per day.

The occasional employ of laborers and mechanics.

All of the appropriations not required for these employments have been expended for cases, glassware, and other necessary contingencies to such an establishment, the accounts and vouchers for which have been duly rendered.

As before remarked, these arrangements are but temporary, nor are they commensurate to the mass of labor which has to be done, or to the just expectations which are entertained in reference to it. More force must be employed and more varied talent than the means appropriated have enabled the institution to command. With the experience which has been acquired, the committee will if desired, under the correcting hand of the Institution, submit to your consideration their views in reference to the expenditures of any future appropriation.

The funds of the Institution are of two kinds.

First, the amount derived from the annual tax upon members

Second, the amounts appropriated by Congress.

The first is necessarily small, from the few members liable to the tax, and the amount of it, for each, \$5 per annum; and it is expended for rare and necessary books, necessary printing, cases, and other contingencies.

The second has as yet been no more than \$5,500 and has been expended in the manner and for the purposes before indicated. We are now, however, without means, and were it not that the individuals employed continue at the labor in the hope that the Government will continue its patronage to its own property, the work of preparation and arrangement would be suspended, as the most the Institution could do from its own funds would be to employ some one to take care of the collection.

The object of the Institution is to "increase and to diffuse knowledge among men." Its time and whatever talent it possesses are faithfully devoted to it. But its members have occupations, private and public, which can not be neglected, and they have not the wealth for voluntary contributions. We are therefore obliged to look

The guy who got setting the U.S. X X. labels. See 2007

to the Government for aid in funds. In other countries, where, although public spirit may not be, individual wealth is so much greater, no institution of the kind has ever succeeded without Government patronage. How much more necessary, then, is such patronage with us. And the more justifiable and necessary will this patronage appear when the reflection is made that the greater part of the property under our care already belongs to the Government, and that all donations, collections, and purchases by the funds of the Institution must by our constitution eventually take the same course. The Institution is but an erator for the Government, voluntarily bestowing its time and talents to objects which can not fail to increase national fame, to elevate national character, and to promote the design of the great philanthropist to "increase and to diffuse knowledge among men."

We therefore respectfully but confidently address you as directors of the Institution and as heads of the departments under which former appropriations were expended and solicit your efforts to obtain further Government aid.

There are two points to which we are anxious to draw your particular attention. One is an appropriation from Congress for preparing and arranging the Government collection; the other for additional space. The first is absolutely necessary, for, as before remarked, former appropriations are exhausted, and the work must be abandoned if more is not granted. We consider that about \$20,000 is required for the active and correct prosecution of the work during the year 1842. More labor must be applied, and more varied talent be employed; and we believe it will not be expected that these requisites are to be obtained without a proper consideration. The committee pledge themselves to a faithful superintendence of the expenditures, and to a faithful account of it.

The second is equally necessary. We want space properly to exhibit the specimens. We acknowledge that our occupation of the half of the room assigned to the Institution is but temporary, and that we must look forward to the period when the whole room will be required for other purposes, and while our occupation is of this character, we are also, and every one must be impressed with the conviction that our arrangements can not assume that scientific and permanent character which will be their ultimate condition. Our present labors must therefore be preliminary to a permanent and scientific arrangement, labors, however, not lost as they would be necessarily under any circumstances. But to execute these properly more space is required, and also the uncontrolled occupation of the whole room. This space is the more necessary from the very preliminary character of present labors, as the room has to be a workshop as well as an exhibition room. We make this request from a thorough conviction of its necessity, and from the belief, if granted, it would not incommode the Patent Office. And to prevent misapprehension, we will take this opportunity to state that from the superintendent of that office the Institution has received those accommodations and facilities which might justly be anticipated from a gentleman of his known urbanity and intelligence.

J. J. ABEEL,

A. O. DAYTON,

FRANCIS MARKOE, JR.,

Committee.

NOTE B.

REPORT UPON THE MATERIALS IN THE INSTITUTE.

By Dr. PICKERING, Dr. DANA, Dr. HALE, and Mr. BRACKENRIDGE.

On the 12th of September last I received the charge of the collections of the National Institute, and the hall was soon after placed at my disposal by an order from the State Department. My time has since been chiefly occupied in general plans of

arrangement and accommodation, in reviewing the collections of the exploring expedition that had been already opened, opening those recently received and ticketing and taking an account of them. The larger portion has now been gone through with and deposited in the allotted cases, but not yet rendered intelligible by means of labeling and arrangement. I should expect, however, some branches of the zoölogical collections, not yet unpacked, and a portion of the botanical, yet to arrive. I am not prepared at present to make a full report on the proceeds of the exploring expedition, but have only to offer a few remarks relating generally to the objects under my charge.

The interior arrangement of the hall is not altogether such as I should have originally recommended; but the cases being already completed, it remains only to conform to the plan as far as practicable. By lining the walls with cases there will be sufficient accommodation for the present collections of the Institute, including those of the exploring expedition, and the specimens of American manufactures already within the walls. At the same time there is no provision for future increase in any department, much less for any new objects that may be contemplated. There is no room for a geological series of the United States, for a library, a gallery of the fine arts, etc.

The persons at present employed are:

Mr. Varden, having the immediate supervision of the hall and fixtures.

Mr. Dana, having charge of mineralogy and geology, and also of corals and crustacea.

Mr. Brackenridge, having charge of the greenhouse and all botanical collections.

Messrs. Townsend and Pollard, taxidermists, also having charge of the ornithological department.

Mr. Falconer, carpenter; constantly occupied, etc.

Mr. Campbell, messenger and general assistant.

All have thus far given entire satisfaction.

I am not aware that any increase of force is necessary. There is, however, one department on which, from the destructible nature of the objects, we are unable to bestow the requisite attention. I allude to that of entomology. We have on deposit the extensive and valuable collection of Count Castleman, and should be ashamed to allow it to perish in our hands. The collections, too, of the expedition, though not so extensive as was perhaps expected of us, and in part lost with the *Peacock*, yet it is believed include materials that in competent hands might be the means of eliciting facts worth preservation, and having a wider bearing than may be supposed by those who have not duly weighed the relationships of the different parts of creation. Our gatherings in this branch derive a further consequence from our being able to connect them with the vegetable products of the widely separated islets of the mid-ocean and other unfrequented regions it has been our rare fortune to visit.

The collections in conchology have only in part been opened (viz, up to the time of our leaving the Fiji Islands), and no portion properly arranged and exhibited; neither at the present moment can any space be allowed for this purpose. When fully displayed, it is believed that those interested in this branch of science will not be disappointed as to their extent and value.

For the ornithological department, and the dried skins of other animals, I must refer to the accompanying list; promising, however, that there are besides many interesting specimens in osteology, both of man and the inferior animals.

Of specimens in spirits, brought by the expedition, we number 208 jars, containing insects and minor objects in zoölogy, not less in all than 4,000 different species, and 895 envelopes of larger specimens. These last include about 900 different species of fishes and 200 of reptiles, making a total of 5,100 species in spirits, exclusive of the Crustacea, noted by Mr. Dana.

For the botanical department I must refer to the accompanying extract from a report by Mr. Brackenridge. I inclose also reports on the drawings made during the

cruise of the exploring squadron, by Mr. Drayton, and Agate; on the mineralogical and geological collections, from Mr. Dana; and a paper on the philological department I obtained from Mr. Hale, who happened accidentally to be in town. As Mr. Hale has not enumerated the collections in this latter branch, I will here specify them particularly. The Institute now possesses, exclusive of—

Thirty-six volumes and pamphlets, and a large bundle of newspaper files; historical documents, all printed at Lima and Chili, which may not properly come under this head.

Grammar of the Quechua language, which is still the vernacular in the mining towns of the Peruvian Andes.

Ten tracts in the language of the Society Islands, printed in part at Tahiti.

Eleven tracts in the Samoan language, from the mission press at those islands.

Printed specimens also of the Fiji and New Zealand languages, including New Zealand testament.

Sixty-three volumes and pamphlets in the language of the Sandwich Islands, including the entire translation of the Bible; printed at those islands by the American Mission Press; accompanied also with specimens of engraving by native artists, one of which in particular, viz, a general map of the islands, would do no discredit to the state of the arts at home.

A Japanese book (apparently a religious work) and other writings, believed to be entirely unique in this country.

The original Tagala grammar, printed two centuries ago at the Philippines, giving an account of that alphabet, now extinct; the more interesting, as this is one of the most remote points to which the invention of letters appears to have penetrated—before, at least, the modern improvements in navigation.

Nineteen volumes of Malay manuscripts; in all probability the finest collection in existence.

Eleven volumes of Bugis manuscripts. (A note says: "The only font of Bugis type in existence belongs to the American board of missions at Singapore.") The Bugis are very proud of their literature, and are now the most prominent people in the East Indian Archipelago; for the peculiar geographical features of the vast region would seem to preclude the division into nations, which obtains in other parts of the globe.

A Bali grammar. (What follows is derived from other sources than the expedition.)

Leaves from a Bali book, presented by Mr. Thomas H. Gills.

A Siamese book.

Several slabs of hieroglyphics from Central America, by Mr. Rupel, United States consul, Laguayra.

Coptic books, by Mr. Gliddon, late consul at Cairo.

Egyptian antiquities and hieroglyphics, by the same, which are specially worthy of notice, and give a juster idea of the style of the works of that wonderful people than could be acquired from plates. Some of these fragments have long been wanted in this country, and will be looked at with the more interest as the extraordinary and authentic annals disclosed by them become more generally known.

I will not now enter into an account of the implements, arts, and manufactures of the various people we have visited. We flatter ourselves, however, that these will prove not the least important part of the collections. I will refer now only to the interest with which we should look upon some such relics of the tribes who once inhabited our Eastern waters, whose race has disappeared ere its history was written. When posterity shall demand of the present generation, as men of intelligence, some account of these people, what will be forthcoming? It is generally to be feared only that which is written in imperishable stone—a few stone hatchets and arrowheads.

With regard to our Western tribes, better things are to be hoped for, although they have already lost some of their arts and ingenuity from intercourse with civil-

ized man. The collection of implements already within the walls is quite respectable, and the expensive series of their portraits from the War Department may well deserve the term of a national monument.

Some national depository has long been wanted where individuals could place, under the care of Government, any object they may happen to possess, in nature or art, that is rare or instructive, calculated to improve and elevate the mind, or furnish materials for new deductions.

The same observations would apply to a national library. Individuals would hardly think of making donations to the Congressional Library; neither would foreign societies. Yet two of the finest libraries of our country—indeed, so far as their sphere extends, I would term them of a higher grade than the rest—have been got together exclusively by donations. I would not by any means be understood to undervalue the Congressional Library, and the very judicious selections that have been made for it of late years. But, shall we always be content with the love of mere England, herself by no means in the first rank in every branch of knowledge? We look in vain in any part of our country for a full assemblage of French, German, Italian, Swedish, Danish, Spanish, Portuguese, Oriental, or hardly classical literature.

I have omitted to mention that the property of the Institute is at present very much exposed to depredation. From 6 to 9 a. m., and also after 5 p. m. the hall is left entirely unguarded and might be entered with the utmost ease. I would propose that a dog-watch be set over the hall and building, as about other public edifices.

Respectfully submitted.

CHARLES PICKERING,
Curator of the National Institute.

WASHINGTON, November 22, 1842.

BOTANICAL DEPARTMENT.

Among the various branches of science which it is the object of the National Institute to encourage, disseminate and exhibit, for the benefit and improvement of mankind, perhaps none claims its attention so much as botany. By the study of this science we learn the uses of trees, shrubs, and plants, whether medicinal, nutritious as food, or useful in the arts. The beneficial effects its study produces on society, or on those who pursue it, by softening down the asperities of our nature, and leading the mind to contemplate objects of a higher order than the mere gratification of ordering amusements—which appears to have been the view taken of it by all civilized nations.

The National Institute through the exploring expedition possesses one of the most extensive and varied botanical collections, from the numerous places which the expedition touched at, that is yet known to have been accumulated during any voyage of similar character. This collection has not yet been arranged or set up according to any particular system, whereby it can be referred to conveniently, but rests in the Institute in maps. Wherever a set of specimens of the whole is classified and arranged systematically there will still remain a great number of duplicates to dispose of to institutions of a similar character, either in exchange or otherwise, as the Institute may think fit.

There is also another point connected with botany to which the scientific world has of late years turned their attention, viz. the geological distribution of plants over the surface of the globe; also the altitude or the heights at which certain tribes appear and disappear. On this point the collection could furnish the best information, as many of the specimens were found at a height of 16,000 feet above the level of the ocean. The herbarium it is proposed to put up in neat bands and arranged in cases after the manner of a library.

The Institute has also come into possession of a collection of rare and highly inter-

esting living plants, brought home also by the expedition, which has since received several additions in return for seeds distributed from the same source; also a few donations of other plants from various quarters. For their preservation a greenhouse 50 feet long, and partitioned into two apartments, has been erected on the lot behind the Patent Office. The number of species in cultivation amounts to 500, and, with duplicates of the same, there are about 1,100 plants in pots, over and above those now coming up from seeds. As it is expected that donations will frequently be made, and as the plants we now have will be increasing in size, the present house by another year will hardly suffice to contain them. The propriety also of having a lot of ground fenced in where these plants could be set out during the summer months, and which could also be used for the raising of ornamental trees, shrubs, and other hardy plants, which may come into the possession of the Institute, is strongly urged. The meagerness of our parterres and shrubberies evidently shows that additions are wanting for ornamental gardening.

It would also be a receptacle for proving all samples of fruits, flowers, and essentals that may from time to time be presented to the Institute, there being, so far as I am aware, no public establishment of the kind in existence in the Union. Officers of our Navy and consuls residing in foreign countries might do a great deal in introducing fruits, vegetables, and flowers; and whenever it is known that such an establishment exists, there is every reason to anticipate donations, where the country in general is to be benefited by such an enlightened and commendable scheme. A nucleus once formed, with a gradual accumulation of stock and a steady perseverance in its support and furtherance, we might, at some not very distant day, vie with the most celebrated establishments of the same kind in Europe. The progress of the benefit to be expected must be, like the undertaking, slow but sure, and the effects will soon become evident to every enlightened citizen.

The following is a list of plants, or number of species in the herbarium, collected at the various places visited by the expedition:

Madeira.....	300	Low Coral Islands (in all).....	27
Cape de Verde Islands.....	60	Sandwich Islands.....	883
Brazil.....	989	Oregon country.....	1,218
Patagonia (Rio Negro).....	150	California.....	519
Terra del Fuego.....	220	Manila.....	381
Chile and Chilean Andes.....	442	Singapore.....	80
Peru and Peruvian Andes.....	820	Mindanao.....	102
Tahiti.....	288	Tulu Islands.....	58
Samoa, or Navigator Islands.....	157	Mangsi Islands.....	80
New Holland.....	789	Cape of Good Hope.....	330
New Zealand.....	398	St. Helena.....	20
Lord Auckland Island.....	50		
Tongatabu.....	236	Total number of species....	9,674
Fiji Islands.....	786		

The number of seeds brought and sent home by the expedition amounted to 684 species, the most of which have been sent all over the country. Several cases of live plants were also sent home, of the existence of which there are no traces. The live plants brought home by the squadron amounted to 254 species, and these now form part of the greenhouse collection.

WM. D. BRACKENRIDGE.

NOVEMBER, 1842.

REPORT OF MR. DANA.

The inadequacy of the space in the hall of the Patent Office at present allotted for the departments of geology and mineralogy, becomes daily more obvious, as the extent of our collections is better known. The spacious hall is a noble one for the

purpose to which it is devoted; but so many distinct sciences claim a share of the room, that only a small area can be set apart for any one of them. The collections of the exploring expedition swell out beyond our expectations, and when fully arranged there will be room for little else.

The package of mineral and geological specimens already opened occupy three of the cases in the hall and there are yet 7 or 8 boxes untouched. These expedition collections include suites of specimens from the following countries and islands:

1. Brazil, illustrating especially the deposits of gold and gems in the great mining district of Minas Geraes; also the structure of the countries about Rio Janeiro.

2. Rio Negro, Patagonia, where the extensive Pampas of La Plata, and the Tertiary deposits upon which they rest, afforded us a series of interesting specimens, exhibiting the character of these great prairies of the south, and the salt lakes that abound over them.

3. Orange Bay, Terra del Fuego, where terminates the great chain of the Andes. A species of fossil and the nature of the rock deposits, appear to afford sufficient evidence of the similar and consuetaneous origin of this portion of the chain with the Andes of Chile and Peru.

4. Chile, and the Chilean Andes. The mountains were twice ascended by parties from the expedition, and specimens obtained, in addition to the rocks of the coast, and ores from copper mines.

5. Lima and the Peruvian Andes, affording us gold and silver ores. The summit of the Andes was passed by a party of officers, and among their collections is a fossil Ammonite, a large extinct species of shell, obtained at a height of 16,000 feet.

6. Oregon. The collections illustrate the rock formations of Northwest America, including the lignite or coal deposits of the Cowlitz and Frasers River, the sandstones and clay slide occurring at intervals from Puget Sound into California, affording numerous organic remains of shells, echini, fish, etc., and the granites, basaltic rocks, limestones, ores, etc., of the Territory.

7. Upper California.

8. The Sandwich Islands. A region of volcanoes of various ages from the great gulf of Lua Pele, where lakes of liquid fire still boil, to the lofty mountains of the western islands of the group, which in the lapse of time have been so shattered by convulsions and worn by an abrading sea, rains, and running water, that no distinct trace of the vent or vents that ejected the successive layers of basaltic rock. On account of this difference of age in the several parts of the group, we have not only complete collections of modern lavas, but others illustrating the operations of these fires for ages back. The late eruption of June, 1841, is well illustrated by numerous specimens from its lavas or scoria, and from the sandhills and new beach formed as the lavas entered the sea. The tops of the high mountains of Hawaii, each about 14,000 feet in elevation, have also contributed to the collections, through the exertion of the officers of the *Vincennes*, who were long engaged in explorations on this island.

9. Navigator or Samoan Islands, a region of ancient basaltic mountains and extinct craters, some of whose twisted lavas and scoria seemed to be of quite recent origin.

10. Society Islands, of similar structure, but with fewer evidences of modern volcanic action.

11. Fiji Islands, also basaltic and containing some boiling springs.

12. New Zealand, combining the craters, active and extinct, boiling springs and volcanic products of the other Polynesian island, with granite rocks, sandstones, and shales, and deposits of coal.

13. New Holland, the collections from the coal region, including the fossil vegetation and from the subjacent rocks which abound in organic remains, is probably the most extensive that ever left the country.

14. Philippine Islands, a region of granite and talcose rocks, sandstone, shales, and

limestone, with mines of gold, copper, lead, and coal, besides containing one of the largest active volcanoes of the East Indies, and many extinct craters, boiling springs, etc.

15. Sooloo Sea, a region of numberless extinct craters or volcanic mountains and abounding in coral reefs.

16. Singapore.

17. Cape of Good Hope.

18. St. Helena.

19. Cape Verde.

20. Island of Madeira, mostly consisting of basaltic rocks, tufas, or lavas, and remarkable for the grandeur of its mountain scenery and the richness of its vegetation.

21. The South Shetlands, which afford large masses of sal ammoniac.

22. Rocks and earth from the Antarctic land, taken from icebergs in its vicinity—principally granite, basalt, and a red, compact, quartz rock or sandstone.

To these should be added the collection from numerous coral islands, which include not only specimens of dead coral rock, the material of the islands, but also various living corals now growing about their shores. We leave corals for the present, as they require separate remark.

The above will give some idea of the interest that attaches to the expedition collection.

Besides the three cases in the hall, to which I have alluded, two others are all that, with due regard to the other departments, can be set apart for the sciences of geology and mineralogy. There are already large collections of minerals waiting to be arranged, to which Col. Totten has generously added his entire cabinet. The collection which accompanied the Smithsonian bequest has been often noticed, and we pass it by without further remark at present than to testify to the beauty and interest of its specimens. In addition, there are twenty-seven boxes from the Iowa territory, inclosing specimens from the lead and copper mines, and others elucidating its general geological structure, collected by the able geologist of that region, Mr. D. D. Owen. A fine suite of Ohio fossils has been received from Mr. Locke, of Cincinnati, comprising numerous species of trilobites. A rare collection of bones of mammoth size, the remains of a megatherium, an extinct animal, was lately obtained at Skidaway Isle, Georgia, and by the liberty of Dr. S—, of Savannah, are now in the hall. Other packages have been received from M. C. Buck, Wm. A. Irvin, Robert Brown, Capt. R. Latimore, D. A. Buckley, of Jacksonville, Ill.; Fr. Marcoe, jr., of Washington; J. M. Allen, of Albany; M. Stony, of Vermont; Martin Johnson, Mr. Ziegler, Joseph Willett, of Maryland; J. I. Greenough, Prof. U. Parsons, Mr. Mecklin, of Maryland; G. R. Gliddon, consul in Egypt; W. L. Ames, of New Jersey; Dr. J. H. Caustin, C. D. Barton, of New York City; Wm. M. Mitchell, of Virginia; Dr. Lewis Sayensch, and O. Root, esq., of Syracuse, N. Y. Specimens are constantly arriving, and now, after the late circulars issued by the several departments of Government to our military and naval officers and consuls, they may be expected in still greater numbers.

After arranging the expedition specimens, there will be one case and a part of another for all the mineral collection, the Iowa geological specimens, and the many others in our possession. With the exception of the minerals, for which there is scant room, the whole must remain closed.

The importance of these sciences, and the interest of the country in its mineral resources, make it desirable that some plan like the following should be adopted, and as soon as may be carried into execution: There should be a complete collection of minerals, systematically arranged, comprising specimens from all countries, and illustrating fully every branch of the science. For geology, in the collections of which are included rock specimens, fossils, soils, and whatever may illustrate the formation of our globe, the changes in its progress, its present condition, and min-

eral or agricultural resources. I would suggest that in addition to cases for foreign geology, there be a special case set aside for each State in the Union, to contain specimens of all its productions, mineralogical and geological. This plan carried out, a single walk through the hall would convey the information of years of travel; the mineral wealth of each State would be open for inspection, and the nature of their productions and their comparative value might at once be read off. Those interested in coal explorations would find here the rocks which contain this mineral and indicate its presence; and near by those rocks also which by some resemblance have so often led to fruitless explorations; the true and the false might be readily compared, and with the definite information obtained, treatises on this subject, before scarcely intelligible, be read with profit. The same, with the ores of iron, copper, lead, gold, silver, etc., and the various materials used in building, soils, etc.

Such an arrangement, embracing within its plan every part of our country, will enlist exertions as widely extended; and we may confidently believe that the titles New York, Pennsylvania, Virginia, etc., inscribed on the respective cases, would not long stand over empty shelves. Indeed, for some States a second and a third case might soon be required. The Iowa case could now be filled, and a commencement might be made with the case for New York, that for Ohio, Virginia, Maryland, Pennsylvania, Rhode Island, and New Jersey. As geological surveys are in progress in many States, or have been completed, there will be little difficulty in general in obtaining complete snites for the National Institute. The corals in the hall, with few exceptions, were received from the exploring expedition. The collection is extensive and possesses peculiar interest inasmuch as the species are mostly from seas that have seldom contributed to the cabinets of this or any country. The various cruises of the vessels among the numerous Pacific islands afforded unusual opportunities for the collection and examination of these singular forms of animal life, and much that is new has been brought to light with regard to the structure of coral islands, the growth of corals, the nature and forms of the animals that deposit them (of which a large collection of drawings has been made), besides discovering many new species and correcting some errors in former descriptions. The number of species brought home is not less than 250, and if to this be added the smaller corallines it will amount to above 350, besides species of still inferior grade of organization, the sponges. The corals now occupy two cases which are barely sufficient to receive them. A separate case of West India corals might soon be filled, as we may expect large collections through the exertions of the officers of the Navy cruising in those seas. It would be quite important that these productions from the opposite sides of our globe, the East and West Indies, be kept separate.

The beauty of these collections is sufficient of itself, as is believed, to engage the attention and more than a passing glance or hasty word of admiration. But their interest is greatly enhanced when it is considered that thousands of square miles of land have been added to our globe by the labors of the minute coral-builder, and that seas have been studded with islands that otherwise would have remained a waste of waters.

Before closing this communication I may add a word on the Crustacea in the Hall, which department fell into my hands in the expedition and comes under my charge also at the Institute. The collection now arranged includes about 650 species, nearly all of which are from the exploring expedition. The whole number of species collected and examined during our cruise is not far from 1,000, more than half as many as the whole number known. Of these, 500 and upwards have been figured; and not less than 450 out of the 500 are new species, besides many others in the collection not yet particularly examined. About 250 species are oceanic and belong to genera of which not over 30 species are known, affording, as is thus seen, a great number of novelties to be brought out in the publications of the expedition. The most of these oceanic species are microscopic, generally less than a tenth of an inch in length. Although so minute, they sometimes swarm in such numbers as to give a red tinge

to the ocean over large areas. While at Valparaiso, the sea for miles to the southward appeared as if tinged with blood, owing to the myriads of these minute Crustacea. Some species are so transparent that, under the microscope, all the processes of vital action, the motion of every shell in the complex organization of animal life is open to view, exhibiting many novel facts, curious and important to the physiologist.

The arrangement of the expedition specimens may be completed in the space that we now occupy, but the addition of such American and foreign specimens as will gradually collect around this nucleus will finally extend the collection over double the present area.

Very respectfully,

JAMES D. DANA.

NOVEMBER, 1842.

DEPARTMENT OF PHILOLOGY AND ETHNOGRAPHY.

One of the sciences which have of late years attracted an increasing attention, and one which from its subject would seem to claim a peculiar regard, is what may be termed the natural history of the human race, or as some have named it, anthropology. It divides itself naturally into various branches, possessing distinct names of interest, and requiring different methods of study. One of them, and that perhaps to which the Institute will be able to contribute most largely, treats of the manners and customs of the various nations and tribes of mankind, as indicating the character and the grade of civilization which is to be ascribed to them. Travelers in Egypt inform us that, from the representations of objects and views pictured on the monuments of that country, one may obtain a clear and probably accurate idea of the mode of life of the ancient inhabitants and can there form a better conception of their national characteristics than from all the works of historians. The natives of most countries, particularly those less advanced in civilization, possess no monuments of this kind, which may be copied or transported into our midst, like those of Egypt. But one may have the very implements and manufactures which those pictures would represent, the canoe and net of the fisherman, the bow and javelin of the hunter, the spear and club, the helmet and buckler with which the warrior went out to meet his enemy; we may have the clothing, the domestic utensils, the ornaments for the dance—in short, enough to show the state of the arts, the daily habits, and the ideas of comfort and prosperity among particular people. Among the collections of the exploring expedition deposited with the Institute will be found nearly all the articles of native manufacture in use among two tribes of distinct races, the New Hollanders and the Fijians; those of the former number about a dozen, while the latter yield several hundreds. A single glance at the two collections will give a clearer idea of the wide difference existing between these tribes than any description.

In tracing the migrations of a people and the connections of distant branches, the comparison of arts and social habits may, if pursued with caution, be an important guide. A person knowing nothing of our language or history, who should visit the United States, after having traveled in Europe, would have little doubt from which country of the latter our ancestors proceeded. The islands of the Pacific are peopled by two distinct races, the one having a yellowish brown complexion, with flowing hair; the other one a dusky skin, frizzled or woolly hair, and features approaching the African type. There is not in the climate or nature of the islands which they respectively inhabit any reason why their habits and mental characteristics should differ. Yet we find that the art of pottery and the use of the bow are common to all the islanders of the latter or dark-skinned race, without exception, while they are entirely unknown to the former, except where they have been acquired in late times from the other. We must, therefore, presume that these arts were brought by the dusky tribes who possess them from the original seat whence they

have emigrated. These observations will show that the articles of this description preserved by the Institute are not to be regarded merely as amusing toys or as objects of idle curiosity, but possess an important scientific value.

Another department of this study relates to the physical varieties of the human race. In stature, in complexion, in the nature of the hair and the shape of the cranium the differences that prevail between various tribes are very striking. Some have supposed it possible to classify all these varieties under these principal divisions or races, while others have believed them to be so numerous and to fade into one another by such insensible gradations as to set all classifications at defiance. Still there can be no doubt that every distinct people possesses a peculiar cast of countenance and style of complexion and feature, what is commonly called a national physiognomy, and that separate tribes and nations, descended from the same stock, preserve in their physical characteristics the traces of their common origin.

Knowing, as we do, that the influence of climate and manner of life is powerful in modifying the constitution and personal appearance of those subjected to it, a question of the highest importance arises as to the extent to which this modifying power may be effected. Some have supposed that all the peculiarities which distinguish the varieties of mankind have had their origin in this influence of climate and social habits, while others have considered the power much more limited, and maintain that these peculiarities have existed unchanged as they were originally stamped on the progenitors of the different races. These opposite views are supported at the present day by writers of the highest authority, and as the question is evidently one to be settled not by reasoning so much as by observation, every fact bearing on this point merits to be recorded. The Institute possesses a small collection of crania, obtained by the exploring expedition, which will afford some useful results, and the series of Indian portraits due to the War Department may be considered, in this report, invaluable.

A division of this study is comparative philology in the science of languages. Speech has been called the first and highest development of human reason; it is also the clue by which we trace more evenly than by any other means the affiliation of tribes and the relationship which exists between different nations. By the comparison of languages we can prove that nearly all the nations of Europe—whether of Celtic or Latin or German or Slavonic origin—are not only closely allied one to another, but belong to the same stock with the inhabitants of Persia and Hindustan. By the same means we ascertain that a race of Malay origin has peopled all the islands of Polynesia. Modern philologists have discovered that the natives of America, from the Arctic Sea to Cape Horn, speak languages which, though dissimilar in words, possess a striking grammatical resemblance—like different metals cast in the same mold.

In the pursuit of this interesting study, the importance of obtaining vocabularies of the languages spoken by secluded or newly discovered tribes is easily seen. Manuscript works in language of which little is known, are also of great value for the investigation of their grammatical structures, and the collection of East Indian manuscripts brought home by the exploring expedition may be signaled as possessing unusual interest. The Institute is not less indebted to Mr. Stevens for the monumental slabs from Central America, covered with those remarkable hieroglyphes, which are now awaiting the appearance of some new Champollion to unfold their mysterious purport.

In search of these departments of ethnographical science, all persons whose pursuits bring them in contact with many varieties of one kind, and in particular the officers of the Navy of foreign stations, have an opportunity by obtaining and transmitting articles of native workmanship—crania or mummies of particular tribes, and vocabularies or manuscript of languages little known—to add materials to the general stock, which may hereafter be of invaluable service to the scientific investigator.

H. HALE.

OUTLINES OF THE ETHNOGRAPHICAL COLLECTIONS, CHIEFLY
FROM THE EXPLORING EXPEDITION.

NEW HOLLAND.

Buckles, or small narrow shields.
Boomerangs, the singular missile, often described.
Waddies or clubs.
The throwing-stick, adjutant for throwing javelins.
Beads or wampum, made of the stem of a grass, etc.

FEEJEE ISLANDS.

War clubs of various patterns, and the small war clubs used as a missile.
Bows and arrows, slings.
Spears, both for war and fishing.
Wooden idols, oracles, headdress of priest, sacred cava cup, etc.
Wigs, combs, turbans, etc.
Pateras or cava bowls, dishes, etc.
Matting, and baskets of various patterns.
Pottery—water vessels and for cooking.
Musical instruments, consisting of Pandean pipes, nose flutes, war conch, and drum.
Mosquito nets, fans, fly brushes, wooden pillows.
Stone adzes.
Fishing nets and lines, cordage, etc.
Dresses for females, of various, and some brilliant colors.
Armlets and necklaces in great variety, neck ornaments, head bands.
Tapa, or cloth, also of great variety of patterns in the stained figures.

SAMOA ISLANDS AND TONJATABU.

These islands, in common with the other Polynesians, have evidently derived their arts mostly from the Feejees. Their implements as we recede become less numerous, with often much diversity in the model. I note only:

Arrows for catching pigeons, of the Samoa Islands.
Models of the single canoe.
Models, large, double Tonja canoe, used for distant sea voyages.
Rasps of shark's skin, for working wood, common to many Polynesian islands.

TAHITI.

We obtained very few things at Tahiti, where native implements are becoming rare. We saw no weapons of the original stamps.

SANDWICH ISLANDS.

The same remarks apply in a good measure to this group. Native ingenuity disappears when brought in contact with civilized man—and with a knowledge of money, the bark-beaten cloth of the South Seas gives place to calico at 10 cents a yard. We obtain here, however, more extensive collections. I mention only—

The large calabashes, used as baskets to carry burdens, and found so convenient by all travelers.

Tapa, in imitation of European patterns.

Models of canoe.

Feather ornaments—the yellow is the favorite color here.

MARQUESAS ISLANDS.

Specimens of the ingenious carving of these islanders, procured many years ago, were presented by Mr. Demester.

LOW OR POMOTEE ARCHIPELAGO.

These lonely coral reefs present attractions only for this amphibious race of people. Implements of the same pattern with other Polynesian, but much ruder. There is no longer any stone for hatchets, and a piece of shell is substituted, while a crooked root serves for a handle. There is no bark suitable for making cloth or tapa, and their clothing consists exclusively of matting.

PENRHYN'S ISLAND.

The same remarks will apply to Penrhyn's Island, with its wild and impetuous inhabitants, but being covered with cocoanut trees, it is much more populous, and the implements obtained show neater workmanship.

NEW ZEALAND.

Still Polynesian, but much variation in the style of their manufactures and ornamental carving. Their cloaks, made of New Zealand flax, a beautiful article.

Neck ornaments of green-colored stone or jade. The thin, slender club, or wooden sword (used with both hands), almost their only weapon prior to the introduction of firearms, etc.

KINGSMILL ISLANDS.

A remarkable change in most things from the Polynesians. Long, pronged spears set with shark's teeth; as likewise swords of different lengths. Woven coats of mail and cuirasses for protection. A porcupine fish for a cap. Natural fishhooks of crooked roots, etc. A very large and interesting collection of the implements of these coral islands was lost in the *Peacock*.

EAST INDIES.

Models of Malay proas.

Krisses or seymetars, spears and shield, battle-axes, musical instruments.

TERRA DEL FUEGO.

The collection is nearly complete, though the articles are so few in number.

Bows and arrows, the latter singularly enough the most beautiful we have met with—flint head.

Bone-headed fish-spears, likewise bearing a stony analogy to those of our Northern Indians.

Seal-skin quivers, slings, paddles, and necklaces.

PERU.

Our collection of antiquities is quite respectable; pottery, cloth, nets, plastering, etc., from the ancient graves. I must also particularize the headdress of "the last of the Incas," presented by Mr. Sweetzer.

OREGON AND NORTHWESTERN COAST.

Our collections here were full.

Paddles, models of canoes, etc., some of former ornamented with different colors.

Carved combs, the conical, woven, and painted hat (the same pattern is used throughout East India).

Bows and arrows, the heads of bone, flint, and now iron almost their only weapon, except now knives.

Various grotesque wooden masks.

Dice, made of beaver's teeth, wooden decoy-duck.

Model of cradle showing the mode of flattening the cranium, for which the Che-nooks are so famous.

Model of fastening child to a board and carrying on horseback.

Pipes of wood and bone, imitating steamboat, houses, and other fashions of civilization.

Stone pipes, representing grotesque figures of original pattern.

Carved stone saucers, some well worthy the attention of those who think genins only the offspring of civilization.

Ornaments of dentalium shells; snow-shoes.

Blankets and belts, of native weaving.

Feather blankets.

Cloaks of vegetable fiber; much after the New Zealand pattern.

Leather or buckskin dresses, moccasins, belts, etc.

Beautiful membrane cloaks, and baidare (covered skin canoes) of farther North.

CALIFORNIA.

A race of different origin is seen in the different style of manufactures, ornaments, and woven baskets for carrying water and cooking; others richly ornamented with feathers, plumes, ear ornaments, bead work.

Bows and arrows of the usual American pattern; war spears headed with bone.

Feather dress for a sort of priest or devil.

The arrow-proof cuirass and hemispherical cap of the Shasty Indians.

C. PICKERING.

NOVEMBER, 1842.

REPORT UPON THE DRAWINGS MADE BY MESSRS. DRAYTON AND AGATE.

Through the labors of the artists, Messrs. Drayton and Agate, in connection with the literary and scientific duties of the other officers, the journals of the expedition are of two kinds—the written and the pictorial, and although the former is necessarily the more complete, yet the latter in consequence of the industry of those gentlemen and the large number and faithfulness of the sketches made, would of itself give a very thorough account of the islands and races we have seen; and in many respects far more detailed and satisfactory than is possible with the pen. The scenery of the islands, their mountains and forests, their villages, with interior and exterior views of the huts or houses of both chiefs and common people, spirit houses or temples, war implements, fortifications, household utensils, tools, canoes, the natives sitting in council, dressed and painted for war, the domestic scenes of the village, costumes, tattooing, modes of cooking, eating, drinking cava, taking and curing fish, swimming, gambling and other amusements, war dances, club dances, jugglery, and numerous other particulars illustrating the modes of life, habits, and customs of the various tribes inhabiting the islands or countries visited, have been sketched with fidelity. Indeed nothing escaped their pencil when time was allowed, and the series of sketches when finished—for many were necessarily left in outline—will be more instructive and interesting than the highest literary abilities could render the journal of the voyage. One picture by Mr. Agate, representing a temple on a newly discovered island, and the cocoanut grove about it, containing one ride, three or four naked savages starting in affright from an officer that is just beginning to puff a cigar, and is pouring the volumes of smoke from his mouth, the impression of such a scene can not be conveyed in words, nor the idea it gives of the ignorance and superstition of the savage. The portraits are numerous, and are not merely

general sketches, but accurate likenesses of particular individuals—so faithful, indeed, although but the work of a few minutes in the hands of our skilful artists, that the natives would cry out with surprise the name of the individual when a sketch was shown them.

Besides historical and ethnographical drawings, the sketches of objects in natural history are very numerous; and they embrace all departments of natural science, including some geological sketches. The variety and beauty of marine animals in the coral seas of the Pacific are beyond description. Like birds in our forests, fish of rich colors and strange forms sport among the coral groves; and various mollusca—animals low in the scale of organization—cover the bottom with living flowers. A new world of beings is here opened to an inhabitant of our cold climate, and many of these productions are so unlike the ordinary forms of life that, but for our eyes, we could scarcely believe in their existence. Many of them are among the most brilliant and beautiful objects drawn and colored by Mr. Drayton. Among the geological sketches by Mr. Drayton the representations of the great crater of Lua Pele, especially the night scenes of its boiling lakes of lava, are highly valuable. There is probably no volcano in the world where the processes of volcanic actions are more laid open to view, and on this account these sketches are very unlike the ordinary pictures of a burning mountain, and far more interesting to the geologists. Scarcely less interesting than these volcanic scenes are the views taken among the Andes of Peru and Chili.

The following list gives more particularly the number of drawings in the several departments. The whole number of distinct objects or scenes delineated is 2,100. Of these 200 are portraits, 180 plants, 75 reptiles, 260 fish, 850 mollusca, and over 500 landscapes and historical sketches. The drawings of crustacea, corals, birds, and quadrupeds were mostly by the naturalists in charge of these departments, and are not here enumerated.

The sketches, to which we have referred, have been made in the following different regions, and they have been the more or less complete according to the length of time spent at these places. It should be observed that the several groups of islands in the Pacific, although not far distant from one another, have each marked peculiarities in the physiognomy, dress, domestic manners, etc., of their inhabitants.

(1) Madeira, (2) Cape Verde, (3) Rio de Janeiro, (4) Rio Negro, Patagonia, (5) Terra del Fuego, (6) Chile, (7) Peru, (8) several islands of the Low Archipelago, (9) Society Islands, (10) Navigator Islands, (11) New Zealand, (12) New Holland, (13) Tonga Tabu, (14) Fiji Islands, (15) Kingsmill Islands, (16) Sandwich Islands, (17) Oregon Territory, (18) Philippine Islands, (19) Sooloo Sea, (20) Singapore, (21) Cape Town, (22) St. Helena—besides some small scattered islands in the Pacific unnoticed in this enumeration. Of these places, the pictorial account of the Fiji and Sandwich Islands and Oregon Territory is the most full.

The drawings, as has been remarked, are not finished. To complete them on the spot would have been impracticable where so many things equally important were demanding immediate attention, and had it been attempted the sketches could not have exceeded one-fourth their present number. They are so far complete, however, that they might in a short time be finished up by the artists.

In addition to sketching, Mr. Drayton has written down the music of the natives at many of the islands, and the note or tones which the different nations employ in speaking.

On nearing land the artists were besides employed in drawing headlands, and of them there are nearly 500 in addition to the other sketches.

DRIED PREPARATIONS IN NATIONAL INSTITUTE—NOVEMBER 18, 1842.

Catalogue, showing the number of birds, quadrupeds, reptiles, fishes, etc.—Prepared in the rooms of the National Institute.

	Speci- mens.	
Birds from the exploring expedition	471	
Birds from South America and other foreign parts.....	86	
Birds presented by the Jardin du Roi, Paris.....	87	
Birds of North America	276	
	—	920
Quadrupeds from the exploring expedition.....	26	
Quadrupeds from United States and other parts.....	49	
	—	75
Reptiles from the exploring expedition, etc.....	66	
Fishes from the exploring expedition, etc.....	48	
	—	114
		1, 109

There remain probably three hundred bird skins to be set up, brought by the exploring expedition; and about twenty quadrupeds, some of large size. This is exclusive of an immense number of duplicate specimens.

C. P.

NOTE C.

REMARKS SUBMITTED TO THE HON. MR. WALKER BY MR. MARKOE AND COL. ABERT.

In conformity with the desire you expressed that we should put on paper the substance of our conversation with you on certain matters connected with the Institute, we submit the following to your consideration:

There are several points which, to our experience and reflections, are essential to the prosperity of the Institute and to the great objects for which it was chartered. These are:

(1) That the Institute should be the organ of the Government in the arrangement and preservation of the collections and in the supervision of the appropriations which the Government may make for those purposes.

(2) That the Institute should have the power of disposing of all duplicates by a system of exchanges with other institutes, or with States, or with individuals.

As all the Government collections are placed under the care of the Institute and as all the collections which have been made, or will hereafter be made, by the Institute, must, by its charter, eventually become the property of the Government, the necessity of a harmonious and intimate intercourse between the Institute and the Government seems, to our judgment, self-evident. This idea is clearly maintained in the charter of the Institute, which makes the six heads of the different Government Departments six of its directors.

But the nominal charge which the Institute now has of the collections amounts to nothing, and the same may be said of the very slight and extremely indirect influence which it has been allowed to exercise over the Government expenditures for the preservation and arrangement of the collections. At present there are three controlling or operating powers over these subjects: First, the Library Committee of Congress; second, the Navy Department; and third, the Institute. But this last, its influence is so slight, if it can be said to have any, that it would be too much to say it is either felt or acknowledged. Such a divided state of control can

not fail to operate injuriously upon persons employed and upon their duties, as it is difficult to say who is their head, who shall direct or superintend their operations, or who shall decide upon the propriety of expenditures, and to whom they are accountable.

It is clear, to our judgment, that the desired and necessary control can not well be exercised by the Library Committee. This committee can not be considered as present, upon an average, for more than six months of each year; and when present the legislative functions of its members must occupy each greater part of their time and minds.* It is equally clear that these powers can not be well exercised by the Navy Department. In addition to its other various and highly important duties, there is no kindred occupation in any of its interesting functions which would give to it the means of judging of the proper occupation of the persons employed upon the collections, or of the propriety or appropriateness of any expenditure which may be made; nor can it devote the time requisite to superintend either occupations or expenditures. Under such circumstances surprise should not be created if disappointment were to be experienced in reference to anticipated results from Government patronage. The Institute, as before remarked, possessing neither influence nor authority, can exercise no control; and although it may, as a consequence, be free from responsibility, it can not, in our opinion, be exempt from serious anxieties, nor from that moral responsibility which the country already attaches to it from its charter and from a general impression of the power it is supposed to possess. And yet it seems to us that the Institute is the most suitable agent for such purposes. It is always present; the very intuition of its organization was to promote matters of science, to arrange and preserve specimens of natural history, and to advise on subjects connected therewith. It ought to be supposed that the Institute possesses among its members competent knowledge for such duties and that it has all the devotion and zeal and exclusiveness of feeling which the well-being of matters of science requires. During the period when the Institute exercised more influence than now its vigilant vice-president was daily in his rooms, and for hours, advising and directing, to the great benefit of its management and to the prevention of many an injudicious expenditure.

In addition to these considerations, the organization of the Institute renders it peculiarly deserving of the confidence of Government, as it can offer, as an agent for Government property and Government expenditures, a board of its own officers.

The officers of the Institute consist of a president, vice-president, two secretaries, one treasurer, and twelve directors. Six of these twelve directors are the heads of Government Departments, namely, the Secretary of State, the Secretary of the Treasury, the Secretary of War, the Secretary of the Navy, the Attorney-General, and the Postmaster-General. These are directors *ex officio*, and constitute the Departments through which all Government expenditures are made. Six others are elected by the Institute from among its members. These six at present are the honorable Mr. Woodbury, the honorable Mr. Preston, Mr. Dayton, Fourth Auditor, Commodore Warrinton, of the Navy, Col. Totten, of the Corps of Engineers, and Col. Abert, of the Corps of Topographical Engineers.†

These are the whole of those who are recognized by the charter as "officers of the Institute," and constitute by the charter "a board of management for the fiscal concerns of the Institute."

* This committee also expires on the 4th of every other March, and in consequence it can exercise no control, either directly or indirectly, until after the election of a new committee at the ensuing December session of Congress.

† Since this paper was written a new election of directors has taken place, namely, on the 25th January, 1843, when the honorable Mr. Walker was chosen in the place of the honorable Mr. Preston, who could no longer attend, and Commodore Maury, of the Navy, was chosen in the place of Commodore Warrinton, who was unwilling to serve.

The whole board consists of seventeen, five of which are the officers named, six are the heads of the Government Departments, *ex-officio* directors, and six are elected annually from the body of members. Now, as it is hardly within the verge of possibility, that the offices of president, vice-president, secretaries, and treasurer of the Institute will be filled by any other men of known fitness and good character, so is it impossible that eleven (adding the six *ex-officio* directors), a majority of the board, can fail to deserve the fullest confidence of the Government. Then if we look to the six elected directors and reflect for a moment upon the palpable and decided interests of the Institute and upon the vocations of its members, it is a probability so remote that it may be considered an impossibility that a great majority of this board of managers can ever be other than persons deserving of confidence, holding important public places and in the employ of the Government.

Now, then, if the Government were to place the control of its collections and of the appropriations for arranging and preserving them under this board of management it would be placing its property and funds where all its other property and funds are placed, namely, under its own officers and under accustomed and long established responsibilities. But these officers are also officers of the Institute; therefore to place this property under that board would also be to place it under the Institute.

Upon this plan the Institute would be made to fulfill the objects of its organization, the most appropriate organ would be selected by the Government, and the Government would, in the persons of its own officers, retain its just control over its own property.

If it should be said that this board of management can be controlled by directors of the Institute, the answer is easy. It would be worse than idle for the Institute to come in conflict with the Government or hazard a loss of its confidence, and it is not fair to suppose, against all experience, that the small portion of common sense necessary to avoid such a consequence would not be possessed by the Institute or that it would be unmindful of its own palpable interests.

Moreover, if this board of management should be required to lay a statement of its proceedings annually before Congress, it would be held to the established responsibility of the different Government Departments, and be subject, like them, to have its course and conduct investigated and corrected.

Such a plan would also preserve that union between the Government and the Institute collections so desirable and so essential to the prosperity of both.

It has been intimated to us that there was a desire to separate these and to form a distinction between the exploring squadron and the Institute collections. A course more fatal to the prosperity of both collections and to the great objects for which the Institute was chartered could not well have been imagined.

All the collections in the care of the Institute, from whatever sources received, are either now the property of the Government or must by our charter eventually become so. They are the results of various donations from foreign ministers and consuls abroad; from foreign institutions and foreign governments; donations from domestic institutions and from citizens of our own country; donations from officers of our Army and Navy, the results of the official circulars from the War and Navy Departments; and deposits from individuals and from the different departments at Washington. Let the opinion once get abroad that contributions from the various sources are not to receive from the protecting hand of the Government that attention which their preservation and arrangement require; let it once be supposed that all these are to be neglected and those only of the exploring squadron to be cared for, and the consequence will soon be felt by the degenerating of the collection from a great and increasing storehouse of all that our own and other countries can furnish to that of a small museum, forever limited to the results of the exploring expedition.

Far be it from our intention, by these remarks, to undervalue the collection from

the squadron. We are too sensible of its excellence and too conscious of the aid it has been to the Institute to entertain any such idea, and we fully and most highly appreciate the intelligent labor and industry of its collectors. But its specimens neither exhaust our admiration or our wants, nor render us insensible to the highly valuable and continually increasing supplies from other sources, nor relieve us from the conviction that upon other sources we must principally rely, if our desire be to extend the collection to a point worthy of the national character or of comparison with similar institutions in other countries.

In justice to the Institute it should also be borne in mind that, but for its efforts, these very specimens from the exploring squadron would have been scattered, we know not where; and but for those efforts the scientific describer might have searched in vain for a specimen upon which to found a description or to prove a discovery. It is to the Institute, chiefly, that those who gathered these specimens are indebted for the present collected results of their great industry and intelligence.

Second. The next matter which we desire to bring to your notice is the right of disposing of duplicate specimens. Our efforts to exchange have been paralyzed for the want of this right. The institute is now seriously indebted to foreign governments, to foreign and domestic institutions, and to individuals, on the principle of exchanges, because the Institute has not the right to dispose of specimens, although its cases are loaded with duplicates. The collections of the Government being placed in the Institute on deposit, the committee upon exchanges have not felt themselves at liberty to use a specimen. We have heard, with extreme regret, that it is contemplated to give all duplicates back to the collectors. Such a course, in our opinion, would be ruinous in the extreme, as it would destroy one of the great means of increasing the collection by a system of exchanges. And as these collectors were amply paid for their labors, we can see no reason for such a course in justice or equity. Nor can we believe that such a course is desired by the scientific corps of the expedition, for, while other men of science are daily making collections, at their own expense, and sending them to the Institute, many as presents, some in expectation of exchanges, it would place the gentlemen of this corps low in the scale of contributors to science if, after having been so long and so liberally paid for their labors, they should yet desire the result of these labors to be given back to them. Moreover, we have understood that by far the greater number of these specimens were actually bought by the collectors from funds furnished by the United States. We can see, therefore, no reason whatever that they should be returned unless the Government is disposed to abandon all idea of forming an enlarged scientific and interesting National Museum.

From our remarks, then, it will appear that, in our judgment, there are serious defects in the present condition of affairs which required to be remedied: one, in the absence of a responsible and adequate supervision of the arrangement and preservation of the collections and of the persons and expenditures in reference thereto; the other, in the absence of authority to dispose of duplicates. These defects can be properly remedied only by legislative provision.

We desire it to be distinctly understood that our reasoning has no reference to the publication of the results of the voyage, but is limited solely to the preservation, arrangement, and exhibition of the collections. We think, however, that the Institute might be able also to give acceptable opinions, even in reference to the publication—its form and style of execution. But as there is an anxiety to possess this power by others, and as it is already placed elsewhere, we do not seek to interfere with it, not doubting that in all its parts it will equal similar publications by other governments and justify the anticipations which are now entertained of it by the learned world.

Having thus expressed our general views on these several subjects, we will conclude by an effort to condense them in a manner that will admit of their being incorporated in a law.

This law should, in our opinion, contain provisions investing—

(1) The Board of Managers of the National Institute with the custody of all the Government collections which have been received or which may hereafter be received from the exploring squadron or other sources, with authority to make all necessary arrangements to preserve or exhibit the same, to regulate, under the supervision of the President of the United States, the number and compensations of persons employed on said duties, and to superintend the public disbursements in relation thereto.

(2) To authorize the said board to exchange any of the duplicates of said collections with other institutions, or with State collections, or with individuals, and to require the board annually to lay before the President of the United States, to be by him laid before Congress, a full account of their proceedings under this law.

(3) To direct the said board to furnish to the persons who shall be employed in the writing or publication of the voyage and discoveries of the exploring squadron all desired facilities.

[Copied from original draft of Col. Abert.]

NOTE D.

WASHINGTON, *March 10, 1843.*

HON. ROBERT J. WALKER,

United States Senator:

DEAR SIR: We beg leave to call your attention to Senate Document No. 233, of the 28th ultimo, being a report made by the Hon. Mr. Tappan, as from the joint Committee of Congress on the Library, to which had been referred "A bill for the preservation of the collection of natural curiosities furnished by the exploring squadron, and from other sources," together with "remarks submitted by Mr. Markoe and Col. Abert."

The "remarks" to which the report refers were made, as you will recollect, and, as is distinctly stated in the first paragraph of them, at your request, were intended to satisfy your mind of the propriety of the measure we wished you to befriend, and were addressed to you not only as the well-known friend and advocate of the Institute, but also as the chairman of one of its important committees, and as a director and consequently member of the Board of Management. They passed into the hands of the committee, of which Mr. Tappan is a member, without any desire on our part, and without our knowledge (certainly, however, with no unwillingness that they should be read by the whole world), and, under these circumstances, we respectfully submit to you whether the attack upon us by the honorable Senator has not been as unprovoked as a reference to our remarks will prove it to have been unmerited.

We can not suppose, as Mr. Tappan supposes, that you had not read our "Remarks" before you laid them before the Library Committee, therefore take it for granted that you did not perceive the "direct insult" to the committee which is so palpable to Mr. Tappan, or you would not have consented to be the medium through which the insult was conveyed. On the contrary, we have every reason to suppose that you had made yourself perfectly acquainted with the character and scope of "our remarks"—remarks hastily put together, and meant to afford limits and memoranda for your consideration and use, to illustrate the necessity or advantage of the measure recommended. They were certainly not intended or calculated to give offense in any quarter. We will therefore occupy your time by pointing to two paragraphs, only, of the "Report," which we quote in answer to two serious allegations made against us by the honorable Senator. You will judge whether they have any just foundation.

Mr. Tappan says: "The case presents two officers of the Government, one at the

head of a bureau, the other a clerk in one of the public offices, who ask as a matter of right, that they should have the supervision of a very important literary and scientific work, the publication of which Congress has thought proper to entrust to one of its regular committees."

We must deny that any such case is presented, or that it can be inferred from our "remarks." Our "remarks" on this subject were as follows: "We desire it to be distinctly understood that our reasoning has no reference to the publication of the results of the voyage, but is limited solely to the preservation, arrangement, and exhibition of the collections. We think, however, that the Institute might be able to give acceptable opinions even in reference to the publication, its form, and style of execution. But as there is an anxiety to possess this power by others, and as it is already placed elsewhere, we do not seek to interfere with it, not doubting that in all its parts it will equal similar publications of other governments, and justify the anticipations that are now entertained of it by the learned world."

You are well aware that there are appropriations of two distinct characters in respect to the exploring squadron, and the publication of its results (the Hon. Mr. Tappan does not appear to be aware of this, in our judgement, to have kept this distinction in his mind): one for the publication of the history of the voyage, the narrative and scientific descriptions; the other for the preparation, preservation, and exhibition of the collections. It is the latter one that we have ever manifested a desire to see placed under control of the Institute, which it appears to us is a most suitable agent for such purposes, and the more particularly as these collections had been placed by the Executive under its care.

The other allegation against us by Mr. Tappan is, in our opinion, equally incorrect. He says: "But the great point with Messrs. Abert and Markoe seems to be to get hold of the appropriations made by Congress to enable the committee to execute the law."

The law to which Mr. Tappan refers relates to the publication of the proceedings of the expedition; the remarks made by us relate to a system for the preservation and exhibition of the collections.

Our remarks on this head were: "that the Institute should be the organ of the Government in the arrangement and preservation of its collections, and in the supervision of the appropriations which the Government may make for those purposes." We speak of the Institute, of which we are merely members, and of the "Board of Management," of which we are but two out of seventeen. To this "Board of Management" we think the power appropriately belongs, and in its hands we hope yet to see placed the management of whatever relates to the arrangement, preservation, and exhibition of the collections. It is clear to us that no better arrangement could be made with the superintendence of the publication and in the appropriation which belongs to it (duties assigned to the Exp'l. Exp'm Committee by law) we have not expressed a desire to interfere, and forbear, as we have forbore, to make any remarks upon them—except to express the hope that the wishes and opinions of the naturalists themselves will be consulted and their opinions be allowed a proper weight.

Our "remarks" in continuation of the above quotation were: "The organization of the Institute renders it peculiarly deserving of the confidence of the Government, as it can offer as an agent for Government property and Government expenditures a board of its own officers."

"The officers of the Institute consist of a president, vice-president, two secretaries, one treasurer, and twelve directors—six of these twelve directors are the heads of the Government Departments, namely, the Secretary of State, the Secretary of the Treasury, the Secretary of War, the Secretary of the Navy, the Attorney-General, and the Postmaster-General. These are directors, *ex officio*, and constitute the Departments through which all Government expenditures are made. Six others are elected by the Institute, from amongst its members. These six at present are

the Hon. Mr Woodbury, the Hon. Mr. Preston, Mr. Dayton, Fourth Auditor, Commodore Warrington, Col. Totten, of the Corps of Engineers, and Col. Abert, of the Corps of Topographical Engineers."

"These are the whole of those who are recognized by the charter as 'officers of the Institute,' and constitute by the charter, 'A Board of Management of the fiscal concerns of the Institute.'"

The quotations speak for themselves, and we will trouble you with but few more remarks. Mr. Tappan, in the beginning of his report, most truly says that, "The remarks of Messrs. Markoe and Abert are not to be considered as the act of the National Institute." The "remarks" neither purport nor pretend to be the act of the Institute. And moreover we beg leave further to say that neither are Messrs. Abert and Markoe the "Board of Management for the fiscal concerns of the Institute" under the supervision of which they suggested the expediency of placing the appropriations which Government might make for the arrangement and preservation of its collections.

It also seems to have given offense to the honorable gentlemen, that we should have proposed in our remarks "to furnish to the persons who shall be employed in the writing or publication of the voyage and discoveries of the exploring squadron all desired facilities." We really are at a loss to perceive the offensive matter in this sentence. It has no allusion to the Library Committee, for they were neither to write nor to publish. The law invested them with power to enter into contract for the publication and each member of the scientific corps of the squadron would, we presume, be required to furnish the narrative of his observations. The persons therefore employed in the "writing or publication of the voyage" were these scientific men and the contractors. If furnished with all desired facilities it would be all they ought to have, all they could want, and if furnished by the Institute there would be some agent responsible for the specimens and interested in seeing that they were returned after being taken out of the building by either the describer, the engraver, or the publisher. The Library Committee expired on the 4th of March, and there will be no committee until after a new election of the next Congress. We believe the committee can not appoint an agent to have a longer existence than itself; hence appeared in our judgment the propriety that the Institute should be invested with the care of the collection.

Had the honorable Senator published our "remarks" with his "report," as was due in all fairness, this letter would have been unnecessary, for the "remarks" contain in our opinion ample refutation of the errors of the "report." We deem it wholly unnecessary, also, to point out to you other inconsistencies and mistakes into which the honorable Senator has fallen, and which have been, on his motion, published in his report to the Senate.

We rather limit ourselves, in conclusion, to soliciting your advice as to the best mode of correcting the erroneous impressions which the language of the Senator is calculated to make upon the public.

We remain, dear sir, with great esteem and respect, your most obedient servants.

LETTER FROM THE HON. MR. PRESTON TO COL. ABERT AND MR. MARKOE.

COLUMBIA, S. C., *April, 1843.*

MY DEAR SIR: Having had ample occasion to witness the devotion which you and Col. Abert have manifested to the National Institute, you may imagine the surprise and mortification with which I have seen the total misconception of your motives and conduct in regard to it in Mr. Tappan's report to the Senate. To the unwearied and enthusiastic exertions of yourselves and a few other gentlemen, animated, as it seemed to me, by nothing but a pure love of science, that institution was mainly indebted for its origin and the eminent success which has attended it from the be-

ginning. I can say with entire certainty that my own interest in it was stimulated and sustained by you, and that I was continually made ashamed of how little I felt and how little I did when I saw the unabated zeal and unrecompensed labor which you bestowed upon it. While I wished well to the Institute from a conviction that it would promote the advancement of science, you and he particularly devoted yourselves to it with that deep enthusiasm which a more intimate knowledge can alone excite, and upon which all scientific projects must depend for their success. Men in public station or the munificent rich may contribute the means, but the vital principle of all such institutions is found in the hearts of those who are willing to work night and day, and whose labor is a labor of love. I was deeply impressed that the Institute had found in you and Col. Abert precisely such agents, and my high hopes of its ultimate success arose from the fact that it had found such. I by no means mean to say that there are not associated with you other gentlemen equally impelled by as earnest and disinterested motives, but this I will say, that a vast deal of the labor was thrown upon you two, and that, to my mind, the discretion and wisdom of the Institute was evinced in the selection of such agents. I speak of Col. Abert and yourself especially because you and he are made the subject of a most unmerited attack.

It is with great pleasure that I bear this testimony in your behalf. If I had been in the Senate when the report was made I think I would have been able to satisfy Mr. Tappan of the mistake into which he had fallen, but at all events I would have put upon record my opinion of the purity of purpose and the wisdom of the plans which have characterized the conduct of Col. Abert and yourself throughout.

I am entirely satisfied that if the Government collection derived from the exploring expedition, or from any other source, be not to a great extent subject to the control of a scientific association, or of men animated by a philosophic spirit, which spirit alone brings them to the task, it will not increase and will be dilapidated. Our Government is peculiarly incapable of a proper superintendence of scientific institutes. In the first place it may be said that it has no constitutional power, and if it had, the tenure of office is so liable to change, that in a department so removed from interests of intense excitement, negligence and decay would soon creep in. It therefore seems to me from the beginning that accessions to science, incidentally made, like the collections of the exploring expedition, should be deposited for arrangement, preservation, and exhibition with such a society as the National Institute, the Government retaining the property while the Institute has the use of it, or rather while the Institution makes it useful to the public. Without some such arrangement the Government will find that its valuable specimens will be lost or molder away in forgotten boxes, or become a mere mass of rubbish.

I am persuaded that Mr. Tappan, upon such explanations as you and other gentlemen in Washington can give him, will perceive the injustice of his remarks. He has an earnest love of science and literal learning of all sorts, and without some obvious misconception cannot fail to sympathize and cooperate with gentlemen who with such singleness of purpose and such broad intelligence as yourself and others of our friends of the Institute have at heart the same objects with himself.

I am, my dear sir, your obedient servant,

WM. C. PRESTON.

FRANCES MARKOE, jr., esq.

SPRINGWELLS (NEAR DETROIT), *May 18, 1843.*

COL. J. J. ABERT:

DEAR SIR: I have read with much interest, but not without some pain, the pamphlet you had the goodness to send me. I regret that anything should have occurred unpleasant to you, and especially in any matter in which the Library Committee should have participated. I do not remember the day when "the remarks" of yourself and Mr. Markoe were submitted in the Senate by Mr. Walker and referred; but my impression is that by reason of accident or delay in some of the officers of the

Senate they did not reach the committee until more than a week after they were referred; and when taken up in committee the session had approached very nearly its termination. I do not remember whether when so taken up they were read *in extenso*; but the "bill" which accompanied them was read and its principle discussed. The committee was, I believe, unanimous in its opinion that it was not expedient to pass the bill; if at any time, certainly not until the Library Committee should have fully executed and terminated the trust committed to it by law. Very much inconvenience and embarrassment had already grown out of a conflict of an alleged power of control and direction, especially in relation to the "specimens of natural history," etc., collected, and in respect to which it has been made the duty of the Library Committee to cause to be prepared the appropriate publications.

Great responsibility must grow out of the execution of those powers, for a wide discretion must of necessity be exercised. Without expressing any opinion as to what disposition should finally—and after the powers of the committee in the matter shall have ceased—be made of those rare, rich, and beautiful materials, it remained the undivided opinion of the members of the committee, I believe, that while those powers and correlative duties existed it was necessary that those materials should continue in the entire control of the committee.

This conclusion being come to, the whole subject of the bill, "remarks," etc., was committed to Mr. Tappan, as a subcommittee, with directions to prepare and make report accordingly.

After this last measure was adopted in committee, I believe the committee did not meet again; but it was certainly understood that Mr. Tappan should report to the Senate this result.

Without respect to the doubt which had been raised as to whether all the powers of the Library Committee continued after the 3d of March, I hazard nothing, I believe, in saying that in analogy to the case of certain officers of Congress, those powers were believed by the committee (on which, as you are aware, there were some professional gentlemen of very high standing) to continue during the recess, and it was in corroboration of that opinion asserted that always since the foundation of the Government the same construction had been put upon the Constitution and the powers of Congress. In conformity with that view, I have been required, as chairman of the joint committee, to draw, in the name of that committee, upon the funds subject to its order for sums of money for books, salaries, compensations, etc., since the close of its last session. How else could the law be executed or justice be done?

I trouble you with this long detail, my dear sir, because of the personal esteem and respect which, I beg leave to say, I entertain for you individually, and because I very sincerely regret that anything should have occurred in this matter tending to wound your feelings or to give you pain.

As chairman of that most highly respected committee whose proceedings have been the subject of comment, it may perhaps be esteemed indelicate in me to have made this exposition without its previous sanction. Please, therefore, consider this letter as intended for yourself alone.

I remain, with sincere respect, yours,

WM. WOODBRIDGE.

NOTE E.

JANUARY 21, 1845.

SIR: I have the honor of transmitting to you the memorial of the National Institute, drawn up in pursuance of a resolution of the Institute of the 10th of December. And in further obedience to the resolution, I have to request that you will do the Institute the favor of presenting the memorial to the consideration of the Senate and House of Representatives.

The papers herewith, and which constitute the memorial are:

- (1) The memorial as directed by the resolution.

- (2) The resolution under which the committee acted.
 (3) The memorial of the scientific men at their meeting in Washington during last April.
 (4) The memorial of the Institute of March, 1844.

J. J. ABERT,

Hon. MR. WOODBRIDGE,
United States Senate.

Hon. J. Q. ADAMS,
House of Representatives.

I.

MEMORIAL OF THE NATIONAL INSTITUTE.

To the honorable, the Senate and House of Representatives of the United States of America in Congress assembled:

The undersigned, a committee appointed for the purpose of preparing a memorial on behalf of the National Institute, to be accompanied by copies of memorials which were presented to your honorable body during the last session, beg leave to submit to your consideration the annexed copies of said memorials and to invoke the friendly views of your honorable body, to the prayer therein contained.

An examination of the character of the by-laws and of the proceedings of the National Institute will show that among the principal objects of its organization are those of forming, at the seat of the General Government an extensive museum of the natural history of our country in all branches, and affording every possible facility for the development of mind in its devotion to the sciences and the useful arts. But the experience of a few years of our existence has satisfied the Institute that individual means are inadequate to meet the expenses involved in the exhibition and preservation of its already extensive and continually increasing collection and for paying the transportation charges of valuable donations daily arriving from all parts of the world.

These collections, valuable and extensive as they are, have been obtained comparatively without cost, and will evidently go without cost to the United States, as by the conditions of our charter the Institute, in reference to all its collections, is in reality a trustee for the United States.

Its position and national character have enlisted the most enthusiastic feeling in its favor from the institutions and the enlightened men of all countries, evinced and daily evincing itself, by presents of the most valuable literary works, and by donations of specimens of natural history and the fine arts. It is to preserve and exhibit these and to pay for their transportation, which exceed our ability and for which, on behalf of the National Institute, we solicit the aid of your honorable body on the grounds of our position in the District of Columbia, of the national character of our organization and action, and the consideration that all the property and collections of the Institute must by our charter eventually become the property and collections of the Government.

The Institute will readily acquiesce in any restrictions and safeguard with which your honorable body think proper to protect any aid that may be granted, only begging leave to call the attention of your honorable body to the safeguard already established in our charter, which makes the six heads of the principal departments of the Government directors of the *ex-officio* board of managers of the Institute.

J. J. ABERT, *Chairman,*

I. L. SULLIVAN,

T. SEWALL, M. D.,

M. THOMAS, M. D.,

W. W. LEATON,

I. C. BENET,

Committee.

II.

At a meeting of the National Institute, held December 9, 1844, the corresponding secretary (Mr. Markoe) offered the following resolution, which was, on motion, unanimously adopted:

“Resolved, That a committee of six persons be appointed by the chair to prepare a memorial to Congress in behalf of the National Institute, to be accompanied by a copy of the memorials which were presented at the last session; and that the committee request the Hon. Levi Woodbury to present it to the Senate, and the Hon. John Quincy Adams to present it to the House of Representatives, at the present session.”

Whereupon, the chair appointed the following gentlemen to constitute the committee: Col. J. J. Abert, John T. Sullivan, Dr. Sewall, Dr. Thomas, Messrs. Seaton, and J. C. Brent.

[Proc. Nat. Inst., 1, 374.]

III.

MEMORIAL OF THE FRIENDS OF SCIENCE WHO ATTENDED THE APRIL MEETING OF THE NATIONAL INSTITUTE.

To the Congress of the United States—The respectful memorial of the friends of science, assembled at the City of Washington, from various parts of the Union.

The undersigned have come together at the capital of the United States, at the call of the National Institute for the Promotion of Science, with the purpose of communicating to each other the facts and reasonings in science which each one's research might have suggested, and of interchanging views and opinions in regard to the progress of science in our country.

While engrossed in this delightful and most profitable communion, we have had an opportunity to observe the results of the efforts made by the members of the National Institute for the advancement of science. Founded only four years since, they have already brought together valuable collections in natural history and in the arts. Connecting themselves with the Government, through the heads of departments, who, by virtue of their offices, are directors of the Institute, they have voluntarily imposed restraints upon the operations of the Institute, which will preserve its national character, and prevent its being tributary to any local or sectional purpose. By making the Institute merely a trustee for the United States of the property which it possesses, and may hereafter acquire, they have proved that no sordid or interested views guided them in framing their constitution. The zeal and industry shown in making collections, the disinterestedness in the disposition of them, would seem to deserve from the Government of the Republic approval and encouragement. The value of the property already collected, although the existence of the Institute has been so short, is very great. And yet it has no building for the convenient exhibition of its treasures, or even for their safe keeping. And if articles of so much interest and value have already been collected, what may not be expected from the Army, the Navy, and friends of science generally, in the long reach of years to come, if a suitable place can be provided for their preservation and exhibition. But how are the means of providing such a building to be obtained? If attained at all for such a purpose by voluntary contributions, it could only be in the midst of large and flourishing communities. Local feelings of interest or pride can not be transferred, and it is not to be expected that the means to arrange, display, preserve, and augment these collections can be procured by voluntary contributions of individuals in the District of Columbia, or that they can be procured out of the District. There is no civilized nation, however narrow its policy in other respects, which does not exhibit some measure of interest in promoting the advancement of human knowledge. In most countries science receives direct encouragement, and many governments have vied with each other in their efforts to advance this cause. The government of a country emulous to consider itself among the first of enlightened nations, we trust, will not refuse to aid in securing to its capital the benefits of the labors of

the National Institute. We cordially unite with the resident members of the Institute in asking an appropriation in its behalf from Congress. Our only fear is that in thus requesting aid for the keeping of what in fact is the property of the Government, we may be considered as asking a boon far below that which the country calls for, and that we ought to urge upon the National Legislature a liberal and pteuseous endowment for a National Institute; and we are only withheld from doing so by considerations growing out of the present financial condition of the Government. But that which we ask is so entirely within the means of Congress, and the urgency of its application to preserve what has been accumulated, with so much labor and expense, is so great, that we can not but hope the enlightened and intelligent members of Congress will distinguish the present session by the necessary appropriation of funds to an object so truly national and so truly republican.

ELIPHALET NOTT, *President Union College, Schenectady.*

BENJAMIN F. BUTLER, *New York.*

A. H. EVERETT, *President Jefferson College, Louisiana.*

JAMES TALLMADGE, *President University of New York, and President American Institute, New York.*

JOHN W. DRAPER, *Professor Chemistry, University of New York.*

W. W. MATHER, *Professor Natural Sciences, Ohio University, Athens, Ohio.*

L. R. WILLIAMS, *Professor Natural Philosophy and Chemistry, Jefferson College.*

C. GILL, *Professor Mathematics, St. Paul's College, Flushing, N. Y.*

JOHN W. DUNBAR, M. D., *Professor, University Maryland.*

W. A. NORTON, *Professor Mathematics and Natural Philosophy, Delaware College, Easton, Pa.*

JOHN W. YEOMANS, *President Lafayette College, Pa.*

JOHN W. LOCKE, *Professor Chemistry, Medical College, Ohio.*

HENRY R. SCHOOLCRAFT, *Delegate New York Historical Society.*

W. R. ABBOTT, *President Georgetown Library Association.*

GRAFTON TYLER, M. D., *Georgetown, D. C.*

RICHARD S. McCULLOH, *Professor Mathematics and Natural Philosophy, Jefferson College, Maryland.*

JOHN ELGAR, *Montgomery County, Md.*

FRANCIS J. GRUND, *Philadelphia.*

A. D. CHALONER, M. D., *Philadelphia.*

S. C. DONALDSON, *Baltimore, Md.*

JAMES CURLEY, *Professor, Georgetown College.*

ALEXIS CASWELL, *Professor, Brown University, Rhode Island.*

JAMES P. ESPY.

EDWARD A. COOK, *New York.*

A. TALCOTT, *Connecticut.*

WM. STRICKLAND, *Philadelphia.*

BENJAMIN HALLOWELL, *Maryland.*

HECTOR HUMPHREYS, *President St. John's College, Annapolis, Md.*

GEORGE TUCKER, *Professor, University of Virginia.*

JAMES PRENTISS, *New York.*

RICHARD PETERS, *Philadelphia.*

R. M. PATTERSON, *Philadelphia.*

SAMUEL HAZARD, *Philadelphia.*

ELIAS LOOMIS, *Professor, Western Reserve College, Ohio.*

CHARLES D. CLEVELAND, *Philadelphia.*

SAMUEL F. B. MORSE, *New York.*

RICHARD RUSH, *Philadelphia.*

EDWARD HITCHCOCK, *Professor, Amherst College, Massachusetts.*

IV.

MEMORIAL OF THE NATIONAL INSTITUTE.

To the honorable the Senate and House of Representatives of the United States of America:

The memorial and petition of the "National Institute for the Promotion of Science and the Arts," respectfully represent:

That its members have been induced, by a high sense of the duty to the body whose interests they represent, as well as to the great objects which it was the design of its creation to promote, to submit to the consideration of your honorable bodies a statement of the origin and progress, of the past and present condition, and of the wants and exigencies of the Institute.

The Congress of the Union, after a full investigation of the subject, after duly estimating the value and importance of the design of its founders, and the means which it contemplated to employ in the accomplishment of those ends, deemed them so far entitled to its countenance and favor as to grant to the Institute a charter of incorporation. Some pecuniary aid incidentally followed, and it was made the custodian of much valuable property belonging to the Government. This charter, whose date is recent, naturally afforded the hope of national protection, thus inspiring everywhere confidence the moment it was seen, by the acts of Government, that confidence was felt at home.

Under these auspices the National Institute began its career. Many of the most distinguished and illustrious individuals in the nation afforded it their aid and encouragement.

Its active members were chiefly composed of officers of Government and citizens of Washington, who, occupied in their own private concerns, neither men of wealth nor mere scholars, proposed to give a portion of their leisure to promote objects in which they had no other or ulterior motives and interest than such as were common to the nation, and, perhaps, to the whole human family.

These individuals have so far advanced with a success which they could little have anticipated, and they now approach the legislature of the Union, and the nation at large, with the fruits of their labors in their hands, spreading before those whose interests they have undertaken to advance the results which in so brief a space of time they have accomplished, asking that their deeds should be examined and compared with their promises; and if they have performed their duty faithfully, and discharged the trusts confided to them honorably, zealously, and successfully, that they may be encouraged by the only reward they have ever sought, viz., the means of enlarging and giving additional efficiency to their patriotic efforts and purposes. They appear before your honorable bodies to render an account of their stewardship, and they solicit an examination of their proceedings.

In urging this matter upon Congress, it is not the design of your memorialists to present a formal argument to establish either the constitutional authority of your honorable bodies to confer upon the National Institute that pecuniary aid which they so urgently need, or the expediency of so applying any portion of the public patronage. They believe that Congress is fully competent to the ascertainment and decision of all questions of this character. While, therefore, your memorialists abstain from entering into any discussion of constitutional questions, submitting, with the most respectful deference, to the judgment of your honorable bodies, they feel that they are in no manner trenching upon this ground in exhibiting fully and distinctly those facts and circumstances which will furnish the general data upon which Congress is to decide.

The National Institute is composed of private individuals, with no other bond of connection than their common labors as trustees of certain property for the public and the Government—a common feeling of interest in promoting scientific and useful information, and the bond of union bestowed upon them by Congress in their charter

of incorporation. In effecting the designs of their association, they have established an extensive correspondence with influential and useful men—men of experience, of letters, and of distinguished scientific attainments, not only throughout the Union, but throughout the world. In every part of Europe and of the American continent, in Asia, and in Africa, we find generous and enthusiastic friends and corresponding members. Foreign Governments have evinced their interest by valuable contributions, and many of the most distinguished institutions and societies abroad are correspondents and contributors. An aggregate amount of munificence, zeal, learning, and adventitious advantage is thus possessed by the Institute, which has already yielded substantial results, and holds out assurances of the richest fruits. In further illustration of the advantages which are here imperfectly sketched, we submit for the examination of your honorable bodies a communication lately received from Paris, with accompanying documents and transactions, exhibiting, in a remarkable manner and degree, evidences of interest and good will towards Congress, towards the States, and towards the Institute on the part of the Government and people of France.

Through this widespread instrumentality the Institute has labored to form an extensive library and museum, or collection of objects of natural history, a repertorium of facts and contributions to science, documents illustrating history in general, but in an emphatic manner that of our own continent, and specimens of the fine arts, of mechanic ingenuity, valuable productions of the vegetable kingdom, and materials illustrating the moral and social condition of nations generally, but in a more especial manner of our own. From every quarter of the globe valuable and various contributions have been transmitted to us. The gallant officers of our Army and Navy, the diplomatic and consular representatives of the Government abroad, the men of learning and science every where have entered with the most praiseworthy zeal in the cause, and vied with each other in the number and value of their contributions.

The collection thus made is not designed for, or appropriated to, the exclusive use of the Institute, or of any particular class of individuals. It is opened gratuitously and daily to the inspection and for the benefit of all. Without cost, the student of natural history may here find ample means of improvement in that department of science to which his attention has been directed; without cost, the geologist and mineralogist are furnished with abundant materials for prosecuting their researches; the curious may indulge their predilections, while the man of science is enabled to peruse the valuable contributions from learned societies and individuals throughout the world.

In addition to these materials, thus accumulated by the labors of the Institute itself, the convenience of the Government has made it the depository and guardian of numerous articles of its own property, which are thus exhibited to the public eye without trouble to the ordinary officers in the various departments, and without the consequent abstraction of their time from more peculiar and appropriate duties. The interesting collections of Indian portraits and curiosities formerly deposited in the War Department; the objects of curiosity, and various donations to the Government or to distinguished citizens from foreign countries, once in the State Department, are here shown to the public in connection with much other public property.

The articles arising from these, and from various other sources which it would be tedious to enumerate, already in the custody of the Institute, are of great value, and they are increasing with rapidity, and accumulating to an indefinite extent.

The real owners of these treasures are the Government and the nation. The individual members of the Institute contemplated no interest or property in them, beside their trust for the public, beyond what is enjoyed by every citizen in the land, or, indeed, every stranger who may feel disposed to use them as a means of indulging a liberal curiosity, or gratifying his love of science. Such of the articles as at any time belonged to the Government remain its absolute and exclusive property. They

are simply intrusted to the Institute for safe-keeping and public exhibition, and may be withdrawn whenever it shall suit the wishes of the owners to dispose of them in any other manner. The donations by individuals and public bodies to the Institute are substantially in the same predicament. So long as this corporate association exists it has the charge, custody, and control of it, as trustee for the Government; but upon the dissolution of the Institute, the entire mass becomes equally, as the other branch of the collection, the absolute and exclusive property of the nation. In the mean time, the members wish for no private interest in the collection, and if the present charter be not susceptible of the construction that the whole beneficial interest of all the articles is now, as well as at its close, in the Government, they are anxious to have an amendment made to accompany the appropriation asked for, which shall, at once, regulate the property in that way; for the Institute has depended on the Government heretofore, and must continue to rely on it, not only for many of the most valuable articles in its possession, but for a place to deposit them, and a place for their meetings, as well as for some of the means to defray the incidental expenses of opening, putting up, and preserving their collections. In short, all the property belongs to the Government. The guardians of it, under the charter, are chiefly the officers of the Government. The custody of such property was heretofore at the public expense. And that such sums should still be expended by Congress as would pay for the freight and other expenditures connected with it, would be the exercise of no other power than such as has been exercised by the Government every year since its organization.

The individuals who compose the Institute, have, by their pecuniary contributions and specific donations, largely aided in augmenting the value of this property, in arranging it so as to render it available, and in defraying the expenses necessarily attending the execution of the important and responsible trusts confided to them. They have thus created, enlarged, and rendered practically useful the property of the Government and of the nation. Their means of usefulness, their capacity to extend the benefits of the museum, are limited only by their capacity to meet their daily expenses.

Not only are the Government and the nation the absolute owners of much of the property of the Institute and the beneficiary owners of the residue, but they are also the exclusive recipients of the advantage to result from the entire enterprise. At this period of the world, and in this enlightened age, it is not necessary to present an argument to establish a truth which all history inculcates, that the highest glory of a nation, the purest and most durable happiness of a commonwealth, rest most upon a moral and intellectual advancement.

If, in the legitimate execution of those powers which by the Constitution are vested in your honorable bodies, collateral results should follow, by which science and literature shall be fostered and encouraged among your constituents, and diffused more widely through our Union, such consequences will not, we presume, furnish grounds of objection to the rightful exercise of power in the breast of any individual. It is believed that few are disposed to controvert the lawfulness, while a still smaller number will deny the expediency, of the appropriations heretofore made by Congress to the literary and benevolent associations of this District and city. None can doubt the lawfulness of those provisions which have been from time to time made for the protection of the property of the nation and its adequate security and care by the erection of suitable buildings for its accommodation, and furnishing proper compensation to the officers or agents of the Government charged with its preservation and improvement.

All the Institute asks of Congress then, is an appropriation of a sum sufficient to discharge the arrears of expense heretofore incurred and due by the Institute, an annual appropriation for the necessary purposes of the association, and the continuance of the indulgence hitherto granted of the use of convenient rooms for preserving the property and holding the ordinary meetings.

Annexed to this memorial are various documents, of which the following is a list:

- (1) Charter of Incorporation.
- (2) Constitution and By-Laws.
- (3) Abstract of Proceedings, comprising the contributions, donations, and deposits made to the cabinet and library of the Institution since its foundation, with the names of the contributors, donors, and depositors.
- (4) List of officers, and honorary, resident, paying corresponding, and corresponding members, and of the societies, institutions, etc., at home and abroad, in correspondence with the National Institute.

PETER FORCE, *Vice-President.*

FRANCIS MARKOE, JR., *Corresponding Secretary.*

JOHN K. TOWNSEND, *Recording Secretary.*

GEORGE W. RIGGS, JR., *Treasurer.*

JOHN C. SPENCER.

JOHN NELSON,

WILLIAM WILKINS,

C. A. WICKLIFFE,

Directors, ex-officio, on the part of the Government.

LEVI WOODBURY.

R. J. WALKER,

J. J. ABERT,

JOSEPH G. TOTTEN.

A. O. DAYTON.

M. F. MAURY.

Directors on the part of the National Institute.

WASHINGTON CITY, *March 18, 1844.*

[Proc. Nat. Inst., 1, p. 382.]

NOTE F.

MEMORIAL TO CONGRESS.

The following appeal was made to Congress at its late session (first session of Twenty-ninth Congress) in favor of the National Institute, and was presented to the Senate by the Hon. Lewis Cass and to the House of Representatives by the Hon. John Quincy Adams:

To the Senate and House of Representatives in Congress assembled:

The undersigned would respectfully petition that the memorials* heretofore presented to your honorable bodies in behalf of the National Institute may again be taken into consideration and the prayers therein be granted.

In addition to the reasons before set forth in their favor, the undersigned would beg leave to state what they most sincerely deplore—the increasing difficulties of the Institute. It is becoming entirely impracticable, by mere private contributions and taxes, to pay the large incidental expenses attendant on the collection and preservation of so much valuable property connected with the advancement of science, literature, and the arts. The Institute asks and has asked nothing for the private emolument of its members. It merely seeks means to secure the property coming into its custody from time to time so that it may not be injured or lost, and so that it may be exhibited and used by the public, as it is dedicated to the public, and the title to it is intended to be in the Government.

For want of pecuniary means, all our collections, whether in possession or increasing by new additions weekly, are in jeopardy; and unless Congress interfere to save

* Copies of these memorials will be found at pp. 383 and 386 of the Third Bulletin of the proceedings of the National Institute, which accompanies this memorial.

what is so public in its character, and so peculiarly under its guardianship as is the encouragement of matters of this kind within this District, subject to its exclusive legislation, the prospect is that the operations of the Institute must of necessity cease and the property be abandoned.

Deprecating, as we do, an event so unfortunate for the cause of science and the arts, not only here, but from here in some degree over the whole Union, and not a little disreputable to our character abroad, the undersigned would earnestly pray that Congress, at an early date, may avert the calamity by taking steps to aid efficiently in preserving this important public property; and the more especially do we ask this, when, for various reasons, it can be done at moderate expense and in entire conformity to the provisions of the Constitution.

The undersigned respectfully refer to the documents annexed, which exhibit the character of the Institute and the course of its proceedings.

LEVI WOODBURY, *President*,
 PETER FORCE, *Vice-President*,
 FRANCIS MARKOE, JR., *Corresponding Secretary*,
 G. W. RIGGS, JR., *Treasurer*,
 ROBERT J. WALKER, *Secretary of the Treasury*,
 J. J. ABERT, *Topographical Engineers*,
 J. G. TOTTEN, *Engineer Corps*,
 M. F. MAURY, *U. S. Navy*,
 A. O. DAYTON, *Fourth Auditor*,

Directors.

WASHINGTON, *December 16, 1845.*

LIST OF DOCUMENTS ACCOMPANYING THE ABOVE MEMORIAL.

First Bulletin of the Proceedings of the National Institution for the Promotion of Science, established at Washington, 1810: Washington, 1841.

Second Bulletin, etc., March, 1841, to February, 1842: Washington, 1842.

Third Bulletin, etc., February, 1842, to February, 1845; also proceedings of the meeting of April, 1844: Washington, 1845.