

NOTES

1. *Report of the Superintendent of the Coast Survey Showing the Progress of the Survey during the Year 1854* (Washington, 1855), p. 65; *Report of the Superintendent of the Coast Survey Showing the Progress of the Survey during the Year 1855* (Washington, 1856), p. 76; *Report of the Superintendent of the Coast Survey Showing the Progress of the Survey during the Year 1856* (Washington, 1856), p. 64; Hugh Richard Slotten, *Patronage, Practice, and the Culture of American Science: Alexander Dallas Bache and the U.S. Coast Survey* (Cambridge, 1994), p. 153. [Return to [text](#).]

2. "Elisha Kent Kane," *Dictionary of American Biography*; Joseph Henry and Alexander Dallas Bache to John Pendleton Kennedy, December 1, 1852, in Marc Rothenberg et al., eds. *The Papers of Joseph Henry*, vol. 8, (Washington, 1998), pp. 408-410; [Geographic Names Database, Prince of Wales Northern Heritage Centre](#); Elisha Kent Kane, *Arctic Explorations: The Second Grinnell Expedition in Search of Sir John Franklin, 1853, '54, '55*, vol. 2 (Philadelphia, 1857), pp. 56-57 (quotation), 385. [Return to [text](#).]

3. I. I. Hayes, "Lecture on Arctic Explorations," *Annual Report of the Board of Regents of the Smithsonian Institution ... for the Year 1861* (Washington, 1862), pp. 149, 157; Introduction to Isaac I. Hayes, "Physical Observations in the Arctic Seas," *Smithsonian Contributions to Knowledge*, vol. 15 (Washington, 1867), p. x; Hayes, *The Open Polar Sea: A Narrative of a Voyage of Discovery Towards the North Pole* (New York, 1867), p. 10. A later explorer determined that the Henry and Bache Islands were "undoubtedly connected, and therefore not islands." Albert Hastings Markham, *The Great-Frozen Sea: A Personal Narrative of the Voyage of the "Alert" During the Arctic Expedition of 1875-6* (1878; London, 1894), p. 64; see also [Geographic Names Database](#). [Return to [text](#).]

4. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 14 (September 1862): 444-445. Additional information on the specimen supplied by David G. Smith, museum specialist in the Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution; [Species Summary for *Isichthys henryi*](#). Image of *Isichthys henryi* obtained from [Photographs and Preliminary Identifications](#). Biographical entries on Gill in the *Dictionary of Scientific Biography* and [Spencer Baird and Ichthyology at the Smithsonian, 1850-1900](#).

In his description of the fish, Gill noted the specimen at the Smithsonian had once formed part of the collection of the ill-fated National Institute for the Promotion of Science in Washington. The National Institute had been a poor custodian of materials; under its care, for example, the massive collection of the Wilkes Expedition of 1838-42 had suffered much damage and loss of labels before being turned over to the Smithsonian. Gill remarked that there was "no indication of locality" for the *Isichthys henryi*, but he presumed it had come from Liberia.

I wish to thank Smithsonian research associate Ellis Yochelson for locating a catalog of fishes that first alerted me to the existence of the fish. [Return to [text](#).]

5. George N. Lawrence, "Heliodoxa Henryi," *Annals of the Lyceum of Natural History of New York* 8 (December 1866): 402; Clark A. Elliott, *Biographical Dictionary of American Science* (Westport, Connecticut, 1979), p. 151; M. A. Carriker, "An Annotated List of the Birds of Costa Rica," reprinted from the *Annals of the Carnegie Museum*, vol. 6, nos. 2-4

(1910): 358-360; image from Joseph del Hoyo, Andrew Elliott, Jordi Sargatal, eds., *Handbook of the Birds of the World*, vol. 5 (Barcelona, 1999), plate 61, no. 194. [[Return to text.](#)]

6. William H. Goetzmann, *Exploration and Empire: The Explorer and the Scientist in the Winning of the American West* (New York, 1966), p. 541; John Wesley Powell, *Exploration of the Colorado River of the West and its Tributaries: Explored in 1869, 1870, 1871, and 1872, Under the Direction of the Secretary of the Smithsonian Institution* (Washington, 1875), p. xi.

Prior to the 1869 exploration, Henry had arranged for the Smithsonian to loan Powell expensive scientific equipment for an expedition to the Rocky Mountains in 1867. Fresh from the success of this trip, Powell conceived a plan to conduct a survey of the Colorado River in 1868. He traveled to Washington, D.C., in the spring of 1868 to obtain permission from the U.S. Army to draw rations from western outposts. But this required passage of legislation in Congress authorizing the Secretary of War to grant the permission. When the proposed legislation met with opposition, Henry wrote a four-page letter of introduction for Powell to then congressman James A. Garfield. Henry explained that Powell was seeking no personal gain, but rather was attempting to conduct a scientific survey of "one of the most interesting regions of our continent." William Culp Darrah, *Powell of the Colorado* (Princeton, N.J., 1951), pp. 78-82, 89; Joseph Henry to James A. Garfield, April 20, 1868, Outgoing Correspondence, Office of the Secretary, Record Unit 33, Smithsonian Archives.

Garfield proved to be an influential advocate for Powell's plan, and Congress voted to provide supplies for up to twenty-five persons. Henry saw to it that the Smithsonian furnished Powell with instruments, such as barometers, chronometers, and a sextant. Powell's party of scientists, students, and eager amateurs spent the summer and winter of 1868 determining the altitude and structures of mountains; recording the vocabularies of Ute Indians (this was Henry's suggestion, according to Powell's biographer); and surveying various routes to ascertain the best approach to the Colorado River. After thoroughly studying the topography of the Colorado region, Powell returned to Washington in hopes of securing additional financing. He was unsuccessful in doing so, but Congress again approved the use of army supplies, and Powell was encouraged after meeting with Henry about the forthcoming trip. Goetzmann, *Exploration and Empire*, pp. 534-536; Darrah, *Powell*, pp. 93-95, 99, 105-107, 112, 259.

After Powell returned from the 1869 expedition a national hero, Congress became more generous and, prodded by Garfield and Salmon P. Chase (both Smithsonian regents), provided funds for follow-up expeditions in 1870, 1871, and 1872. The Smithsonian was put in charge of directing the expenditures. Powell returned to Washington in 1873, this time to take up residence. He was given a small room in the Smithsonian Building to work in, and consulted with Henry and naturalist Spencer Baird, assistant secretary of the Smithsonian, on the progress of his monograph on the Colorado explorations. In June 1874, Powell personally delivered his manuscript to Henry. Its publication would establish his scientific reputation. Darrah, *Powell*, pp. 152, 205, 215; *Annual Report of the Board of Regents of the Smithsonian Institution...for the Year 1871* (Washington, 1873), p. 26; *Annual Report of the Board of Regents of the Smithsonian Institution...for the Year 1875* (Washington, 1876), p. 17.

The date Powell named the Henry Mountains is uncertain. G. K. Gilbert's *Report on the*

Geology of the Henry Mountains, a work submitted to Powell for review prior to publication, states flatly that on Powell's descent of the Colorado River in 1869 he gave the mountains their name as his boat passed near their foot. Presumably Gilbert obtained this information from Powell himself. G. K. Gilbert's *Report on the Geology of the Henry Mountains* (Washington, 1877), p. 1. [Return to [text](#).]

7. "Charles Francis Hall," *American National Biography* (New York, 1999); Trevor H. Levere, *Science and the Canadian Arctic: A Century of Exploration, 1818-1918* (Cambridge, 1993), pp. 248-253; *Annual Report of the Board of Regents of the Smithsonian Institution ... for the Year 1873* (Washington, 1874), pp. 37-38; quotation from Markham, *The Great-Frozen Sea*, p. 127; G. S. Nares, *Narrative of a Voyage to the Polar Sea During 1875-6* (London, 1878), vol. 1, pp. 130, 169, 252-253, 301-302, 326; Henry to Dawes, March 12, 1870, Office of the Secretary, Outgoing Correspondence, Record Unit 33, Smithsonian Archives; March 11 and 18, 1870, Henry Desk Diary, Henry Papers, Smithsonian Archives; Chauncey C. Loomis, *Weird and Tragic Shores: The Story of Charles Francis Hall, Explorer* (New York, 1971), pp. 251-254, 279-281, 337-354.

I have not been able to locate a primary source confirming positively that Hall named Cape Joseph Henry. The name first surfaces, as far as I can tell, on a map of Hall's expedition prepared by Emil Bessels in his *Scientific Results of the United States Arctic Expedition: Steamer Polaris, C. F. Hall Commanding* (Washington, 1876). The map is titled "Chart of the Regions of Smith Sound and Baffin Bay, Showing the Tracks and Discoveries of the U.S.S. Polaris, C.F. Hall, Commanding: Newly Projected from Revised Materials," and was completed sometime prior to March 1, 1875, the date on which Bessels submitted his book to Henry for publication. It is possible that a crew member of the *Polaris* named the cape after Henry, perhaps in accordance with Hall's wishes. Personal Communication, November 10, 1999, from Randolph Freeman, Prince of Wales Northern Heritage Centre. Another possibility is that Bessels himself named the cape after Henry. To further confuse matters, among Henry's manuscripts is a letter dated December 6, 1876, congratulating him "that Cape Joseph Henry has been added to the domain of geography." The writer, an official with the American Geographical Society, found the honor "especially gratifying as coming from the countrymen of the founder of the Smithsonian," thus implying members of the British expedition of 1875-76 led by George S. Nares. Charles P. Daley, December 6, 1876, Record Unit 26, Office of the Secretary, Incoming Correspondence, Smithsonian Archives. Nares's expedition was, in fact, the first to set foot on the cape and his narrative of the expedition makes numerous references to it (see citation to Nares in previous paragraph). Bessels's account of Hall's expedition was rushed into print so that Nares would benefit from its discoveries. Perhaps Nares merely reaffirmed the name and thereby helped make it official. One secondary source quotes him as stating that the cape "was named by the late Captain Hall," but gives no citation for this quote. [Geographic Names Database](#). [Return to [text](#).]

8. Alexander Leitch, ed., *A Princeton Companion* (Princeton, 1978), pp. 64, 160, 248; ["Nobel Prize Winners"](#); Charles G. Osgood, *Lights in Nassau Hall: A Book of the Bicentennial, Princeton, 1746-1946* (Princeton, 1951), p. 114. [Return to [text](#).]

9. William Barber to Spencer F. Baird, May 15, 1878; Barber to Miss [Mary?] Henry, June 9, 1879: both in Box 39, Joseph Henry Collection, Record Unit 7001, Smithsonian Archives; excerpt from Board of Regents Meeting of January 25, 1967, Box 1, Office of the Secretary, Record Unit 99, Smithsonian Archives; David Ferry, trans., *The Odes of Horace*

(New York, 1997), pp. 64-65. [Return to [text](#).]

10. Rothenberg, *Papers of Joseph Henry*, vol. 8, pp. xxxiii-xxxiv. John Rodgers to Harriet Henry, July 5, 1878, Rhees Collection, RH 4221, Huntington Library; Letter from the Secretary of the Treasury, Recommending an Appropriation, to be Paid as Compensation for Services Rendered by the Late Professor Henry as a Member of the Light-House Board," Senate Executive Document No. 94, 45th Congress, 2d Session, quotation from p. 2; "U.S. Coast Guard Cutter, *Fir*," at [the web site of the National Maritime Initiative, National Park Service](#), dated 6-25-99; label to model of *Joseph Henry* in the National Museum of American History; Arnold Burges Johnson, *The Modern Light-House Service* (Washington, 1890), pp. 42-43; quotation from George R. Putnam, *Lighthouses and Lightships of the United States*, (Boston, 1917), p. 213; *Annual Report of the Light-House Board...for the Fiscal Year Ended June 30, 1886* (Washington, 1886), pp. 106-107. [Return to [text](#).]

11. Horace C. Hovey, "The Caverns of Luray," chapter 12 of *Celebrated American Caverns* (Cincinnati, 1882), especially pp. 164-167, 172, 179, and map facing p. 163; "Report of a Visit to the Luray Cavern, in Page County, Virginia, Under the Auspices of the Smithsonian Institution, July 13 and 14, 1880," *Annual Report of the Board of Regents of the Smithsonian Institution ... for the Year 1880* (Washington, 1881), pp. 449-460; Russell H. Gurnee, *Discovery of Luray Caverns, Virginia* (Closter, New Jersey, 1978), pp. 45, 52, 69, 72-73, 76, 77, 86, 88; S. Z. Ammen, *History and Description of the Luray Cave* (Baltimore, 1882), p. 31; "Luray Cavern," *Encyclopedia Britannica* (Cambridge, 1911), pp. 127-128. Image of Henry-Baird Column taken from *Frank Leslie's Illustrated Newspaper*, February 1, 1879, p. 400.

Surviving documents do not explain why the Reading Society named the stalagmites after Henry and Baird (or why this small society was involved in the naming of the object). The documents do, however, offer some hints. Henry had begun corresponding with officials of the society shortly after its founding in the late 1860s. At their request, he supplied the society with publications in natural history (and probably specimens as well). Baird, a native Pennsylvanian who possibly was acquainted with some members of the society, also corresponded with them. Perhaps the society acted out of gratitude for Henry and Baird's assistance. It is unclear what, if anything, the Smithsonian's interest in the cavern had to do with the naming. But it is worth noting that another feature of the caverns, Hawes' Cabinet, was named after someone from the Smithsonian, geologist George Wesson Hawes. W. J. Hoffman to Joseph Henry, February 4, 1869, Record Unit 26, Office of the Secretary, Incoming Correspondence, Smithsonian Archives; Henry to R. S. Turner, February [11?], 1870, Record Unit 33, Outgoing Correspondence, Smithsonian Archives; Frank Kimball to Henry, May 29, 1871, Record Unit 26, Incoming Correspondence, Smithsonian Archives; Hovey, *Celebrated Caverns*, p. 186; "Obituary Notice of Dr. G. W. Hawes," *Annual Report of the Board of Regents of the Smithsonian Institution ... for the Year 1882* (Washington, 1884), pp. 158-160.

I wish to thank Roger Sherman, museum specialist at the National Museum of American History, for first alerting me to an entry in the 1957 edition of the *Encyclopedia Britannica* that mentioned the Henry-Baird Column. [Return to [text](#).]

12. "S. H. Short," *Dictionary of American Biography*; S. H. Short, "The First Electric Railroad," *St. Louis Daily Globe-Democrat*, May 14, 1899, Section 3, p. 10; George K. Bradley, "Thomas A. Edison, Leo Daft, Edward M. Bentley, Walter H. Knight, and Others

Who Were Pioneer Electric Railway Inventors," in John R. Stevens, ed., *Pioneers of Electric Railroading: Their Story in Words and Pictures* (New York, 1991), pp. 54, 81; George W. Hilton and John F. Due, *The Electric Interurban Railways in America* (Stanford, 1960), pp. 6-7. [Return to [text](#).]

13. *Report of the Action of the International Electrical Congress held in Chicago August, 1893, in the Matter of Units of Electrical Measure*, pp. 1-4, in Box 27, Joseph Henry Collection, Record Unit 7001, Smithsonian Archives; *Annual Report of the Board of Regents of the Smithsonian Institution...to July, 1893* (Washington, [1895]), p. 10; T.C. Mendenhall, "The Henry," *Annual Report of the Board of Regents of the Smithsonian Institution...to July, 1894* (Washington, 1896), pp. 141, 143, 152; Mascart entry in *Dictionary of Scientific Biography*. Photograph of delegates to the congress from *Proceedings of the International Electrical Congress held in the City of Chicago: August 21st to 25th, 1893* (New York, 1894), frontispiece. [Return to [text](#).]

14. L. A. Sawyer and W. H. Mitchell, *The Liberty Ships* (Cambridge, 1970), pp. 13-16, 86-88; additional information supplied by maritime historian William F. Hultgren, to whom we are indebted for a photograph of the *Joseph Henry*. I also wish to thank Smithsonian research associate Ellis Yochelson for first suggesting that a Liberty ship might be named after Henry. [Return to [text](#).]

15. "Galway: Yesterday and Today," a brochure published by the Galway Preservation Society, 1988; Albert E. Moyer, *Joseph Henry: The Rise of an American Scientist* (Washington, 1997), pp. 17, 20. [Return to [text](#).]

16. Alexander Leitch, ed., *A Princeton Companion* (Princeton, 1978), pp. 248, 277, 351. When the widow of Stanley Palmer Jadwin died in 1964, the bulk of her estate went to Princeton (some \$27 million). A new physics building was constructed shortly thereafter and named Jadwin Hall in honor of Stanley Palmer Jadwin. The physics department had suggested the building be named after Joseph Henry. When the university administration chose to honor the benefactor, the department named its complex of laboratories after Henry. Leitch, *A Princeton Companion*, p. 277; phone interview with physics professor Frank Shoemaker, August 11, 1999. [Return to [text](#).]

17. 1993 press release, Joseph Henry Press; communication from Stephen Mautner, executive director of the press, July 1999. [Return to [text](#).]

18. William Jay Murphy to Henry, two letters, each dated October 9, 1873, Record Unit 26, Office of the Secretary, Incoming Correspondence, Smithsonian Archives; Henry to Murphy, October 14, Outgoing Correspondence, Office of the Secretary, Record Unit 33, Smithsonian Archives. [Return to [text](#).]

