December 10, 1830

the imperfect tables prefixed to Gibson's Surveying \[17 \& Bowditches Navigation\]. These only extend to 4 and 5 places of decimals and are consequently inapplicable to any very exact calculation.

The introduction of this work will I am confident have a tendancey to induce a habit of more exact numerical calculation and enable the student to become more intimately acquainted with the use of logarithmic tables. The price of this vol. is $2.50 and it is more minute in some cases and almost as extensive in every way as Hutton's Mathematical tables \[18\] which cannot be procured in this country, and if ordered from England will cost at the least $10.

In conclusion therefore I would recommend that Hasler's Arithmetic be used for the older students in the academy \& that each student when commencing the study of Trigonometry or the higher parts of algebra be required to procure a copy of Hasler's Mathematical tables.

I am Gentlemen with much Respect Your humble serv[ant]
Joseph Henry


\[18\] Nathaniel Bowditch, *The New American Practical Navigator* (Newburyport, Massachusetts, 1802), which quickly superseded its predecessors, became a standard reference work for seamen throughout the world, and, in revised form, is still widely used. The latest edition available to Henry would have been the fourth, published in New York in 1817.

\[19\] Charles Hutton, *Mathematical Tables; Containing the Common, Hyperbolic and Logistic Logarithms*, . . . , 7th ed. (London, 1830). The edition cited here was the latest available to Henry.

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TO BENJAMIN SILLIMAN, SR.\[1\]

*Silliman Family Papers, Sterling Library, Yale University*

Albany Dec. 10th 1830

Prof. Silliman
Dear Sir

I have been engaged for some time past in a series of experiments on electro-magnetism and particularly in reference to the development of great magnetic power with a small galvanic element. The results I wish to publish if possible in the next No. of the Journal of Science. I am anxious

\[1\] Henry's retained copy of this letter, dated one day earlier, is in the Smithsonian Archives. It has been printed in Nathan Reingold, ed., *Science in Nineteenth-Century America: A Documentary History* (New York, 1984), p. 65.
December 17, 1830

that they should appear as soon as possible since by delaying the publication of the principles of these experiments for nearly two years I have lately had the mortification of being anticipated in part by a paper from Prof. Moll in the last No of Brewster’s Journal.2

Please inform me if I shall be too late for the next no. of the Journal if I send my paper within two weeks of the date of this letter—it will probably make five or six pages. If it be not too late I should like to have a small wood cut of a powerful magnet which I am constructing on electro-magnetic principles.

Both Mrs. Henry and myself retain a lively recollection of the many polite attentions we received in New Haven last Spring. We join in a respectful remembrance to your self and family. I am with much respect Your humble serv Joseph Henry


FROM BENJAMIN SILLIMAN, SR.

Henry Papers, Smithsonian Archives

N Hav. Dec 17 1830

Dear Sir

Yours of the 10th1 reached me a few hours since. I write by return of mail to say that as Prof Molls memoir is already printed in this No of the Journale it is the more important that yours should appear also. Although we are already arrived at the Miscellanies I will reserve a form for you at the very end where you can come in by way of appendix.3 As a week is already

1 See above.
2 Gerrit Moll, “Electro-Magnetic Experiments,” Silliman’s Journal, 1891, 19:329–337. Both Henry and Silliman had noted this piece on its original publication in Britain. Moll, like Henry, was aware of the work of William Sturgeon. His paper is markedly different in style from Henry’s. Henry is detailed and factual; Moll is more “literary” in his range of allusions. And Henry’s results were more spectacular in terms of lifting power.