

❧ 1873 ❧

204. TO JOHN TYNDALL

Smithsonian Institution,
Washington, Jan. 7. 1873.

My dear Sir,

I regret very much that I have not an opportunity of discussing the subject of your letter orally, and at leisure.¹ Were it not that the annual meeting of the Board of Regents takes place on the 16th Inst., and that in the meantime ~~that~~ I am obliged to prepare an account of the expenditures and operations of the Institution for the past year, I would visit New York for the purpose in question. I must however content myself with exchanging views with you by letter.

It is my own opinion as well as that of others with whom I have conversed on the subject, that you are not called upon by any consideration usually thought valid by the world to make any other disposition of the proceeds of your lectures, which have been of so much labor to yourself and of profit to your hearers, than that of furnishing more enlarged means for the advancement of science through your own investigations. But I presume your mind is made up on this point and that nothing I could say would change your determination. I shall therefore proceed to give you such views as a somewhat hasty consideration of the subject suggests.

Your proposition to expend your money for the advancement of science in our country is a noble example of the liberalizing tendency of scientific pursuits on a mind of generous sympathies and ought to be one which can permanently be referred to as a prominent illustration of the truth in question. For this purpose as well as for more certain and lasting effects I would suggest that instead of expending it in one hazard the money be permanently invested and the annual proceeds from it, only be applied perpetually to assist in supporting a student in a German, or other foreign, university "while being trained with reference to the prosecution of original research in the line of Physics." This Fund, which, if judiciously invested, would yield six or seven hundred dollars a year, should be put in charge of a Board of Trustees consisting, if you please, of myself, Prof^r Youmans² and your cousin,³ than whom no better man could be selected, this Board to perpetuate itself by electing new members to fill any vacancies that may occur by death or otherwise. I suggest this plan because there are at present, according to a recently published statement, upwards of a thousand American students in different schools in Europe and among these as one of my assistants, Dr Endlich,⁴ (who has lately returned from a ten years residence at Friburg), informs me there

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are at least two hundred in Germany alone devoted to the acquisition of science.*

By^A addressing letters to the Professors of Physics in the German Universities information might be had as to whether there are any young men from the United States pursuing their studies who would be worthy recipients of aid from the fund in question.

There being such a demand for practical applications of science in this country, and the remuneration of professors being so small, few of the young men educated abroad devote themselves to pure science on their return home. Another reason for the scarcity of men devoted to original science in this country is ↑owing to↓ the fact that there are no honorary distinctions of any kind which can be conferred by the Government and therefore the tendency of talent is to seek social position and influence through wealth and politics. There are at the present time two first class positions vacant in the United States, viz, the Chair of Physics in the University of Pennsylvania, at Philadelphia, and the "Joseph Henry Chair of Physics" in the College of New Jersey at Princeton—a chair lately endowed by Mr. John C. Green of New York.

What is wanted in this country is well endowed professorships which will give those occupying them a liberal support and afford them sufficient time and ample apparatus for pursuing original research while the drudgery of teaching is done by assistants under the Professors direction. To this should be added a higher appreciation on the part of the public of the importance of pure science. I think ↑however↓ we are making progress in the latter and that your lectures will have done good service in this direction.

Of course what I have said to you in this letter is merely in the way of suggestion to be adopted by you in part, or in whole, or to be entirely disregarded as may suit your views. Whatever plan you may decide upon will, I am sure, result in good and in keeping you in grateful remembrance by the more intelligent portion of this country.⁵

Since commencing this letter I have learned through the newspapers that you are not well, and I fear you have overworked yourself. Your labors have been immense, but I trust, most sincerely, that the invigorating sea-air and the entire rest of the voyage will restore you to your wonted vigor.

Do not forget before leaving for England to give General Woodruff a visit at the Light House Depôt, Tompkinsville, Staten Island.⁶ Professor Youmans has been there and will no doubt accompany you.

*Freiburg 30; Berlin 20; Stuttgart 10; Tübingen 6, or 8; Göttingen 4; Erlangen 2; Heidelberg 4, or 6.—

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Your lectures in Washington were a great success. From the President of the United States to the lowest Employee of the Government—all were delighted with your course.

With kind regards from Mrs. Henry and my daughters,

I am

Very truly

Your friend & servant

Joseph Henry

Prof^r John Tyndall,
Brevoort House
N.Y.

RI MS JT/1/H/78, Tyndall Papers, Archives, Royal Institution of Great Britain.

In a clerk's hand, except for the signature and interlineations. Letterpress copy (dated January 6): RU 33, Smithsonian Archives. Reply: January 11, 1873, RH 3978, Rhees Collection, Huntington Library.

1. Tyndall had written on January 2 (RH 3976, in same location as reply) that it was time for him and Henry to consider what to do with the proceeds of his lectures and that he wanted to complete arrangements before leaving the United States. Despite heavy expenses incurred during the lecture tour, Tyndall expected to end up with a surplus of \$10,000. Before leaving England he had planned to donate his net proceeds to Chicago to help the scientific community there recover from the disastrous fire of October 1871. He now proposed to fund three years of graduate studies in Germany for four students. He asked Henry to name one of the students, preferably in physics, and E. L. Youmans, who had been "indefatigable" in helping to arrange the lectures, to name another. A third American, as yet unnamed, was to choose the third student. Tyndall wanted to reserve the right to himself to name one of the students, "at the other side of the water." Howard S. Miller credits Henry and Youmans with helping to change Tyndall's mind concerning the disposition of the lecture proceeds. Howard S. Miller, *Dollars for Research: Science and Its Patrons in Nineteenth-Century America* (Seattle, Washington, 1970), p. 122.

2. Edward Livingston Youmans (1821–1887), a popularizer of science through his lectures, writings, and editorship of the *Popular Science Monthly* from 1872 until his death. ANB.

3. Hector Tyndale.

4. Frederick M. Endlich (1851–1899) was a native of Pennsylvania but lived in Basel, Switzerland, from 1857 to 1861 when his father served there as United States consul. Beginning in 1866, he spent four years studying in Germany. After a year at home, he returned to Europe again before being hired by the Smithsonian in November 1872 as "mineralogist, geologist, mine expert and chemist." *The Engineering and Mining Journal*, 1899, 68:126; Henry to William H. Dall, November 27, 1872, Dall Papers, Smithsonian Archives.

5. In his reply, Tyndall accepted Henry's suggestions and also predicted a larger surplus. The trust was established on February 7, 1873. The original trustees were Henry, Youmans, and Tyndall's cousin, Hector Tyndale. Tyndall's net proceeds of just over \$13,000 were to be permanently invested, as Henry suggested, with the interest used to support American students for four years of study and research in physics in Germany. Tyndall gave the board authority to fund study and research in the United States instead of Germany if the progress of science there warranted. *Smithsonian Report for 1872*, pp. 104–106.

6. Israel Carle Woodruff was a lieutenant colonel in the Corps of Engineers and from 1870 to 1878 the engineer officer in charge of the Light-House Board's third district. *Henry Papers*, 10:365n; *Light-House Board Report for 1882*, p. 138.