

star, by all means, in horticulture, but do not lose sight of either the wagon or the star.

Are you really interested in this work—in some phase of horticulture? If you are not, I commiserate you on the time you have spent at this school; if you are, I am glad to extend to you the most hearty congratulations and good wishes on the completion of your course here, and the commencement of the larger and more serious work upon which you are about to enter.

C. STUART GAGER

BROOKLYN BOTANIC GARDEN

### LETTER ON THE SMITHSONIAN INSTITUTION<sup>1</sup>

BY THE LATE PROFESSOR LOUIS AGASSIZ

*Addressed to the Honorable Charles W. Upham*

*Dear Sir,*—Every scientific man in this country has been watching with intense interest the proceedings of the Smithsonian Institution ever since its foundation, satisfied, as all must be, that upon its prosperity the progress of science in America in a very great measure depends. The controversies which have been lately carried on respecting the management of the institution have increased the solicitude of its friends with regard to its future prospects in a degree which can hardly be realized by those who are not immediately connected with the cause of science.

As a foreigner, who has enjoyed but for a few years the privilege of adding his small share to support the powerful impulse which scientific investigations have lately received from those who are the native representatives of science in America, I have thus far abstained from taking any part in this discussion, for fear of being charged with meddling with matters in which I have no concern. There is, however, one feature of the institution itself, which may, I trust, justify the step

<sup>1</sup> From *Canadian Journal*, Vol. III., 1854 and 1855, pp. 216-217, in the April number for 1855, containing Proceedings of the Canadian Institute. Communicated by Dr. Otto Klotz, Dominion Observatory, Ottawa, Canada.

I have taken in addressing you upon this subject as the chairman of the committee elected by the House of Representatives to investigate the proceedings of that establishment.

With the exception of a few indirect allusions, I do not see that any reference is made in the discussion now going on to the indisputable fact that the Smithsonian Institution is not an American institution. It was originated by the liberality of a high-minded English gentleman, intrusting his fortune to the United States to found in Washington an institution *to increase and diffuse knowledge among men*. America, in accepting the trust, has obtained the exclusive management of the most important and the most richly endowed scientific institution in the world: but it is at the same time responsible to the scientific world at large for the successful prosecution of the object of the trust, which is to *increase and diffuse knowledge among men*.

Were it not for this universal character of the institution, I would not think it becoming in me to offer any suggestion with regard to it. As it is, I feel a double interest in its prosperity—in the first place, as an institution designed to foster the process of science at large, and without reference to nationalities or local interests, and next, as more immediately connected with the advancement of science in the country of my adoption.

The votaries of science may differ in their views about the best means of advancing science, according to the progress they have themselves made in its prosecution; but there is one standard of appreciation which can not fail to guide rightly those who would form a candid opinion about it. I mean the lives of those who have most extensively contributed in enlarging the boundaries of knowledge.

There are two individuals who may, without qualification, be considered the most prominent scientific men of the nineteenth century—Cuvier and Humboldt. By what means have they given such powerful impulse to science? How have they succeeded not only in increasing the amount of knowledge of their age, but also in founding new branches of science? It is by their own publications and by aiding

in the publications of others; by making large collections of specimens and other scientific apparatus, and not by the accumulation of large libraries. Humboldt never owned a book, *not even a copy of his own works*, as I know from his own lips. "He was too poor," he once said to me, "to secure a copy of them"; and all the works he receives constantly from his scientific friends are distributed by him to needy students.

Again, there is hardly a scientific man living on the continent of Europe, who is not indebted to him for some recommendations in the proper quarter for assistance in the publication of their works. I mention more particularly these details about Humboldt, because he is happily still among the living, and his testimony may be asked in a matter of such deep importance to the real progress of science. But the same is equally true of the part Cuvier took in his day in promoting science. All his efforts were constantly turned towards increasing the collection of the *Jardin des Plantes*, and supporting the publication of original researches, giving himself the example of the most untiring activity in publishing his own.

In this connection, I ought not to omit mentioning a circumstance to which the United States owes the legacy of Smithson, which I happen accidentally to know, and which is much to the point, in reference to the controversy concerning the management of the Smithsonian Institution.

Smithson had already made his will, and left his fortune to the Royal Society of London, when certain scientific papers were offered to that learned body for publication. Notwithstanding his efforts to have them published in their transactions, they were refused; upon which he changed his will and made his bequest to the United States. It would be easy to collect in London more minute information upon this occurrence and, should it appear desirable, I think I could put the committee in the way of learning all the circumstances. Nothing seems to me to indicate more plainly what were the testator's views respecting the best means of promoting science than this fact.

I will not deny the great importance of libraries, and no one has felt more keenly the want of an extensive scientific library than I since I have been in the United States; but, after all, libraries are only tools of a secondary value to those who are really endowed by nature with the power of making original researches, and thus increasing knowledge among men. And though the absence or deficiency of libraries is nowhere so deeply felt as in America, the application of the funds of the Smithsonian Institution to the formation of a library, *beyond the requirements of the daily progress of science*, would only be, in my humble opinion a perversion of the real object of the trust, inasmuch as it would tend to secure facilities only to the comparatively small number of American students who may have the time and means to visit Washington when they wish to consult a library. Such an application of the funds would in fact lessen the ability of the Smithsonian Institution to accomplish its great object (which is declared by its founder to be the increase and diffusion of knowledge among men) to the full extent to which they may be spent towards increasing unduly the library.

Moreover, American students have a just claim upon their own country for such local facilities as the accumulation of books affords.

If I am allowed, in conclusion, to state my personal impression respecting the management of the institution thus far, I would only express my concurrence with the plan of active operations adopted by the regents, which has led to the publication of a series of volumes, equal in scientific value to any production of the same kind issued by learned societies anywhere.

The distribution of the Smithsonian Contributions to Knowledge has already carried the name of the Institution to all parts of the civilized world, and conveyed with them such evidence of the intellectual activity of America as challenges everywhere admiration: a result which could hardly be obtained by applying the resources of the institution to other purposes.