

appointed chairman of physics at the Johns Hopkins University. Among many other honors, he was awarded the Rumford medal for researches in light and heat, and the Draper medal for researches in spectroscopy. An anecdote on Rowland relates that he was retained by the Niagara Falls Company as an expert on making reports on the utilization of the power of Niagara Falls. After completing his duties, he found himself in the position of having to sue the company for his fee. At the trial, counsel for the company asked Rowland to state the difference between his status and that of an English engineer concerned in the case. He replied that the Englishman was one of thousands, but he was one of three in the United States. And when asked to name the half-dozen greatest living scientists, he stated under oath, "Helmholtz, Kelvin, Rayleigh, and myself—no others."

—Henry Augustus Rowland being a name upon which attention will inevitably be arrested in any extensive future history of the development of human knowledge, the future reader of that history may ask, "How came such a tree to grow to such proportions in such a soil?" Well, it happened that the duty of tending that tree fell upon a university president of such singular discernment as not to take fright at meeting with a real live man, a man obtrusively and naïvely real and personal; and so the tree was supplied with the desirable fertilizer, and quite indispensable vacancy, without which its growth might have been vigorous, but never could have attained to largeness and symmetry. Had Rowland been a growth of French soil, the publication of his complete works would have been undertaken by the Government, and would have been executed in such style as seemed worthy of a nation in the van of civilization. Let us hope that some complete publication may somehow be made yet. Meantime we receive from the Johns Hopkins University a cheapish reprint ("The Physical Papers of Henry Augustus Rowland") of his experimental works, some of them too much abridged to answer all the purposes of the critical student. The volume contains, besides, some public addresses and other writings which we are thankful to find thus made available. Those works by which Rowland most stirred physical thought, and upon which his place among those American physicists who, since Rumford, have influenced fundamental conceptions (if any other such there be), must mostly depend, are omitted. It is said, in excuse for this strange method, that Rowland himself did not desire the republication of those papers. We are not told why; but Rowland certainly did not depart from the usual type of genius in that his judgment was less sure than that of ordinary men. Those who knew him would not be surprised to hear that he had passed through a phase in which, like Pascal, he thought mathematics an idle amusement. But this should not have influenced the editors.

**76 (19 March 1903) 226**

### A CORRECTION

The editorial reply to this letter is by Peirce in view of his authorship of the notice that Ames criticizes. See also: Burks, *Bibliography*.

Joseph Sweetman Ames (1864-1943) was a widely published author on topics of physics and general science. He began his higher education in 1886 at Johns Hopkins University, and graduated Ph.D. from there in 1890. Ames was well known in academic as well as in scientific circles. He was made an honorary member of the Royal Institute and was a mem-

ber of the National Academy of Sciences. An honorary LL.D. was bestowed upon him by Washington College in 1907.

TO THE EDITOR OF THE NATION:

SIR: My attention has been called to a brief review, in a recent number of the *Nation*, of the Physical Papers of the late Professor Rowland, and, as Secretary of the committee in charge of the publication of these papers, I think it necessary to call your attention to certain misstatements in the article referred to.

In the first place, the reviewer says that the reprints of some of the experimental works are "too much abridged to answer all the purposes of the critical student." As a matter of fact, every published paper dealing with Rowland's experimental work, either from the point of view of theory or results, is reprinted in full in this volume, with the exception of the figures in the *Tables of Wave Lengths*, copies of which Tables, however, accompany each volume. Not one word is omitted. The description of the methods by which these Tables are obtained is published in the volume. It may be that the reviewer is under the impression that the extracts from certain French scientific papers in regard to Professor Rowland's last determination of the Ohm are abstracts of published articles, whereas, in reality, Professor Rowland never published any description of the methods or results of this research.

In the second place, the reviewer refers to "some public addresses and other writings," thus implying, possibly, that there were other similar writings which were not included in the volume. In reality, *all* Professor Rowland's "addresses and other writings" are reprinted.

In the third place, those papers on purely mathematical subjects which are omitted from the volume, four in number, are in no case those which "most stirred Physical thought and upon which his place among those American physicists who since Rumford have influenced fundamental conceptions (if any such there be) must mostly depend." If the reviewer will look for one moment at the lists of the papers omitted, or, better still, if he will read the papers, he will see for himself why they were omitted. It should be noted, moreover, that every paper, mathematical or not, dealing with the fundamental conceptions of Physics, which Professor Rowland published, is, without exception, reprinted in this volume. Opinions may differ in the years to come as to the relative value of Rowland's contributions to science, but there can be no doubt that his thoughts and his experimental investigations in regard to the properties of heat, light, and electricity will always be of permanent value. Every paper published by Professor Rowland bearing in the remotest degree upon the above subjects is included in this volume.

It is a matter of regret that to any one the character of the publication of this volume should seem to have taken a "cheapish" form. It was the effort of the committee to give the volume such a character in respect to paper, type, illustrations, and binding that it would in every way be a fit memorial of their late colleague. As a matter of fact, the volume in its external appearance compares most favorably with the publications of the collected works of Lord Rayleigh, of Hopkinson, of Reynolds, and others which have recently appeared.

It is a pity that the reviewer did not see fit to call attention to certain features of the volume which will make it always useful to all students of physics—such as the publication of many papers which had been entirely lost sight of, and the detailed description of Rowland's wonderful ruling engine, the mechanism of which is here for the first time explained in print.

I am, sir, very truly yours.

J. S. AMES.

JOHNS HOPKINS UNIVERSITY, March 7, 1903.

[We have received from our contributor the following statement concerning this matter.—ED. NATION.]

"Professor Ames's letter convicts me of a grievous mistake of a complex nature. I received a copy of the volume with the request for a note upon it, and very unwisely accepted the commission when it was not in my power to make a sufficiently careful examination of it. The copy sent me was not accompanied by the wave-length determinations for which the name of Rowland is now uppermost; and two misapprehensions of mine, due to my well knowing his insistence on the publication of all details of experimentation, led me to think that these had been omitted in other cases. I had read Rowland's first mathematical memoir, which seemed to me to contain a striking enlargement of conceptions of electricity, and to place him in a higher rank of science than his experimental work. I was aware that there was some controversy in regard to its soundness; but there have been before mathematical works which proved upon examination to be unsound, yet which incontestably advanced human thought in no small measure. If it be true that Rowland's mathematical work is a total wreck and must be consigned to oblivion, I shall be very sorry as an American and as an admirer of the glories of the Johns Hopkins University. No doubt, Rowland will still remain a physicist of very high importance.

"As to the description of the famous ruling machine, I assumed that this gave the working drawings with explanation. If I had looked more carefully at them, I should have seen that this was not their character. It appears that they are new drawings, executed to scale for the purpose of this publication; and this sufficiently evidences the care that has been bestowed upon it. My epithet 'cheapish' marked my general dissatisfaction; but, with Professor Ames's explanation, it reduces itself to an expression of taste merely."

**76 (2 April 1903) 269**

#### NOTES

CSP, identification: Haskell, *Index to The Nation*. See also: Burks, *Bibliography*, Fisch and Haskell, *Additions to Cohen's Bibliography*; MS L 159.229; MS 1465 (draft).

We hardly knew what to expect of Professor Royce's introduction to Fiske's *Cosmic Philosophy* in the new four-volume edition (Houghton, Mifflin & Co.), for surely if anything is foreign to Royce's thought, it is Fiske's. It proves to be,