

# Chapitre 1

## Joseph Sweetman Ames

Joseph Sweetman Ames (1864–1943) graduated from Johns Hopkins University in 1886, then went to Berlin to work in Hermann Helmholtz' laboratory. In 1887 he returned to Hopkins to study spectroscopy with Henry Rowland, working from 1888 to 1891 as an assistant in the latter's laboratory. He defended his thesis in 1890, and became an associate professor of physics at Hopkins in 1891. Ames spent his entire career at Hopkins; he was promoted to professor in 1899, served as provost from 1926 to 1929, and university president from 1929 to 1935. He succeeded Rowland in 1901 as director of the Physical Laboratory.<sup>1</sup>

Ames probably met Poincaré during the physics congress held from 6 to 12 August 1900 in Paris, where he was a member of the US delegation, and delivered a paper on the mechanical equivalent of heat (1900). Poincaré's letter to Ames concerns another student of Rowland's, Harold Pender (§ 45), who was in Paris in order to help resolve his conflict with Victor Crémieu (§ 17) over the reality of the Rowland effect. Pender solicited a \$150 extension of his grant from the executive committee of the an extension of his Carnegie grant in order to prolong his stay in Paris. In particular, Pender wanted to ensure completion of the experiments then in progress, and to demonstrate the disputed Rowland effect before the French Physical Society, which had invited him to its Easter meeting.<sup>2</sup>

### Notes

<sup>1</sup>For accounts of Ames' career see (Crew, 1944) and the *DSB*.

<sup>2</sup>Ames to D.C. Gilman, 27.03.1903, Harold Pender file, Carnegie Institution of Washington. For an overview of the Crémieu-Pender experiments, see the correspondence with Crémieu (§17).

## 1.1 Poincaré à Ames

[Ca. 02.1903]<sup>1</sup>

I congratulate myself more and more in having taken the initiative in bringing to Paris Mr. Pender. The results already obtained do not allow any further doubt that this question, so controverted, is going to be cleared up, most probably according to the views of Mr. Rowland. The experiments of Mr. Pender have been repeated successfully besides they have operated with two disks nus . . . and the results have been still more positive . . . . There remain still further questions to be settled from which it is necessary that Mr. Pender should remain somewhat longer in Paris and it would be very desirable that he should bring before the Society of Physics, after Easter, in connection with Mr. Cremieu, the results obtained.<sup>2</sup> If you can get from the Carnegie Institution a further subvention allowing this prolongation of Mr. Pender's absence all the friends of science will be very grateful.

### **TTrL 1p. Harold Pender file, Carnegie Institution of Washington.**

<sup>1</sup>The document bears a Carnegie Institution date stamp, "MAR 28 1903", and a pencilled annotation, "From DCG", suggesting that the letter was transmitted to Daniel Coit Gilman. Gilman (1831–1908), served as the first President of Johns Hopkins University from 1876 to 1891, and as President of the Carnegie Institution of Washington from 1902 to 1904. The typed transcription begins with the sentence: "Substance of a letter from Professor Poincaré to Prof. Ames."

<sup>2</sup>On these experiments see the correspondence with Victor Crémieu (§ 17). Crémieu and Harold Pender (§ 45) presented the results of their collaboration on 17.04.1903 to the *société française de physique*, confirming those obtained earlier by Pender (1903a).