On the dielectric power of ice

M. A. Perot

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of water; and as the method described in the preceding pages also depends upon the measurement of differences in the rate of rise, the correction would eliminate and would, therefore, not affect the values of the specific heat of aniline as given in Table VII. Again, if there are any errors in the values of the electrical standards upon which my determination of J depends, they also would eliminate during the calculations by which the specific heat of aniline was ascertained. There can, therefore, be no doubt that the value assumed for J (4.198×10^7) is the correct one to be used for the reduction of the observations on aniline.

ON THE DIELECTRIC POWER OF ICE. BY M. A. PEROT.

I published on June 29, 1894, the result of experiments made to determine the dielectric constant of ice by electrical oscillations. In calculating these experiments, which I had carried out as for glass, I made an error due to the external capacity, which in those experiments is altered, the condenser being wholly or partially immersed in the dielectric. M. Blondlot having pointed out the disagreement between his results and those which I had obtained, I have gone through the calculations, and made new experiments, the result of which is given below:—

λ (air).	λ_1 (ice).	$\sqrt{K}$.
91	130	1.43
91	133	1.46
136	186	1.37
136	197	1.44
151	215	1.42
149	214	1.44

Mean $\sqrt{K}=1.43$; $K=2.04$.

—*Comptes Rendus*, October 8, 1894.

ON THE REFRACTION AND DISPERSION OF ELECTRICAL RAYS.

BY E. GARBASSO AND E. ASCHKINASS.

The authors summarize the results of their research as follows:—

We have shown that the rays proceeding from a Hertz's primary conductor may, by means of a prism built up of resonators, be resolved into a spectrum, and draw from this the following conclusions:—

(a) The rays of electrical force emitted are not necessarily to be regarded physically as monochromatic, but as compound, with as much justification as ordinary light.

(b) Helmholtz's theory of colour-dispersion acquires fresh support from our experiments.—*Wiedemann's Annalen*, No. 11, 1894.