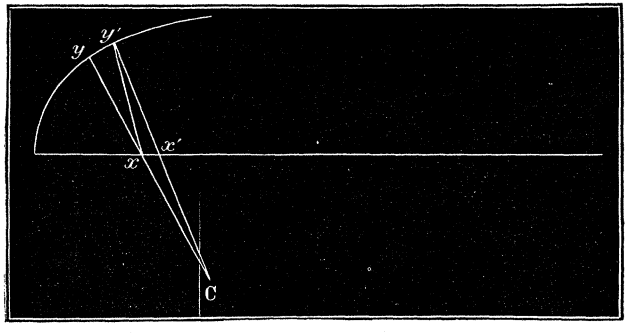
subject is discussed in the same manner as Boltzmann discusses the after-effect of torsion on a fibre, and it is worth remarking that the results of my experiments can be roughly expressed by a formula in which $\phi(t)=\frac{A}{t^{\alpha}}$. For glass No. 5 (soft crown) $\alpha=0{\cdot}65$, whilst for No. 7 (light flint) it is greater; but in the electrical experiment no sign of a definite deviation from the law of superposition was detected.

IV. "Note in correction of an Error in the Rev. Dr. Haughton's Paper 'Notes on Physical Geology. No. V" ("Proc. Roy. Soc.," vol. xxvii, p. 447). By the Rev. SAMUEL HAUGHTON, M.D., Professor of Geology in the University of Dublin, F.R.S. Received October 9, 1878.

In my paper read 20th June last, and published in the "Journal of the Royal Society," there is an error in p. 450 which I wish to correct.

Referring to the geometrical proof of Mr. Darwin's theorem, I state that from cusp to cusp of the cycloidal wabble occupies $152\frac{1}{2}$ days; this is an error, as it should be 305 days, as can be shown geometrically.



Let yx, $y'x'$, be two successive positions of the line joining the axes of rotation and figure; produce them to meet at C, which will be the centre of curvature, because yx and $y'x'$, are normals to the cycloidal arc yy'; it is well known that yC, (radius of curvature) is double yx (chord of generating circle) or double $y'x$; therefore the angle yxy' is double the angle yCy'; but yxy' measures the angular velocity of the wabble, when x is supposed at rest; therefore the angular velocity of yx is only half that of the wabble, if the axis of figure were at rest. Hence in 305 days, yx will turn through 180° only, and not 360°.

This correction, when introduced into my calculation of Mr. Darwin's problem, p. 182, will double the result, and give 19,350 years to represent the 19,200 years, found by Mr. Darwin.

I would wish to add, that Mr. Darwin, in a letter to myself, proposes to call the cycloidal wabble described by him, a "*lopsided wabble*," as distinguished from the simple circular "*wabble*" described by me; the one being caused by continuous motion of the axis of figure, and the other caused by sudden displacement of that axis.

V. "Measurements of Electrical Constants. No. II. On the Specific Inductive Capacities of Certain Dielectrics." Part I. By J. E. H. Gordon, B.A. Camb. Communicated by Professor J. Clerk Maxwell, F.R.S. Received October 21, 1878.

(Abstract.)

A paper of mine with the above title was communicated to the Royal Society by Professor J. Clerk Maxwell, F.R.S., on March 9th, 1878. It was read on March 28th, and an abstract of it appeared in the "Proceedings."*

In the course of the summer it was pointed out to me that owing to a mistake in the formula of calculation all the results were wrong. I, therefore, requested permission to withdraw my paper, in order to recalculate the results. The new values of K arrived at led me to make some determinations of refractive indices and to re-write the theoretical deductions at the close of the paper.

I now beg through Professor Maxwell to present the paper in an amended form, in the hope that it may be found not entirely unworthy of the attention of the Royal Society.

As it would be impossible within the limits of an abstract to give any intelligible account of the new method of experiment (due to Professor Maxwell), which has been employed, I will merely give the table of results, reserving all discussion and explanation until the publication of my paper in full.

I may, however, state that the method is a zero method, that the electrified metal plates never touch the dielectrics, and that the electrification, which is produced by an induction coil, has an electromotive force equal to that of about 2,050 chloride of silver cells, and is reversed some 12,000 times per second.

* *Ante*, vol. xxvii, p. 270.