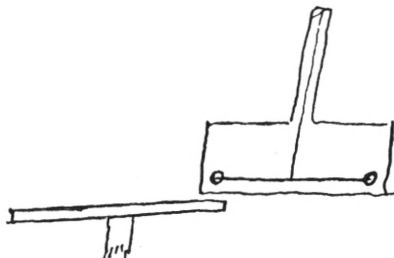


here mentioned the falling body approaches with increasing celerity to the northern pole and is therefore repelled from it. Though this could be considered as a consequence of well known experiments, I have tried some ones [once?] more, particularly related to the subject.



The diagram here joined represents the very simple apparatus. It consists of two parts: a glasscase, containing a balance of torsion, in which two leaden bulbs are fastened at the ends of a wooden rod, and of a magnetic bar fixed on a perpendicular axis, connected with a machinery by which it can be turned round, so that the magnet moves in a plane perpendicular to that represented here by the paper, and very near to the bottom of the glass case. The motion of the magnet produces a considerable deviation of the horizontal

rod from its original situation, towards which it returns through oscillations, when the magnet ceases to be moved.◀

ON THE CHANGES WHICH MERCURY SOMETIMES SUFFERS IN GLASS VESSELS HERMETICALLY SEALED

BY PROF. OERSTED

(REPORT OF THE SIXTEENTH MEETING OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. 1846. NOTICES. P. 37. LONDON 1847)¹

It has been frequently noticed that mercury inclosed in glass tubes, even when those tubes were hermetically sealed, undergoes a remarkable change. It first becomes covered by a thin film of a yellow colour, which adheres to the glass, and becomes eventually nearly black. This has been attributed to oxidation, but the oxidation which would arise from the exceedingly small quantity of atmospheric air which could be contained within the bulbs exhibited by Professor *Oersted* was too small to account for the formation of such a quantity of dark and yellow powder as many of them exhibited. Professor *Oersted* referred the change on the mercury to the action of that metal on the glass of which the bulb was formed. It appears that sulphate of soda is frequently employed in the manufacture of glass, and it is thought that a sulphuret of mercury is formed by the decomposition of the glass itself. This is not however satisfactorily proved, and the subject has only been brought forward that attention might be directed to a subject which appeared to involve some remarkable conditions.

¹ [The same subject is dealt with in: Det kgl. danske Videnskabernes Selskabs Oversigter. 1845. P. 11—12. All the essays of Videnskabernes Selskabs Oversigter are to be found at the end of this volume.]