

On the theory of action by contact—

- (*d*) The principle of conservation of *actual* energy depends on the nature of the atoms.
- (*e*) The conservation of relative motion after impact can only hold in the collision of rigid bodies.
- (*f*) The assumption of rigid atoms is therefore necessary to the conservation of actual energy, which assumption may be made, as it involves nothing inconsistent with nature; but, on the contrary, makes possible the explanation of a wide range of natural phenomena, otherwise inexplicable.
- (*g*) There is no such thing as dead pressure. All forces, pulls, thrusts, frictions, attractions, repulsions, etc., etc., consist of collisions. That there should be action between two bodies without relative motion is inconceivable.
- (*h*) The use of the term potential energy, even when the forces are of the above kind, is inadmissible, since it implies results with regard to which the principle of conservation makes no assertion, and thus leads to false ideas regarding the principle.

