

growth of this conception as applied not only to the energy of visible and measurable mechanical motion, but to all other forces of nature which have in the course of the century not only been measured in terms of this one quantity, but also represented with more or less success as dependent on the energy of specific forms of motion, be this rotatory or vibratory or translational motion, regular and periodic or irregular and disorderly motion. It is clear that such a general abstract view as Maxwell (first among natural philosophers) took of a special problem was only possible after it had been shown how all physical and chemical actions and effects can be reduced to a common measure. The influence of the développement of these views on the kinetic view of nature has been very great. The first and most natural effect of measuring all forces of nature in terms of the energy of motion is to strengthen the kinetic view of natural phenomena. This, however, is not the only view which is possible, or which has been taken, as I shall endeavour to show more fully hereafter. .

The influence of Maxwell's ideas on scientific—nay, even on popular—thought has been very considerable. The main conception around which research, both mathematical and experimental, has moved during the last twenty years is the conception of light as an electromagnetic phenomenon. This view has been much supported and extended by the experiments of Heinrich Hertz, who by ingenious contrivances succeeded in actually exhibiting electro-magnetic waves, and in showing how they differ from light waves merely in length and period, and agree with them so far as