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afforded by the undulatory theory of light is simple and The question, "What becomes of light !" distinct. merges in the more general one, "What becomes of And the answer, on dynamical principles, is, motion?" that it continues for ever. No motion is, strictly speaking, annihilated; but it may be divided, and the divided parts made to oppose and, in point of ultimate effect. counteract each other. A body struck, however perfectly elastic, vibrates for a time, and then appears to sink into its original repose. But this apparent rest (even abstracting from the inquiry that part of the motion which may be conveyed away by the ambient air), is nothing else than a state of subdivided and mutually-compensating motion, in which every molecule continues to be agitated by an indefinite multitude of internally-reflected waves, propagated through it in every possible direction, from every point in its surface on which they successively impinge. The superposition of such waves will, it is easily seen, at length operate their mutual counteraction, which will be the more complete, the more irregular the figure of the body and the greater the number of internal reflections.

(5.) In the case of a body perfectly elastic and of a perfectly regular figure, the internal reflection of a wave once propagated within it in some particular direction might go on for ever without producing mutual destruction; and in sonorous bodies of a highly elastic nature we do in fact perceive it to continue for a very long time. But the least deviation from *perfect elasticity* resolves our conception of the vibrating mass into that of a multitude of inharmonious systems communicating with each other.