

lycopodium-dust, must be a million times bigger still.) Such a grouping is likely to have properties differing not only in degree but in kind from the properties of simple substances.

For it must not be thought that aggregation only produces quantitative change and leaves quality unaltered. Fresh qualities altogether are liable to be introduced or to make their appearance at certain stages—certain critical stages—in the building up of a complex mass (*cf.* p. 71).

The habitability of a house, for instance, depends on its possessing a cavity of a certain size; there is a critical size of brick-aggregate which enables it to serve as a dwelling. Nothing much smaller than this would do at all. The aggregate retains this property, thus conferred upon it by size, however big it may be made after that; until it becomes a palace or a cathedral, when it may perhaps reach an upper limit of size at which it would be crushed by its own weight, or at which the span of roof is