

be truly said that if any difference were discovered it would not be expressed by saying that the amount of matter was different, but simply that "weight" was not so fundamental and inalienable a property of matter as has been sometimes assumed; in which case it is clear that there must be a more fundamental property to which appeal can be made in favour of constancy or persistency or conservation. Now the most fundamental property of matter known is undoubtedly 'inertia'; and the law of conservation would therefore come to mean that the *inertia* of matter was constant, no matter what changes it underwent. But, then, inertia is not an easy property to measure,—very difficult to measure with great accuracy: it is in practice nearly always *inferred* from weight; and in terms of inertia the law of conservation of matter cannot be considered really an experimental fact; it is, strictly speaking, a reasonable hypothesis, an empirical law, which we have never seen any reason to