

possible laws, which might have regulated the motions of bodies.

2. But though we have thus no reason to consider this as the only possible law, we have good reason to consider it as the best, or at least as possessing all that we can conceive of advantage. It is the *simplest* conceivable of such laws. If the velocity had been compelled to change with the time, there must have been a law of the change, and the kind and amount of this change must have been determined by its dependence on the time and other conditions. This, though quite supposable, would undoubtedly have been more complex than the present state of things. And though complexity does not appear to embarrass the operations of the laws of nature, and is admitted, without scruple, when there is reason for it, simplicity is the usual character of such laws, and appears to have been a ground of selection in the formation of the universe, as it is a mark of beauty to us in our contemplation of it.

But there is a still stronger apparent reason for the selection of this law of the preservation of motion. If the case had been otherwise, the universe must necessarily in the course of ages have been reduced to a state of rest, or at least to a state not sensibly differing from it. If the earth's motion, round its axis, had slackened by a very small quantity, for instance, by a hundredth of a second in a revolution, and in this proportion continued, the day would have been already lengthened by six hours in the six thousand years which have elapsed since the history of the world began; and if we suppose a longer period to precede or to follow, the day might be increased to a month or to any length. All the adaptations which depend on the length of the day would consequently be deranged. But this would not be all; for the same law of motion is equally requisite for the preservation of the annual motion of the earth. If her motion were retarded by the establishment of any other law instead of the existing one,