she would wheel nearer and nearer to the sun at every revolution, and at last reach the centre, like a falling hoop. The same would happen to the other planets; and the whole solar system would, in the course of a certain period, be gathered into a heap of matter without life or motion. In the present state of things on the other hand, the system, as we have already explained, is, by a combination of remarkable provisions, calculated for an almost indefinite existence, of undiminished fitness for its purposes.

There are, therefore, manifest reasons, why, of all laws which could occupy the place of the first law of motion, the one which now obtains is the only one consistent with the durability and uniformity of the system;—the one, therefore, which we may naturally conceive to be selected by a wise contriver. And as, along with this, it has appeared that we have no sort of right to attribute the establishment of this law to any thing but selection, we have here a striking evidence, to lead us to a perception of that Divine mind, by which means so simple are made to answer purposes so extensive and so beneficial.

## CHAPTER XII.

## Friction.\*

WE shall not pursue this argument of the last chapter, by considering the other laws of motion in the same manner as we have there considered the

<sup>\*</sup> Though Friction is not concerned in any cosmical phenomena, we have thought this the proper place to introduce the consideration of it; since the contrast between the cases in which it does act, and those in which it does not, is best illustrated by a comparison of cosmical with terrestrial motions.