

to be made upon the universe by our conduct. Hence we must be more specific.

*In the first place, the principle is proved and illustrated by the doctrine of mechanical reaction.*

From the principle long since settled in mechanics, that action and reaction are equal, it will follow that every impression which man makes by his words, or his movements, upon the air, the waters, or the solid earth, will produce a series of changes in each of those elements which will never end. The word which is now going out of my mouth causes pulsations or waves in the air, and these, though invisible to human eyes, expand in every direction until they have passed around the whole globe, and produced a change in the whole atmosphere; nor will a single circumgyration complete the effect, but the sentence which I am now uttering shall alter the whole atmosphere through all future time. So that, as Professor Babbage remarks, to whom we are indebted for the first moral application of this mechanical principle, "the air is one vast library, on whose pages are for ever written all that man has ever said, or woman whispered." Not a word has ever escaped from mortal lips, whether for the defence of virtue or the perversion of the truth, not a cry of agony has ever been uttered by the oppressed, not a mandate of cruelty by the oppressor, not a false and flattering word by the deceiver, but it is registered indelibly upon the atmosphere we breathe. And could man command the mathematics of superior minds, every particle of air thus set in motion could be traced through all its changes, with as much precision as the astronomer can point out the path of the heavenly bodies. No matter how many storms have raised the atmosphere into wild commotion, and whirled it into countless forms; no matter how many conflicting waves have mixed and crossed one another; the path of each pulsation is definite, and subject to the laws of mathematics. To follow it requires, indeed, a power of analysis superior to human; but we can conceive it to be far inferior to the divine.

The same thing is true of the waters. No wave has ever been raised on their bosom, no keel has ever ploughed their surface, which has not sent an influence and a change into every ocean, and modified every wave, that has rolled in upon the farthest shores. As the vessel crosses the deep, the