

other bird, they teach us a great deal, their conditions of life not requiring them to use their wings, they have gradually become useless and merely rudimentary.

But, it may be asked, is it possible that the complicated and perfect organs that we find in the higher animals, the eye, for instance, could have been produced from some simple form by just having small additions continually made to it? And why do we not find every intermediate form; or, if it has been a gradual progress, why have not all simple forms become extinct?

When man has discovered some new principle, or the new application of an old principle, it is generally found that, though new to him, it has long ago been applied and made use of by nature.

We look upon the wonderful development of mechanical power, to which the introduction of the steam engine has given rise, as something quite without a parallel in history. But, if Mr. Darwin is right, a somewhat analogous development has taken place on this earth since the first introduction of a living creature, but, of course, on an immeasurably grander scale, and with more perfect and wonderful results.

If you look at a modern locomotive, which is perhaps the grandest piece of mechanism man has ever produced, and then go back to the first engine, which Stephenson made, and from which all our engines may be said to have descended, what a tremendous difference! But both are arranged on the same general plan, and it has been by making small variations and additions to almost every engine since Stephenson's time that the difference has been created.

Let us go further back, and look at the first steam engine Watt made, and remember that it is from that all our varieties of steam-engine have been developed. What an immense number of species and genera there are now! There are great sea monsters, such as drive the Atlantic steamers, and the smaller fresh-water fish which we see sailing on our lakes and rivers. There is a domesticated variety that turns a rotary brush at the barber's; and others which do not work at all, but, like pet dogs, are only kept for amusement. Some species, like trees, never move from the place where they are first planted; other kinds go rushing about the railways, tearing in pieces

every poor animal that comes in their way. Several species and many intermediate forms have already become extinct.

Though many are highly developed and very complicated, some forms, almost as simple as the original type, still exist in great profusion.

We are like the road locomotive, which does not merely run along rails without any power to turn to the right hand or to the left; for, besides the mechanism and steam, and a person to stop and start it, there is in it an intelligent and responsible being, who, within certain limits can drive the engine which way he chooses—has, in fact, a sort of *moral freedom*.

But if it is true—suppose our relationship to the lower animals was altogether proved—what would happen? Are we, as a rule, so much kinder to our relations that the Society for the Prevention of Cruelty to Animals might at once wind up its affairs? or, to the question—who made you?—could we only answer like Topsy, “I ’spect I grow’d. Don’t think nobody never made me.”

The truth, or otherwise, of the theory must eventually be decided by scientific evidence; but there are several objections often raised against it that cause people to feel a dislike to entertain or consider the idea of its being true.

It has been said that (1) it degrades man; (2) it destroys our faith in the Bible; (3) it puts away all idea of a personal and superintending God in creation.

If rightly considered, I think, it rather tends to do exactly the opposite of all three.

Let us look at each objection separately for a moment.

(1) It degrades man.

People are told that their ancestors were at one time apes, and they instantly jump to the conclusion that we then are *nothing* but a number of highly developed baboons. Of course, any gentleman may hold that glorious idea of himself, if he likes so to do; but, if somebody discovered that my great-great-great-great-grandfather had been a thief and a rascal, do you suppose that I should therefore concur in the assertion “that I was nothing but a highly developed thief and rascal?” No, indeed! If I am an honest man, I am, in no way, the one or the other. I am the very opposite thing. And because we have