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NOTE: Sir William John Macleay (1820-1891) was a pastoralist, politician and patron of science. He was the first president of the society.

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President's address

I would like to draw the attention of our members to a work recently published by Charles Darwin, on a subject which has so far received but little attention at the hands of naturalists. I refer to our earth worms. The publication of this work may induce some of the members of this Society to take the subject up. This work is spoken of in "Knowledge" of 4th November, 1889, as follows:—"No man of science of our day understands better, or applies more thoroughly than Darwin the principle laid down by Lord Bacon, that 'Man, as the minister and interpreter of nature, does and understands as much as his observations on the order of nature permits him, and neither knows nor is capable of more.' To one who rightly apprehends this, the fundamental principle of modern scientific research, small things and great, so only that they illustrate the order of nature, are alike worthy of study. Perhaps the most remarkable result of Darwin's observations is the stupendous work accomplished by creatures so small and weak. It was objected against the views which he published in 1837 that worms could not possibly burrow to a depth of several inches into the fragments of cinders, burnt marl, &c., which had been strewn over the surface of meadow land. But now Darwin is able to speak confidently of their burrowing into the remains of Roman villas and pavements. He shows also how ancient encampments and tumuli have been gradually lowered by the agency of worms. Grass-covered slopes undergo perpetual denudation through their operation,

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the covering of grass remaining all the time intact, and even the inclination of the slope remaining unchanged. It may well seem incredible to the superficial reasoner that creatures like worms - small, weak, and soft-bodied - should produce such results; nay, results far greater in the course of time, changing as they do the entire aspect of a country."

It is this inability, as Darwin well remarks,

"to sum up the effects of a continually recurring cause which has often retarded the progress of science, as formerly in the case of Geology, and more recently in that of the principle of evolution."

When men like Sir John Herschel or Sir Charles Lyell have spoken of the effects of slowly-acting causes in modifying continents and seas, they have been ridiculed by the thoughtless, who cannot see how the downfall of rain, the slow movement of rivers, the play of waves on

shore-lines, can produce such results. In like manner the Biologist is ridiculed who, noting small changes in various races in short periods (or even in periods which to our conceptions seem long), points to the effect of such changes when multiplied during the lapse of those long periods of time of which the earth's crust tells us. But our author has shown how even creatures so tiny and weak as the coral animal have made large islands and long lines of sea-resisting reefs, by constant labour; and now he shows how under our very feet the despised earthworm is changing the form and nature of the land we live on. When we learn that the rich dark mould in which vegetation thrives best is made by worms, we see that not only the aspect of a country, but the condition of its inhabitants, and even its history, have been modified by their work. So that we may accept in its widest significance his remark that "it may be doubted whether there are many other animals which have played so important a part in the history of the world as have these lowly creatures."