

RECORD: Anon. 1882. [Review of] The formation of vegetable mold through the action of worms, with observations of their habits: Darwin and the worm. *Chicago Daily Tribune* (14 Jan), p. 9.

REVISION HISTORY: Transcribed by Christine Chua and edited by John van Wyhe 4.2020. RN1.

NOTE: See *The formation of vegetable mould, through the action of worms, with observations on their habits*. New York: Appleton, F1363.

[page] 9

Darwin and the worm.

Mr. Charles Darwin, who is entitled to be called the greatest of living naturalists and scientific generalizers, has in his latest work, "The Formation of Vegetable Mold Through the Action of Worms, with Observations of Their Habits," shown how interesting a scientific study of even a very unpromising subject can be made. It is the result of over forty years' close observation, and in it he shows how the despised earthworm, which is of interest to most persons only as material for fish-bait, serves a very important purpose and is the prime agency in the production of some very conspicuous results that would naturally be attributed to much less humble instrumentalities.

It was in 1837 that Mr. Darwin first published his views as to the formation of vegetable mold and the agency of worms in its production, and ever since that time he has made the matter a subject of observation.

His views so far as they were noticed at first did not appear to receive much support from geologists, but the result of over forty years' study fully bear them out. The reader will have no hesitation in agreeing with Mr. Darwin's conclusions. Yet in themselves these appear somewhat remarkable. The author says, speaking of worms:

"In many parts of England a weight of over ten tons of dry earth annually passes through their bodies and is brought to the surface on each acre of land; so that the whole superficial bed of vegetable mould passes through their bodies in the course of every few years. From the collapsing of the old burrows the mould is in constant though slow movement... When we behold a wide, turf-covered expanse, we should remember that its smoothness, on which so much of its beauty depends, is mainly due to all the inequalities having been slowly levelled by worms. It is a marvelous reflection that the whole of the superficial mould over any such expanse has passed, and will again pass, every few years through the bodies of worms. The plough is one of the most ancient and most valuable of mans inventions; but long before he existed the land was in fact regularly ploughed, and still continues to be thus ploughed by earth-worms. 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 organised creatures.

Mr. Darwin shows in his study that low in the animal kingdom as worms are they are not by any means altogether devoid of will and intelligence, but that they act with some judgment according to circumstances, and show a considerable degree of selection in their methods at

times. A portion of the book is itself a very interesting contribution to comparative psychology. Worms are also of interest to the archaeologist, for it is to their agency that he owed the preservation of many valuable relics of antiquity. The old Roman villas, etc., that have been exhumed in several places in England owe the high preservation of their tessellated pavements and other features to the covering layer of mold brought up by the worms. Yet these earth making animals are at times destructive to massive walls by undermining them, and, while they may preserve some relics, they also are important agencies in the destruction of others.

Taken altogether, there are few recent works that combine instructions of a high scientific order with an easy and entertaining style as much as this one. The observations on which it is based were made entirely on the Eastern Continent, and it would be of interest to its many readers in this country to see how far they correspond with facts observed here. There are many problems, such as that of the origin of the prairies, etc., which such observations might possibly help to solve.

The work is published by D. Appleton & Co., New York.