

The Earliest Geological Essay from Shropshire? “Thoughts on the Formation of the Earth” by a Farmer

Hugh Torrens¹

TORRENS, H.S. (2007). The Earliest Geological Essay from Shropshire? “Thoughts on the Formation of the Earth” by a Farmer. *Proceedings of the Shropshire Geological Society*, **12**, 53-55. Based on a scanned copy of the review of a book published in Shrewsbury in 1802, which first appeared in the *British Critic* of 1804, volume 23, pages 447 to 448. The original book has yet to be located but, if found, may well prove to be the first geological essay to be published in, or written about, Shropshire.

The identity of “a Farmer” is unknown, and a challenge is to identify who he/she was. It is interesting to speculate to what extent this book might have influenced other pioneer geologists, in particular Arthur Aikin who published his first paper on the geology of Shropshire in the *Transactions of the fledgling Geological Society of London* in 1811, and was one of its founder members (in 1807), and later the likes of the Reverend Thomas Lewis who came to live in the area in 1827 and subsequently greatly influenced the studies made famous by Roderick Murchison leading to defining the Silurian System, and the young Charles Darwin who was born in Shrewsbury in 1809, just a few years after the book’s publication. But can it have influenced anyone if no copy survived?

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1. INTRODUCTION

This article primarily consists of a scanned copy of the review of a book published in Shrewsbury in 1802, entitled “Thoughts on the Formation of the Earth” by a Farmer. The anonymous review was published in the *British Critic* of 1804, volume **23**, pages 447 to 448. The original book has yet to be located but, if found, may well prove to be the first geological essay to be published in, or written about, Shropshire.

In a piece in *Geoscientist* (Torrens, 2006) the real problem was raised of all such printed books, of which no copies are known to have survived! This has always seemed to be one of those major scholarly frustrations which the advent of the computer must be able to help overcome, although the writer is not yet aware of any specific efforts to do so. In his 2006 article, Torrens recorded how in a 1999 Cambridge lecture he had then listed eight such items, of which three have since been found. One other was the book about which he was then writing, William Smith's long lost (since 1807) *Description of Norfolk, its Soils and Substrata*. This is now known to have been produced as only a single, quite unique, printer's proof, and which had just been discovered (in a second hand shop in Great Yarmouth!). But amongst those still missing is the one contained in the current article,

apparently the first Shropshire geology book, published in 1802. This is still missing....

The identity of the author, “a Farmer”, is unknown, and a further challenge is to identify who he/she was. It is interesting to speculate to what extent this book might have influenced other pioneer geologists, in particular Arthur Aikin who published his first paper on the geology of Shropshire in the *Transactions of the fledgling Geological Society of London* in 1811, and was one of its founder members (in 1807), and later the likes of the Reverend Thomas Lewis who came to live in the area in 1827 and subsequently greatly influenced the studies made famous by Roderick Murchison leading to defining the Silurian System, and the young Charles Darwin who was born in Shrewsbury in 1809, just a few years after the book’s publication. But can it have influenced anyone if no copy survived?

The present author would be delighted if anyone can inform him as to the whereabouts of a copy of the book by “a Farmer” or otherwise enlighten him as to who this person was.

ACKNOWLEDGEMENTS

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The review of "Thoughts on the Formation of the Earth" by a Farmer published in Shrewsbury in 1802, as it appeared in the *British Critic* of 1804, volume 23, pages 447 to 448.

ART. 37. *Thoughts on the Formation of the Earth. By a Farmer.*
4to. 28 pp. Shrewsbury. 1802.

A short Preface, full of apologies, is prefixed to the four chapters into which this small work is divided. Acknowledging himself ignorant of the theories which have been offered to the public by other writers on the same vast and abstruse subject, this author says, that an abridged translation of Buffon's work was the only book of the kind he had perused when the present tract was nearly completed: sensible, therefore, of the numerous imperfections with which his work is likely to be replete, he apologizes for intruding on the public his crude ideas relative to the formation of the earth.

The reader, indeed, will easily perceive, that his ideas are crude and indeed indigestible; but, after a full and modest acknowledgment of the probability of its numerous imperfections, it would be ungenerous to examine the work with peculiar minuteness and severity; we shall therefore only endeavour to give our readers some idea of this author's attempt at theory, by a concise statement of its most relevant parts.

In the commencement of the first chapter, he says:

"To the appearance of the high ground called Whitcliff, near the town of Ludlow, in Shropshire, the following ideas owe their existence. These extensive hills chiefly consist of a hard grey sand-stone, abounding with the wreck of fishes: among those of the crustaceous and testaceous kinds, I found lobsters, cockles, razor-shells, barnacles, and oysters; also a number of broken stones, apparently petrified; fishes of the finny tribe, are confusedly scattered over the face of the country. From the deposition of these phænomena, I have endeavoured to reason back to the formation of the earth, and have drawn therefrom the subsequent conclusions."

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The hypothesis which he has formed on the tottering foundation of these partial observations is, that the terraqueous globe always contained the same quantity of water as it does at present; but that once, the solid mass of matter was soft, and smoothly globular, not full of inequalities, as it is at present; and that then it occupied the parts nearest to the centre of the whole; consequently the water surrounded it every where. In this state of things, the only living inhabitants of the globe were those whose exuvizæ, or shells, &c. are now found upon hills and plains, in different parts of the world. This author further supposes, that afterwards, by the agitation and blending of its different parts, "a general fixation of the rocky matter took place; and did (as salt made one of its principal constituent parts) in its transmutation from fluidity to stony firmness, give itself another figure. Thus it contracted in most places now covered by the sea, and pushed itself forward where it appears above its surface; and the water, rolling off from the projecting parts, found itself a resting place on the indented sides; and thus again restored the spherical form of the planet, so far as its quantity would allow."

The land thus emerged from the sea, was naturally mixed with those marine shells, petrifications, &c. which are now to be found upon hills and plains. The creation of the human species, and other land animals, as also of plants, must have taken place subsequent to the above-mentioned emersion.

The title of the second chapter is, *On the Probability of the Land's being again submerged in the Ocean.* That this event is likely to take place at some future period, this author is led to believe, from the constant falling of earthy matter from the mountains to the plains, and thence to the sea; by which means at last, the whole of the land, which now projects above the level of the sea, will be carried to the bottom of the latter; and, of course, the water will again cover all the surface of the globe.

The third chapter contains a recapitulation of the contents of the two preceding chapters.

In the fourth chapter, the author endeavours to reconcile to his hypothesis a few phenomena, which might be urged against it. The principal of these facts is, that in certain places, trees and other vegetable parts are found beneath the layers of marine productions; but "this strange arrangement", he says, "of stratified matter may, in some places, owe its position to land slips; it has often happened, that the sides of hills have slid down into the plain, and covered all the subjacent surface." P. 24.

He also attributes the above-mentioned conformation to the action of earthquakes, and other convulsions of the globe. A rough sketch or map of the world is, by way of illustration, prefixed to the title-page of the tract.

The history of Earth concerns the development of planet Earth from its formation to the present day. Nearly all branches of natural science have contributed to understanding of the main events of Earth's past, characterized by constant geological change and biological evolution. The geological time scale (GTS), as defined by international convention, depicts the large spans of time from the beginning of the Earth to the present, and its divisions chronicle some definitive events of Earth history. The history of geology is concerned with the development of the natural science of geology. Geology is the scientific study of the origin, history, and structure of the Earth. Some of the first geological thoughts were about the origin of the Earth. Ancient Greece developed some primary geological concepts concerning the origin of the Earth. Additionally, in the 4th century BC Aristotle made critical observations of the slow rate of geological change. He observed the composition of the land and Some of the first geological thoughts were about the origin of the Earth. Ancient Greece developed some primary geological concepts concerning the origin of the Earth.Â This questioning represented a turning point in the study of the Earth. It was now possible to study the history of the Earth from a scientific perspective without religious preconceptions. With the application of scientific methods to the investigation of the Earth's history, the study of geology could become a distinct field of science. To begin with, the terminology and definition of what constituted geological study had to be worked out.