

---

# **A Geological Sketch of the Vicinity of Hastings**

**Fitton William Henry**

---

**Title: A Geological Sketch of the Vicinity of Hastings**

**Author: Fitton William Henry**

**This is an exact replica of a book. The book reprint was manually improved by a team of professionals, as opposed to automatic/OCR processes used by some companies. However, the book may still have imperfections such as missing pages, poor pictures, errant marks, etc. that were a part of the original text. We appreciate your understanding of the imperfections which can not be improved, and hope you will enjoy reading this book.**









A  
GEOLOGICAL SKETCH  
OF  
THE VICINITY  
OF  
HASTINGS.

By WILLIAM HENRY FITTON,  
M.D., V.P.G.S., F.R.S.

---

LONDON:

PRINTED FOR

LONGMAN, REES, ORME, BROWN, GREEN, AND LONGMAN;  
AND G. WOOL, HASTINGS.

---

1833.



THE following pages were drawn up at the request of some near relatives of the author who reside at Hastings, and printed to form a part of a new edition of Wool's 'GUIDE TO HASTINGS AND ST. LEONARD'S;' but having been insensibly extended to a greater length than seemed to be adapted to that Work, it has been thought better to publish them apart.

This explanation will account for the form and style of the present little volume,—for the omission of some topics, and the very brief discussion of others,—which, under different circumstances, would have been treated of more fully.

W. H. F.

*London, December 1832.*



ERRATA.

In the wood-cuts, at pages 2 and 8, the upper stratum, marked '1, 2,' is intended to denote,—1, *The Chalk*; and 2, *The Upper Green-sand*, into which the chalk passes insensibly at the lower part.

Page 11, Note, for 'M. de la Beche' read 'Mr. De la Beche.'

— 19, line 13, for '3' read '2'.

## CONTENTS.

	Section.	Page.
GENERAL STRUCTURE . . . . .	1—11	1—10
LIST OF STRATA . . . . .	12	10
Progress of Inquiry . . . . .	13	12
<i>Chalk and Upper Green-sand</i> . . . . .	18—24	17—22
Brighton, to Beachy Head, and Seahouses . . . . .	18	17
Lewes,—Mr. Mantell's Museum . . . . .	25	22
<i>Gault and Lower Green-sand</i> . . . . .	26—30	23—28
The Coast near Folkstone . . . . .	26	23
Gault . . . . .	27, 28	23—25
Lower Green-sand and its subdivisions . . . . .	29	25
<i>The WEALDEN</i> ;—Strata, Nos. 5, 6, and 7 . . . . .	31—32	28—30
The Coast near Hastings . . . . .	33	30
<i>Weald-clay</i> . . . . .	33—38	30—33
<i>Hastings-sands</i> . . . . .	39	33
Order of the Beds in Sussex . . . . .	41	35

	Section.	Page.
<i>(Hastings-sands continued.)</i>		
Sand and Sand-rock, and		
Calciferous Grit . . . . .	42—51	38—45
Bexhill, Horsted . . . . .	42	38
Sand-rock of Hastings . . . . .	43	<i>ib.</i>
Calciferous Grit . . . . .	44	39
White-rock . . . . .	45	41
Höllington . . . . .	46	<i>ib.</i>
St. Leonard's . . . . .	47, 48	42, 43
East of the Forest-ridge . . . . .	49	43
Tilgate Forest . . . . .	50	<i>ib.</i>
Isle of Wight . . . . .	51	45
Variegated-clay and Sand . . . . .	52—54	45—48
Lee-Ness Point . . . . .	52	45
The Haddocks . . . . .	53	46
Granular or Pisolitic		
Iron-ore . . . . .	54	48
Slaty-clay and Shale, with		
Iron-ore . . . . .	55—60	48—56
Trials for Coal . . . . .	55	48
Lowest Strata of the		
Coast . . . . .	56	49
Ashburnham Beds . . . . .	57	50
—————, places		
of their occurrence . . . . .	58	52
Lowest Strata of Sussex . . . . .	59	53
Lowest Limestone . . . . .	60	54

CONTENTS.

vii

	Section.	Page.
<i>Purbeck Strata</i> . . . . .	61	56
Limited extent of the Wealden . . . . .	62	<i>ib.</i>
Fossils of the Wealden . . . . .	63—76	59—72
Plants . . . . .	64	59
Animal Remains . . . . .	65—76	61—72
Fishes . . . . .	65	61
Birds . . . . .	<i>ib.</i>	<i>ib.</i>
Reptiles . . . . .	66	<i>ib.</i>
Megalosaurus . . . . .	67	62
Teeth . . . . .	68	<i>ib.</i>
Iguanodon . . . . .	69	64
Teeth . . . . .	70	65
New Saurian Reptile . . . . .	70*	67
Animals without vertebræ . . . . .	71	68
Crustacea,—		
Cypris . . . . .	72	<i>ib.</i>
Shells . . . . .	73—75	69—71
Bivalves,— <i>Corbula</i> ;		
<i>Tellina</i> ; <i>Cyclas</i> ;		
<i>Unio</i> ; <i>Mytilus</i> ;		
<i>Ostrea</i> . . . . .	73	69, 70
Univalves,— <i>Bulla</i> ;		
<i>Melanopsis</i> ; <i>Paludina</i> ; <i>Neritina</i> . . . . .	74	70, 71
General Remarks . . . . .	75	71
Connexion of the Fossils with Climate . . . . .	76	<i>ib.</i>
<i>Portland Strata</i> . . . . .	77—82	73—79
List of Beds . . . . .	78	73