PRINCIPLES OF GEOLOGY.

"Amid all the revolutions of the globe the economy of Nature has been uniform, and her laws are the only things that have resisted the general movement. The rivers and the rocks, the seas and the continents have been changed in all their parts; but the laws which direct those changes, and the rules to which they are subject, have remained invariably the same."—PLAYFAIR, *Illustrations of the Huttonian Theory*, § 374.

T. Bradley. Sc.

Present state of the Temple of Serapis at Puzzuoli.

London. Published by John Murray, Albemarle St. June. 1830.

PRINCIPLES

OF

GEOLOGY,

BEING

AN ATTEMPT TO EXPLAIN THE FORMER CHANGES OF THE EARTH'S SURFACE,

BY REFERENCE TO CAUSES NOW IN OPERATION.

BY

CHARLES LYELL, Esq., F.R.S.

FOR. SEC. TO THE GEOL. SOC., &c.

IN TWO VOLUMES.

VOL. I.

LONDON:

JOHN MURRAY, ALBEMARLE-STREET.

MDCCCXXX.

LONDON:
Printed by WILLIAM CLOWES,
Stamford Street.

CONTENTS.

PAGE

CHAPTER VIII.

CHAPTER IX.

CHAPTER X.

CHAPTER XI.

CHAPTER XIX.

CHAPTER XX.

CHAPTER XXI.

CHAPTER XXV.

CHAPTER XXVI.

ERRATA.

Page	35	*line*	2	*from*	top,	*for*	or	*read*	and
—	35	—	13	—	bottom,	—	Alp	—	Alps
—	150	—	12	—	top,	—	law	—	laws
—	154	—	11	—	do.,	—	Of	—	In
—	190	—			heading	—	LOUISLAND	—	LOUISIANA
—	226	—			do.	—	DELTA	—	DELTAS
—	326	—	6	—	bottom	—	Pl. 3	—	Pl. 2.

LIST OF PLATES AND WOOD-CUTS

IN

THE FIRST VOLUME.

PLATES.

Frontispiece.—This representation of the present state of the Temple of Serapis has been carefully reduced from that given by the Canonico Andrea de Jorio in his 'Ricerche sul Tempio di Serapide, in Puzzuoli.' Napoli, 1820.

Plate 1., *fig.* 1.—Shewing that a chain of volcanic vents surrounds the Asiatic Islands, in the same manner as a continuation of the same line skirts the eastern borders of the continent of Asia. This plate is copied from plate 13 of Von Buch's Phys. Besch. der Canarischen Inseln. Berlin, 1825. The position however of some of the volcanos, and the outline of several of the islands, has been corrected.

Fig. 2.—Shewing the direction of the trachytic islands from N.W. to S.E. parallel to the principal mountain-chains of Greece, as also to the Grecian islands which constitute a continuation of the mountains of the main-land, and are of the same mineral composition. This plate is also copied from Von Buch, plate 12, p. 318.

Plate 2, *fig.* 1.—View of the islands of Ischia and Procida, with part of the coast of Misenum, taken from part of plate 17 of Sir W. Hamilton's Campi Phlegræi.

Fig. 2.—Map of the Volcanic district of Naples. This map is copied from one constructed by G. P. Scrope, Esq., to illustrate a memoir in the Geol. Trans. vol. ii., part 3, from unpublished maps of Captain Smyth, R.N., p. 326.

WOOD-CUTS.