

CONTENTS.

CHAPTER I.

INTRODUCTION.

The Question of a Bathymetrical Limit to Life.—The general Laws which regulate the Geographical Distribution of Living Beings.—Professor Edward Forbes' Investigations and Views.—Specific Centres.—Representative Species.—Zoological Provinces.—Bearings of a Doctrine of Evolution upon the Idea of a 'Species,' and of the Laws of Distribution.—The Circumstances most likely to affect Life at great Depths : Pressure, Temperature, and Absence of Light Page 1

CHAPTER II.

THE CRUISE OF THE 'LIGHTNING.'

Proposal to investigate the Conditions of the Bottom of the Sea.—Suggestions and Anticipations.—Correspondence between the Council of the Royal Society and the Admiralty.—Departure from Stornoway.—The Færoe Islands.—Singular Temperature Results in the Færoe Channel.—Life abundant at all Depths.—*Brisinga coronata*.—*Holtenia carpenteri*.—General Results of the Expedition Page 49

APPENDIX A.—Particulars of Depth, Temperature, and Position at the various Dredging Stations of H.M.S. 'Lightning,' in the Summer of 1868 ; the Temperatures corrected for Pressure Page 81

CHAPTER III.

THE CRUISES OF THE 'PORCUPINE.'

The Equipment of the Vessel.—The first Cruise, under the direction of Mr. Gwyn Jeffreys, off the West Coast of Ireland and in the Channel between Scotland and Rockall.—Dredging carried down to 1,470 fathoms.