## PREFACE.

THESE two volumes consist chiefly of an abstract of the less technical portions of my own journal for the first year of the voyage of the *Challenger* (1873), and the early part of the fourth year (1876), when she again traversed the Atlantic on her way home. With these I have incorporated some of the more novel results of the observations of my colleagues, and I have added, usually in the form of Appendices, such Meteorological Tables, Tables of Depths and of Sea-temperatures, and Tables of Specific-gravity Determinations, as shall be sufficient to place in the hands of our fellow-workers in the field of Physical Geography, at all events, an abstract of the data on which our conclusions and speculations are founded, and enable them to judge for themselves.

I had much hesitation in attempting to prepare these volumes for publication at sea. For the last four years the duties of each day have nearly fully occupied our time: our minds have been continually distracted by new impressions and by the necessity of devoting undivided attention to new objects of interest. Ship-life is generally unfavorable to steady work; and during a great part of the time the motion of the ship makes it impossible to have even the limited space at one's command in his cabin, littered with papers and journals and memoranda in the orderly confusion which is inseparable from comfortable literary work. Although there was a reference