



W. HILL sc.

*Mary Seacole.*

*From a drawing by James R. Swinton. Eng. 1848.*


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# PHYSICAL GEOGRAPHY.

BY MARY SOMERVILLE,

AUTHOR OF THE 'CONNEXION OF THE PHYSICAL SCIENCES,'  
'MECHANISM OF THE HEAVENS,' ETC. ETC.

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*FIFTH EDITION, THOROUGHLY REVISED.*  
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BY THE SAME AUTHOR.

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TO

SIR JOHN F. W. HERSCHEL, BART., K.H.,

*&c.    &c.    &c.*

DEAR SIR JOHN,

I HAVE much pleasure in again availing myself of your permission to inscribe this book to you, as it gives me an opportunity of assuring you once more of my admiration of your talents, my high appreciation of the services you have conferred upon science, and of my sincere estimation of your friendship.

I remain, with great regard,

Yours truly,

MARY SOMERVILLE.

*La Spezia, 1862.*

## PREFACE.

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DURING the few years that have passed since the last edition of this book was published, the activity of the age has been so great that it is difficult to keep up with the progress of the sciences. The requisite information for bringing down the work to the present time has been obtained chiefly from the publications of the Royal Geographical Society of London; various journals, both British and foreign; the narratives of the recent expeditions in British America, Central Africa, Australia, Manchouria, and China; the new edition of Commander Maury's 'Physical Geography of the Ocean;' Mr. Mallet's work on Earthquakes, &c. The author has great pleasure in acknowledging her obligations to Sir Roderick Murchison, who has kindly revised the Geological portion; to Professors Secchi, Owen, and Elie de Beaumont; to Mr. Hunt, Curator of the Mining Records at the Government School of Mines, who has furnished valuable statistical data on the mineral riches of Great Britain; and especially to that distinguished Geographer, Mr. Alex. Keith Johnston, whose 'Royal Atlas of Modern Geography,' recently published, and his admirable 'Physical Atlas of Natural Phenomena,' form such beautiful and perfect monuments of geographical science. To her friend Mr. Pentland the author offers her sincere thanks for his kindness in again carrying this work through the press during her absence from England.

*La Spezzia, 1862.*