

**STORIES OF OUR MOTHER  
EARTH. WESTERN SERIES  
OF READERS - VOL. VI**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649713011

Stories of Our Mother Earth. Western Series of Readers - Vol. VI by Harold W. Fairbanks

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**HAROLD W. FAIRBANKS**

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VERNAL FALLS, YOSEMITE VALLEY.

WESTERN SERIES OF READERS — VOL. VI

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# Stories of Our Mother Earth

BY

HAROLD W. FAIRBANKS, PH. D.



SECOND EDITION  
(FOURTH THOUSAND)

SAN FRANCISCO  
THE WHITAKER & RAY COMPANY  
(INCORPORATED)

1899

621418

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## INTRODUCTION.

NATURE study is deservedly attracting more and more attention in the schools, but the most of the aids for teachers and pupils have been limited to a presentation of organic nature, while the wide and fully as important field of inorganic nature has been very much neglected. With the hope of supplying, to some extent, the existing lack, this little book is presented for the use of grammar-grade pupils.

It has been the opinion of some educators that children are not as quickly or as easily interested in rocks, minerals, and the processes which are changing the surface of the earth, as in plants and animals. I believe, however, that where the experiment has been well tried, all phases of nature with which the child comes in contact, have been found to be equally interesting and instructive.

It is undoubtedly true that the study of specimens by themselves is largely devoid of interest. Children want to know the relation existing between things in the world about them. I am thoroughly convinced also that they are capable of understanding many of the processes involved in the shaping of the earth, but because of the idea that the subject is too difficult, or from lack of proper familiarity with nature on the part of the teacher, these inorganic nature studies are more often neglected.

The majority of children leave school at, or before, the completion of the grammar grades, and for these the great realm of inorganic nature has too often no meaning. We must reach these and give them at least some correct ideas of the origin and meaning of the common things about them.

In mountainous regions especially, where mining is often such an important industry, and physical nature seems to work



more energetically, it is particularly desirable that the children should go out from school with some living knowledge of their surroundings. They should know something of those aspects of nature with which they have to deal their whole lives.

I do not wish to unduly emphasize the economic aspect of education at the expense of the so-called cultural, but I do maintain that the education of the child should bear some relation to his life's surroundings, and if, as is the case with nature studies, this education is cultural as well as economic, then so much the better. Those who pass their lives in the mountains with the rocks and minerals all about them, and the processes of disintegration, erosion, etc., actively at work, should be able, on leaving school, to interpret the more simple of these phenomena in a rational manner.

Nature study from books cannot be a success. Books should only direct to nature herself. Neither should nature study be an addition to already crowded courses but should supplant, especially in geography, much which is still too often taught irrationally and mechanically.

It has been my purpose in the preparation of the following chapters to present in a simple manner, some elementary conceptions in geology, mineralogy, and physical geography. While the different topics are illustrated by examples from the Pacific Coast, yet the most of them are of such a nature as to be applicable to any section of the country.

The Pacific Coast is particularly rich in illustrative material for the study of inorganic nature, but up to the present time little of this material has been put in such shape as to be available for the use of schools.

If the subjects presented here should prove helpful, even in a small degree, to teachers and pupils, and arouse in them a desire to know more of the processes of nature going on all about, the purpose of the book will have been accomplished.

HAROLD W. FAIRBANKS,  
Berkeley, California.

May 15, 1899.

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