

# **THE FAIRY-LAND OF SCIENCE**

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The Fairy-Land of Science by Arabella B. Buckley

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**ARABELLA B. BUCKLEY**

**THE FAIRY-LAND  
OF SCIENCE**



FIG. 29.



GLACIER CARRYING DOWN STONES. See p. 119.

*Frontispice.*

THE  
FAIRY-LAND OF SCIENCE.

BY

ARABELLA B. BUCKLEY, Fisher

AUTHOR OF 'A SHORT HISTORY OF NATURAL SCIENCE,'  
'BOTANICAL TABLES FOR YOUNG STUDENTS,' ETC.

ILLUSTRATED.

~~~~~  
" For they remember yet the tales we told them  
Around the hearth, of fairies, long ago,  
When they loved still in fancy to behold them  
Quick dancing earthward in the feathery snow.

" But now the young and fresh imagination  
Finds traces of their presence everywhere,  
And peoples with a new and bright creation  
The clear blue chambers of the sunny air."

*Folk Lore.*

~~~~~  
NEW YORK:  
D. APPLETON AND COMPANY,  
1, 3, AND 5 BOND STREET.  
1888.

SG

## PREFACE.

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THE Ten Lectures of which this volume is composed were delivered last spring, in St. John's Wood, to a large audience of children and their friends, and at their conclusion I was asked by many of those present to publish them for a child's reading book.

At first I hesitated, feeling that written words can never produce the same effect as *viva-voce* delivery. But the majority of my juvenile hearers were evidently so deeply interested that I am encouraged to think that the present work may be a source of pleasure to a wider circle of young people, and at the same time awaken in them a love of nature and of the study of science.

The Lectures have been entirely rewritten from the short notes used when they were delivered. With the exception of the first of the series, none of them have any pretensions to originality, their object being merely to explain well-known natural facts in simple and pleasant language. Throughout the whole book I have availed myself freely of the leading popular works on science, but have found it impossible to give special references, as nearly all the

matter I have dealt with has long been the common property of scientific teachers.

I am much indebted to Mr. J. Cooper for the zeal and assiduity he has shown in carrying out my suggestions for illustrations. All the engravings, with one exception, were executed under his superintendence.

ARABELLA B. BUCKLEY.

*Christmas, 1878.*



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# THE FAIRY-LAND OF SCIENCE.

## LECTURE I.

HOW TO ENTER IT; HOW TO USE IT; AND HOW  
TO ENJOY IT.



HAVE promised to introduce you to-day to the fairy-land of science,— a somewhat bold promise, seeing that most of you probably look upon science as a bundle of dry facts, while fairy-land is all that is beautiful, and full of