

Jacob Abbott

Rollo's Philosophy. [Air]

EAN 8596547366195

DigiCat, 2022

Contact: <u>DigiCat@okpublishing.info</u>



TABLE OF CONTENTS

	\Box			۸,	\frown	_	
\mathbf{P}	к	ь.		71		_	
	<u> </u>	_	. ,	<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>	_	

CHAPTER I.

CHAPTER II.

CHAPTER III.

CHAPTER IV.

CHAPTER V.

CHAPTER VI

CHAPTER VII.

CHAPTER VIII.

CHAPTER IX.

CHAPTER X.

CHAPTER XI.

CHAPTER XII.

the ROLLO PHILOSOPHY

AIR.

CHAPTER I. LOST IN THE SNOW.

QUESTIONS.

CHAPTER II. FLYING.

QUESTIONS.

CHAPTER III. VALVE MAKING.

QUESTIONS.

CHAPTER IV. EXPERIMENTS.

QUESTIONS.

CHAPTER V. PRESSURE.

QUESTIONS.

CHAPTER VI. BALLOONING.

QUESTIONS.

CHAPTER VII. PHILOSOPHICAL DISCUSSION.

QUESTIONS.

CHAPTER VIII. TASKS.

QUESTIONS.

CHAPTER IX. BURNING.

QUESTIONS.

CHAPTER X. GRAVITATION.

QUESTIONS.

CHAPTER XI. AIR IN MOTION.

QUESTIONS.

CHAPTER XII. AIR AT REST.

QUESTIONS.

PREFACE.

Table of Contents

The main design in view, in the discussions which are offered to the juvenile world, under the title of The Rollo Philosophy, relates rather to their effect upon the little reader's habits of thinking, reasoning, and observation, than to the additions they may make to his stock of knowledge. The benefit which the author intends that the reader shall derive from them, is an influence on the cast of his intellectual character, which is receiving its permanent form during the years to which these writings are adapted.

The acquisition of knowledge, however, though in this case a secondary, is by no means an unimportant object; and the discussion of the several topics proceeds accordingly, with regularity, upon a certain system of classification. This classification is based upon the more obvious external properties and relations of matter, and less upon those which, though they are more extensive and general in their nature, and, therefore, more suitable, in a strictly-scientific point of view, for the foundations of a system, are less apparent, and require higher powers of generalization and abstraction; and are, therefore, less in accordance with the genius and spirit of the *Rollo* philosophy.

As teachers have, in some cases, done the author the honor to introduce some of the preceding works of this class into their schools, as reading books, &c., considerable reference has been had to this, in the form and manner of the discussion, and questions have been added to facilitate

the use of the books in cases where parents or teachers may make the reading of them a regular exercise of instruction.

CHAPTER I.

Table of Contents

- Page.
- Lost in the Snow, 9

CHAPTER II.

Table of Contents

• Flying, 19

CHAPTER III.

Table of Contents

• Valve Making, 40

CHAPTER IV.

Table of Contents

• Experiments, 51

CHAPTER V.

Table of Contents

• Pressure, 64

CHAPTER VI

Table of Contents

• Ballooning, 79

CHAPTER VII.

Table of Contents

• Philosophical Discussion, 94

CHAPTER VIII.

Table of Contents

• Tasks, 108

CHAPTER IX.

Table of Contents

• Burning, 121

CHAPTER X.

Table of Contents

Gravitation, 143

CHAPTER XI.

Table of Contents

• Air in Motion, 158

CHAPTER XII.

Table of Contents

• Air at Rest, 178

ROLLO PHILOSOPHY

Table of Contents

AIR.

Table of Contents

CHAPTER I. LOST IN THE SNOW.

Table of Contents

ONE pleasant morning, very early in the spring, Rollo's cousin Lucy came to call for Rollo to go on an expedition, which they had planned the day before. It was near the end of March, and the snow had become so consolidated by the warm sun in the days, and the hard frosts at night, that it would bear the children to walk upon it. The children called it the crust; but it was not, strictly speaking, a crust, for the snow was compact and solid, not merely upon the top, but nearly throughout the whole mass, down to the ground.

Rollo and Lucy were going to have an expedition upon the crust. Rollo had a sled, and they were going to put upon the sled such things as they should need, and Rollo was to draw it, while Lucy and Nathan, Rollo's little brother, were to walk along by his side.

Rollo's sled was ready at the back door, when Lucy came. Lucy brought with her some provisions for a luncheon, in a basket. This was her part of the preparation. Rollo got his axe, and one or two boards a little longer than the sled, which he said were to make seats. He also had a tinder-box, and some matches, to enable him to make a fire. When all things were ready, the three children set out together.

Rollo drew the sled, with the boards, the basket, and some other things upon it, all bound together securely with a cord. The load appeared to be considerable in bulk, but it was not heavy, and Rollo drew it along very easily. They were not obliged to confine themselves to the roads and

paths, for the snow was hard in every direction, and they could go over the fields wherever they pleased. In one place, where the snow was very deep on the side of a hill, they went right over the top of a stone wall.

It was a cloudy day, but calm. This was favorable. The sky being overcast, kept the sun from thawing the snow; but yet their father told them that probably it would begin to grow soft before they came home, and, if so, they would have to come home in a certain sled road, which Jonas had made that winter by hauling wood. He advised them not to encamp at any great distance from the sled road.

They came at last to a pleasant spot on the margin of a wood, near where there was a spring. The rocks around the spring were all covered with snow, and the little stream, which in summer flowed from the spring, was frozen and buried up entirely out of sight. But the spring itself was open, which Rollo said was very fortunate, as they might want some water to drink.

Here they encamped. Rollo cut some stakes, which he drove down into the snow, and contrived to make a rude sort of table with his boards. He also cut a large number of hemlock branches, which Lucy and Nathan dragged out and spread around the table for them to sit upon. Then Rollo built a fire of sticks, which he gathered in the wood. The ground was covered with snow, so that it would have been very difficult for him to have found any sticks, were it not that some kinds of trees, in the woods, have a great many small branches near the bottom, which are dead and dry. These Rollo cut off, and Lucy and Nathan dragged them out, and put them on the fire when he had kindled it. The fire

was a little way from the table, with the carpet of hemlock boughs between.

There was a high hill covered with snow at a little distance, and, after they had eaten their luncheon, Rollo said,—

"O Lucy, we will play go up the mountains. There is a hill for us. That shall be Chimborazo."

"Well," said Lucy, "if you will cut us some long staves."

Accordingly Rollo went into the wood, and selected some tall and slender young trees, about an inch in diameter, and cut two for Lucy, two for Nathan, and two for himself. These he trimmed up smoothly, and each of the children took one in each hand. They played that Rollo was the guide, and Lucy was the philosopher. Nathan was the philosopher's servant. Rollo conducted them safely to the summit; but just after they got there, it began to snow.

The snow descended in large flakes, and Rollo was delighted to see it; but Lucy seemed a little anxious. She said that, if there should be much snow, it would make it hard for Nathan to get home, and she thought that they had better go down the mountain immediately, and set out for home. Rollo was rather unwilling to go, but he allowed himself to be persuaded, and so they all came down the mountain together.

They packed up their things as quick as they could, leaving the fire to burn itself out, only Rollo first piled on all the hemlock branches,—which made a great crackling. The snow began to fall faster. The air was full of the large flakes, which floated slowly down, and lodged gently upon the old snow.

The children went along very successfully for some time, but at length Rollo lost his way. The air was so full of snow-flakes, that he could see only a very little way before him; and the old snow covered the ground, so as to hide all the old marks, and to alter the general aspect of the fields so much, that Rollo was completely lost. He, however, did not say anything about it, but wandered on, Lucy and Nathan wondering all the while why they did not get home; until at length they came across a track in the snow.

"O! see this track," said Rollo. "Here is a track, where somebody else has been along with a sled."

"Yes," said Lucy, "some boys, who have gone out to slide, perhaps."

The track was partly obliterated by the snow which had fallen upon it since the boys that made it had gone along. Rollo wondered whose track it could be. He said that he thought it very probable it was Henry's. Lucy thought that it might be the track of some children, that had gone out to find them.

"At any rate," said Rollo, "we will follow the track a little way, and see what it leads to. Perhaps we shall overtake the boys."

Accordingly Rollo turned along in the track, but Lucy stopped.

"No, Rollo," said she, "we must go the other way if we want to find the boys;—the track is going the other way. But never mind," she added, "I don't want to find the boys; I want to go home; so we will go this way."

Rollo went on, secretly pleased to find the track, for he supposed that by retracing it, as he was doing, it would lead him back home. He had, however, a great curiosity to know who could have made it; and in fact the mystery was soon unraveled.

For, after following the track a short distance, they saw before them a large, dark spot upon the snow, and, on drawing near to it, to see what it was, they found it was the place of their own encampment; and the track which they were following was their own track, leading them back to the mouldering remains of their own fire. They had gone round in a great circle, and come back upon their own course. Rollo looked exceedingly blank and confused at this unexpected termination of the clew, which he had hoped was to have led him out of his difficulty. What he was to do now, he did not know.

The fact, however, that they were lost, was no longer to be concealed; and Lucy proposed that they should go into the woods, where the tops of the trees would act as a sort of umbrella, to keep the snow from falling upon them, and wait there until it stopped snowing; and then the air would be clear, and they could find their way out.

"O," said Rollo, "I can easily make a hut of hemlock branches, and we can go into that for shelter."

"But, Rollo," said Nathan, "how do you know but that it will snow all day? We can't stay in the woods all day."

"No," said Rollo; "when it snows in great flakes, it is not going to snow long. Jonas told me so."

So the children went into the woods, and Rollo began to make his hut; but he was soon interrupted, and the attention of all the children was called off by a little bird, which they saw there, hopping about, and appearing