MOTHER NATURES CHILDREN 4



MOTHER NATURE'S CHILDREN

BY

ALLEN WALTON GOULD

GINN AND COMPANY

BOSTON · NEW YORK · CHICAGO · LONDON ATLANTA · DALLAS · COLUMBUS · SAN FRANCISCO COPVRIGHT, 1900, BY
ALLEN WALTON GOULD

ALL RIGHTS RESERVED
519.10

The Athenaum Press
GINN AND COMPANY · PROPRIETORS · BOSTON · U.S.A

Dedicated to

My Little Daughter

PREFACE.

This book aims to help the young to see the spirit rather than the form of nature. It traces the love and care and mutual dependence of living things from human beings down to plants. And while it is set in an imaginative framework, no facts are stated and no illustrations used save on good scientific authority. Recognizing the power of pictures to reach the child, such subjects are treated as can be illustrated. Each chapter opens with a picture by some artist of acknowledged ability and contains other interesting pictures bearing directly on the text.

In using the book in the schoolroom it might be well to have the children look at the pictures and tell what they see before the descriptions are read. They will thus learn to observe and to think for themselves as well as to express themselves. The pictures and descriptions can be made more real by bringing into the class-room some specimen of the plant or animal or nest or other object that is described.

But in dwelling on these material facts of nature, we must be careful not to let them obscure the truth we wish to teach, or bewilder the child by their multiplicity. We must remember that it is not the formal part of nature, but the spiritual part we wish to teach through the forms. We must try to give the children no more of body than shows soul, as Browning says of painting.

Y

Our purpose is to teach only the actual facts about nature. But as every fact is a fairy tale in the mind of the child, these facts will "take form and limb" in a way that would make them untrue for us. They may seem childish to us, but we must remember that all conceptions are necessarily childish when really imaged by children. That is the only way the truth can be held by the child. If we impress upon the child the love and faithfulness of nature, and also the way in which nature requires effort and desert, we can safely leave the reconciliation of those ideas to the later years of the pupil.

Heartfelt thanks are due to many friends, on both sides of the water, who have helped with suggestions and criticisms and encouragement in this effort to put the everlasting gospel of nature in such a form that even the children may read and understand it. If this result is achieved, surely we shall all feel that we have our exceeding great reward.

ALLEN WALTON GOULD.

CHICAGO INSTITUTE.

CONTENTS.

CHAPTER		P	AGE
I.	How the Birds Cradle their Babies	•	1
II.	How Mammals, Spiders, and Fish Cradle their Babies	3	9
III.	How Babies are Cradled in Clay and Wood	٠	17
IV.	How the Plants Cradle their Babies	•	25
v.	How the Plants Tend their Babies		33
VI.	How Mammals Tend their Babies		41
VII.	How Fish, Reptiles, and Spiders Tend their Babies	3	49
VIII.	How Mother Nature Sets the Table for Birds .	·	57
IX.	How Mother Nature Sets the Table for Reptiles	,	
	Fish, and Spiders		65
X.	How Mother Nature Sets the Table for the Insects	3	73
XI.	How Mother Nature Sets the Table for Plants		81
XII.	How Mother Nature Clothes the Birds		89
XIII.	How Mother Nature Clothes the Mammals		97
XIV.	How Mother Nature Clothes the Mollusks		105
XV.	How Mother Nature Clothes the Plants	î.	113
XVI.	How Seeds Learn to Fly		121
XVII.	How Reptiles and Mammals Learn to Fly		129
XVIII.	How Birds Learn to Fly		137
XIX.	HELPING EACH OTHER IN THE EARLY FAMILY	. !	145
	vii		

viii Contents.

CHAPTER				PAGE
XX.	HELPING EACH OTHER IN THE SISTER FAMILY	•	ž	. 153
XXI.	HELPING EACH OTHER IN FLOCKS AND HERDS			. 161
XXII.	How Human Beings Help Each Other			. 169
XXIII.	How Men and Birds Lay up Food	•		. 177
XXIV.	How the Rodents Lay up Food	•/.		. 185
XXV.	How the Insects Lay up Food	¥	*	. 193
XXVI.	How the Plants Lay up Food		ž	. 201
XXVII.	Borrowing Strength from Others	÷		. 209
XXVIII.	Borrowing Clothing from Others			. 217
XXIX.	Borrowing Food from Others	*		. 225
XXX.	SLEEPING AND WAKING DAILY	•		, 233
XXXI.	SLEEPING AND WAKING YEARLY	٠	÷	. 241
XXXII.	SLEEPING AND WAKING FOR A LIFETIME		•	249

MOTHER NATURE'S CHILDREN.

CHAPTER I.

HOW THE BIRDS CRADLE THEIR BABIES.



That baby in the picture ought to be a happy little child. She has been playing with the pet lamb that you see lying in front of the cradle, and with the dog who is rubbing his head against the cradle to show how much he loves his little playmate. And she had such fun watching that mother hen feed

her three cunning little chickens. But when she grew tired of play and wanted to sleep, she did not have to lie down on the hard ground. She found a cradle ready for her. Where do you suppose she got that little rocking cot, with a soft bed in it to lie on and a cover at the head to keep the wind and light from her while she slept? Of course she could not have made it herself. Some one else must have made it for her. I think it was her father who made it for her, or got some one else to make it. And it must have been her mother who made the soft bedding for the baby. You can see the father and mother both looking so lovingly at their sleeping baby. But why do you suppose they took the trouble to make such a cradle for the child? They cannot speak in the picture, but I think if they could speak they would tell you that they did it because they loved her. If you ask your own father and mother why they made your little led for you, I am sure they will say it was because of love for you.

But birds, and other creatures too, all make cradles for their young, and even the plants cradle their babies in beautiful flowers. They cannot tell us in words why they do it, any more than the parents in the picture can; but we cannot help thinking that it is because of their love for their little ones. The same Great Love seems to be in us all, — in man and birds and insects and plants, — coaxing us to make cradles for the children because we love them.

Here is the cradle the humming-bird makes for her baby (Fig. 2). You see it is no bigger than half an egg-shell, and the one in the picture has two eggs in it about the size of peas. It was made by those two beautiful birds that sit on the rosebush beside it. Mr. Humming-bird and his little wife live in Mexico and build their nests in the gardens there. How do

you suppose they manage to make such a dainty little cradle for their tiny babies?

If you and I could steal softly to their rosebush when they were at work, we should see first one bird and then the other come with a mouthful of spider's webs mixed with the downy fibres that grow on seeds like the soft white threads that float the dandelion seeds. Each bird would put the down on the

bush where the nest was to be, and would tie it fast to the branch by winding the spider's web about it.

Soon the mother bird would seat herself on the pile of fi-

bres, and by turning round and round on it she would press it and round it into the circular bottom of a little Then the husband would bring nest. her more downy fibres and spider's webs as fast as he could find them, and she would work them into the side of the nest in the same way. But the white down of the nest could be seen a long way off, so that you could find the nest



Bird's Cradle.

easily if the down were left uncovered. So the wise little birds gather bits of gray lichen or thin moss, such as you find on the tree trunks or rocks, and put them all over the outside of the nest, and make it look just the same color as the bush on which it rests, to hide it from us. In a week they finish their work, and then in a day or two you would find two little eggs, and a couple weeks later you would see two of the tiniest little birdies you ever saw,

The next picture (Fig. 3) shows you the oriole's nest. It looks like a bag, and it is really a bag; but it has one great advantage,—the babies cannot fall out of it. I suppose that is what Mr. and Mrs. Oriole thought when they decided to make such a nest as the one in the picture, for it is exactly like a

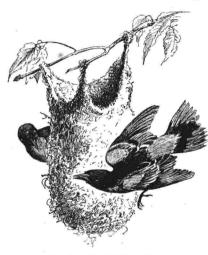


Fig. 3.—The Oriole's Nest.

bag with the three corners fastened to the branches of the tree. Their dear little babies will be safe enough in it. But how could birds weave such a nest as this?

Perhaps you have seen the oriole picking up strings and long grasses about the orchards or lawns in the spring and flying away with them. He takes one of the longest and strongest and winds one end of it around a branch of the tree he has chosen for his nursery. Then he winds the

other end of the strand about another branch close by, leaving a loop hanging down as long as he wishes the nest to be.

Then his mate brings another strand and makes a loop with it, just as Mr. Oriole did with his, so that two loops are now hanging down. They do this again and again, till they think they have loops enough for their bag. Then they begin to weave in between the strands finer material, like down or tow. Usually one of the birds stays inside, weaving and picking and pressing the down and tow into shape, while the other brings it from the fields or forest.

As you may imagine, they are very glad to get anything that they can use in making this cradle. One nest was made almost entirely of tow furnished by a man who loved birds, and the oriole was so delighted to have such a gift that he would burst into song with his mouth full of tow. He could not wait to express his thanks till he came back for more. But they do not always wait for people to give them the strings they want. One eager pair were making their nest not far from a house where a woman sat sewing by an open window. She left the room for a moment, and when she came back she could not find the measuring tape or the skein of silk she had been using. The birds had flown into the window and carried them off and woven them into their nest.

I will tell you the story of something that befell a Mrs. Oriole who did this. She and husband were a very happy pair. They had first met each other in an orchard in the beautiful month of May. Two or three gaily colored songsters of the Oriole family had been trying to win this young lady bird as their wife. Each one of them had sung his sweetest to her and looked his finest and behaved his best, in order to persuade her to choose him. But when she saw Mr. Oriole and heard him sing to her, she fell in love with him at once. And when she had chosen him, you should have seen how fond he was of her, — singing to her, bringing her the daintiest bits of food he could find, talking to her in the sweetest little ripple of cooings, and doing everything he could for her.

After a day or two they went house-hunting for a tree to hang their cradle in. They flew from one tree to another for several days, till at last they found a graceful elm where there were two drooping branches close together and high up out of the reach of cats and bad boys. Then they set to work at once

weaving their little cradle. Early in the morning, before you and I were awake, they were flying over the fields and through the forests to find the bits of fibre they needed.

They had been working for four days early and late, and in a day or two more they would have finished the nest, when Mrs. Oriole happened to spy a skein of thread hanging by an open window. She thought that this would be just what she wanted and would save her many a long search. So she darted into the window, caught the thread in her mouth, and flew quickly to the nest. There she found her husband hard at

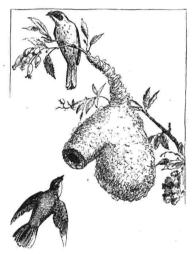


Fig. 4. - The Titmouse's Nest.

work weaving in a horsehair he had found in a pasture. He was delighted with the thread, and they both set to work to weave it in and out through the sides of the nest.

But it was so long that it got into a snarl, and as they were trying to straighten it out Mrs. Oriole somehow got both her tiny feet caught in one of the knots. Her husband tried his best to help her and picked at the knot, but he could not untie it. He could only moan with her,

and she would have lost her life if some kind man had not happened to hear them and cut the string for them.

Mr. and Mrs. Titmouse make a cradle that is safer even than the bag of the Orioles; for these ingenious little birds have covered the nest all over at the top and made a round passageway at the side, like the neck of a bottle or flask, tipped to one side, as you see in the picture (Fig. 4). These bright little cradlemakers are foreign relatives of our own Chickadees. They live in Europe, and are called Titmice, because they are

so small. But small as they are, they have found out how to make a nest that keeps the sun and wind and rain from the babies they love so well.

But the Weaver birds of Africa have made something still better. They have hung their nests (Fig. 5) upside down, with the entrance at the very bottom, like a decanter wrong side up. They have a safe little cot for their babies at the large part of the nest, with a high side to keep them from falling out. When they



Fig. 5. — The African Weaver's Nest.

build their hanging nests, one of the birds stays inside and the other outside. The outside bird pushes a strip of grass through the strands, and the bird within pushes it back in another place; and so they weave the strip out and in till their baby's cradle is finished. They only stop now and then for a frolic, chasing each other merrily through the trees with many a gentle twitter and loving caress.

They like play as much as you do. But these loving pairs never quarrel. Each seems to think that the other is just right. The nearest approach to a quarrel that I have heard of in Birdland was where one bird refused to bring any more stuff to

weave into the nest till his little mate had taken a romp with him. He even picked at the nest roguishly, as if he would tear it down. His mate came out of the nest and gave him a little love-pat with her bill, and then darted off through the trees for just a minute's sport with him. At the end of the minute they were back at work as hard as ever, making a cradle for their dear little babies.

He prayeth well who loveth well
Both man and bird and beast;
He prayeth best who loveth best
All things both great and small;
For the dear God who loveth us,
He made and loveth all.—COLERIDGE.

TEACHING NOTES.

The spirit and method under which these chapters can be made to accomplish their purpose is indicated in the Preface.

The opening picture by Landseer is a lesson in itself, and may lead to acquaintance with other animal pictures by this great artist, now readily obtainable in convenient form for school use.

The following are appropriate topics for conversational and language exercises in connection with this and the three following chapters, which are intended to cover a month of time and bear upon a single branch of the book:—

How nests are made; why birds build in trees rather than on the ground; why more often on tips of branches than close to the trunk; why with openings below in the land of monkeys; why some have their nests over water; why such as have strong feet for walking or swimming do not need finely woven nests; why the birds that have strong beaks for fighting do not make fine nests, and other questions to make children see the wisdom as well as the love of birds.

A collection of abandoned nests will add greatly to the profit and interest of the reading.

CHAPTER II.

HOW MICE AND SQUIRRELS, FISH AND SPIDERS, CRADLE THEIR BABIES.

HERE is a happy little family, and they have a cradle large enough for them all to snuggle into at night, if they pack

themselves very close together. How do you suppose they managed to make this tiny cradle? I do not think you ever saw them building a nest, because they are so very shy and put their cradle so deep in the forest and so high on the tree. But an Englishman once got near enough to watch them, by wearing clothes the color of the forest and lying perfectly still on the



ground, so that they could neither see nor hear him. And he tells us how the squirrels do it.

In the first place, Mr. Squirrel had to get himself a wife, —