



ON THE BEACH.

C. S. KING

TO THE BOYS AND GIRLS.

Do you know that there are cities on your path to school, and under the trees in your garden? Do you know that homes with many rooms in them hang in the branches above your head? Do you know that what you call "little bugs" hunt and fish, make paper, saw wood, are masons and weavers, and feed and guard and teach their little ones, much as your papa and mamma take care of you? This sounds like a fairy story, but it is a true fairy story.

In this book you will read of some of these wonders. And when you have read this book well, you shall have one or two more.

These books will not try to tell you all that there is to tell of these things. They are only to wake up your minds, so that you will think and study and notice these things for yourselves.

Your eyes will be worth many times as much to you as they now are, when you learn to observe with care and to think about what you see.

J. M. N. W.

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Nature Readers.

SEA-SIDE AND WAY-SIDE.

No. 1.

BY

JULIA McNAIR WRIGHT.

"Then Nature, the old nurse, took
The child upon her knee,
Saying, 'Here is a story-book
Thy Father hath written for thee.'"

LONGFELLOW & AGASSIZ

PREFACE.

THIS Series of Nature Readers is intended for the use of beginners in reading. The subjects chosen, and their treatment, have been alike subordinated to this object. The Nature Readers are not offered as text-books in natura' science, but rather as a contribution to the idea that facts of real and permanent value, may be made known, a noble taste may be cultivated, thought may be developed, and the initiatory steps in an increasingly popular study may be taken, while a child is learning to read a certain number of English words.

Should not the first short, strong Saxon sentences be rather used to convey scientific facts, than such trivial information as, "The boy has a new hat," or, "I had a plate of green corn to eat, on the fourth day of July"?

Lessons fresh from the sea-shore and the field, where life is seen, not in an abnormal state, as captivity, but in its own chosen homes and natural development, cannot fail to have an educative power of great value, even to minds of a very early age.

The real difficulty to be overcome has been to put these simple lessons concerning the habits, homes, and anatomy of certain animals, into such words as are usually found in the most elementary reading-books. To accomplish this, so that the series shall reach the hands for which it was intended, has been the author's chief concern. There is happily no uncertainty as to the scientific accuracy of the work. Every substantive statement has been

verified by the observation of the author, or of those whose competency for such work is unquestioned. The practical value of this series of Nature Readers must now be tried in the Homes and the Schools.

Whether the pages have been discreetly broken into paragraphs to catch restless and unaccustomed eyes, whether the words and subjects have been fitly chosen, whether the individuality and personality given to irrational animals shall succeed in attracting the interest, and fixing the wandering thought of childhood, are all questions rather to be answered by a trial of the book, than argued in a preface.

We bring no cat and dog stories, no tales of monkey antics; but we have endeavored to impress upon the little Heir of life, in one of its highest forms, a comprehension of, and a reverence for, life, even in some of its lower manifestations.

This object has already been kindly commended, and generously welcomed, by no small number of skilled teachers and scientists, who have given valuable time to the reading of manuscript and proof of this series.

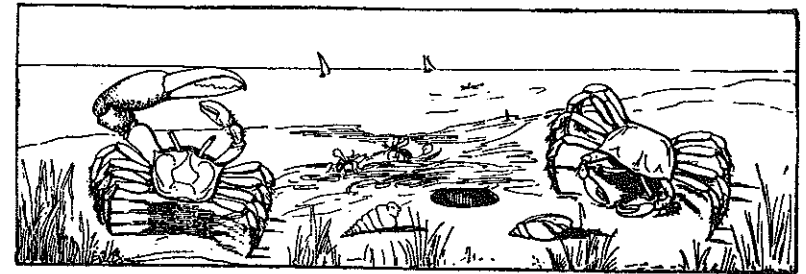
To those parents and teachers who will give the books a careful trial, and reinforce these simple instructions by their own enthusiasm and experience, the Nature Readers are commended by

THE AUTHOR.

SEA-SIDE AND WAY-SIDE.

LESSON I.

MR. AND MRS. CRAB



MR. AND MRS. CRAB.

THIS is a picture of Mr. and Mrs. Crab.
 Do you see the round hole?
 It is the door of their house.
 Mr. Crab lives in the sand by the sea-side.
 He has a smooth, flat shell on his back.
 The crab has eight legs and two hands.
 One hand is large; the other hand is small.
 He fights with the big hand, and takes his food
 with the little hand, or with both hands.

Mr. Crab digs out his house in the sand ; he makes a place for a hall, a bed-room, and a pantry.

Mrs. Crab does not dig.

Both her hands are small and weak.

She gets food to put into the pantry.

She never fights.

If she is in any trouble she runs home, or to a hole in a rock.

See what queer eyes!

They are set on pegs ; some call them stalks.

The crab can push the eye-pegs out and pull them in. Would you not look odd if you could make your eyes stand out six inches?

When crabs go into their houses, they draw down their eyes and tuck in their feet.

Crabs are of many colors.

They are red, brown, green, yellow, and blue.

The claws are often of a very bright color.

The color on the shell is less bright ; it is in small dots.

The color on some kinds of crabs is in lines.

No crab is clear, bright red when it is alive.

When it is boiled it takes a fine, red hue.

Why is this?

We cannot tell why the heat makes it change color.

LESSON II.

MR. CRAB AND HIS HOUSE.

THE water of the sea comes and goes in tides.

Twice each day the water rises — then it is high tide.

After each high tide the water goes back — then it is ebb tide.

Each tide lasts six hours.

When the snow melts in the spring, or when much rain falls, the water rises high in the brook.

In the dry, hot days the water is low in the bed of the stream.

If the stream or brook were full and low twice each day, the change would be like the high and low tides of the sea.

When the tide is low, Mr. Crab digs out his house.

He scoops out the sand with his big claw.

Then he folds his claw to carry the sand, as you can carry grass or leaves on your arm.

Some kinds of crabs carry the sand in three of their feet, bent to form a basket.

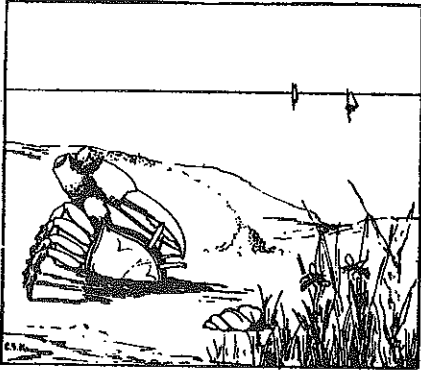
Mr. Crab takes the sand to the top of his hole.

Then, with a jerk, he throws the sand in a heap.

The crab is very strong.

He can lift and carry things larger than his body

He digs out a long hall.
 He makes rooms in his house.
 Then he goes with his wife to look for food.
 They keep near their home.
 They eat flies, gnats, ants, lady-birds, and other little insects.
 They also eat sea-weed.
 When beach-flies light on the sand or on sea-weed,



MR. CRAB MAKES HIS HOUSE.

the crabs jump at them, and catch them as cats catch mice.

But the cats do not move so quickly as the crabs.

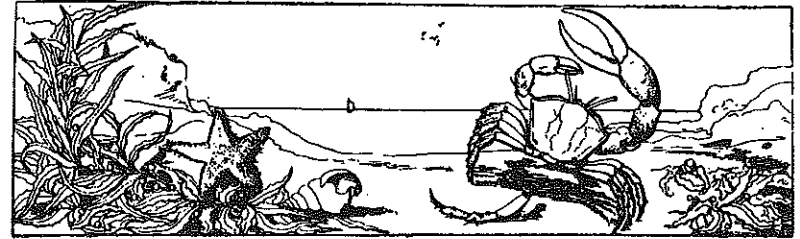
Mr. and Mrs. Crab put the bugs they catch into their pantry.

For six hours, while the tide is high, they stay in their house; and while they stay in the house they eat insects and sea-weed they have stored away.

The crab acts as if he knew about the tide. He knows when it will be high over his house. He knows when it will be low, so that he can come out.

LESSON III.

MORE ABOUT MR. CRAB.



MR. CRAB RUNS AWAY.

I COULD, for a year, tell you queer things about Mr. Crab.

Where are your bones?

They are inside your body.

Your bones are a frame to hold up your soft flesh.

Mr. Crab's bones are on the outside of his body.

His bones are his armor, to keep him from being hurt.

The crab can live and breathe either in water or on land.

You can live only on land.

He can both walk and swim.

Mrs. Crab lays eggs.

A hen, you know, lays eggs, one by one, in a nest.

She keeps them warm till the chicks come out.

The crab's eggs are put in a long tube or sack.
Mrs. Crab does not leave them in a nest.
She carries them tied on her long legs, or, under her
body.

When the small crabs come out of the eggs, they
grow very fast.

When you catch a crab by his arm or leg, if you do
not let go, he drops off this arm or leg, and runs.
He will first pinch you, if he can, with his big claw.

Could you run with one leg gone?

The crab has legs to spare.

Then, too, his legs will grow again.

Yours would not.

A crab's leg, or hand, will grow again very soon,
when one has been lost.

But if his eye-peg is cut off, it takes a whole year for
a new eye to grow.

I think he knows that; he is very careful of his eyes.

The eye-pegs of one kind of crab are very long.

He has a wide, flat shell.

There is a notch in each side of his shell.

He can let his eyes lie in that notch.¹

How can he do that? His eye-pegs are so long he
can bend them down flat to the shell and keep
them safe in the notch.

¹ See Picture in Lesson IX.

LESSON IV.

MR. AND MRS. CRAB GET A NEW COAT



SPIDER CRAB AND LITTLE PINNA.

YOUR skin is soft and fine.

As you grow more and more, your skin does not break.

Your skin gets larger as your body grows.

But Mr. Crab is in a hard shell.

The shell will not stretch.

It gets too tight, and what can Mr. Crab do then?

What do you do when your coat is too small?

Now I will tell you a strange thing.

When Mr. Crab finds that his shell is too small, he
takes it off, as you take off your coat.

He pulls his legs, his hands, and his back, out of his
shell.

He does that in his house.

You do not undress out of doors.

You go to your room.