

## TWILIGHT-LAND.

Here we are in twilight-land.  
Creakety-creak,  
Rocking-chairs at every hand  
Sway and swing and squeak;  
Here is neither park nor street;  
Bare are the little twinkling feet;  
White are the gowns and loose:  
No place here for ball or bat,  
No need now for coat or hat,  
None for stockings or shoes.

What are the stories of twilight-land?  
Hark, ah, hark!  
Call the sweet names where they stand,  
Waiting in the dark.  
Cinderella, and little Bo Peep,  
Who lost her sheep, her pretty sheep,  
Jack Horner, bold boy Blue,  
And the three bears living in the wood,  
And the wolf that ate Red Riding Hood,  
And the spinning pussy too.

The little children in twilight-land  
Are still as mice,  
And the storyteller must understand  
She's to tell each story twice.  
The crickets chirp, the stars' eyes wink;  
Perhaps the man in the moon may think  
Them saucy in their play;  
But, whatever is heard or said or done,  
Each sleepy, weary little one  
Gets rested for next day.

For the pillow is white in twilight-land,  
And white the bed,  
And the tender loving mother's hand  
Is laid on the drowsiest head.  
And list, the tune she hums and sings,  
As with soft creak the rocker swings,  
How far away it seems!  
That tune—that lullaby—ah, me!—  
They are leaving twilight land you see  
For the stiller land of dreams.

—Clara Doty Bates, in *Youth's Companion*.

## STAR-FISH.

BY SARAH COOPER.

Those of you who go to the sea-shore in summer have perhaps discovered that star-fish like rocky coasts the best. They are found most abundantly where the crevices between the stones afford good hiding-places for themselves and for the animals upon which they feed. They do not thrive upon muddy or sandy bottoms, and boys and girls hunting for curiosities upon such beaches are often disappointed to find no star-fish.

They spend most of their time creeping over the rocks, though they love to be where the tide will ripple over their bodies and keep them well supplied with sea water, which they depend upon for their lives.

Our dried specimens are yellow, but when alive, star-fish are of a dull red color, sometimes tinged with purple. They seem plump and fat on being taken from the ocean, but they are only puffed up with water; and if you watch them closely you will see the water oozing out all over the back. No doubt you have learned how tedious and discouraging it is to attempt to dry star-fish. The best way is to put them first in fresh-water, which kills them at once; then leave them for an hour or two in alcohol to harden the tissues before placing them in the sun or in a warm oven to dry.

Our common star-fish has five hollow rays or arms, extending from the centre like a star. If any of these rays are broken off, others grow in their places. It is a singular fact that these animals can break themselves to pieces, or throw off their rays, when they become alarmed.

Star-fish glide along smoothly, and without apparent effort. They bend their bodies into various shapes to fit the inequalities of the surface over which they creep, and in order to do this they require a movable skeleton. See how beautifully nature has provided for this necessity by forming the skeleton of thin limestone plates, so joined as to admit of slight motion. These plates are represented in Fig. 1, which is the under side of a ray, and the end having been broken off, we can see the two hollow tubes which it contains.

Look now at the upper side of your star-fish, Fig. 3, and notice the knobs and short spines with which it is covered. Between these spines are tiny forks, with two prongs that are constantly snapping. The use of the forks is not perfectly understood; they sometimes catch small prey, and they may also be useful in removing particles of matter that would choke up the pores

which open on the surface. The round spot near the middle of the back and between two of the rays is called the "madrepore body," and is an interesting object.

It is a sieve, admitting water into tubes which run to the end of each ray. During life the madreporic body is bright-colored, and it strains all the water that enters the tubes, so there is no danger of their becoming choked.

Now if we turn our star-fish over we shall find its mouth on the under side. This is an important organ, for the star-fish busy themselves continually with eat-

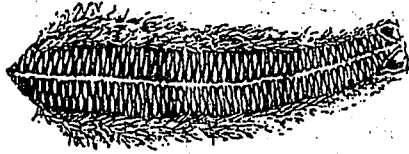


Fig. 1.—Under Side of Ray.

ing. They are especially fond of live oysters and clams, and they have the oddest way of eating them. They turn their stomachs right out into the oyster shell, surrounding the soft body of the oyster, and sucking it up. When the star-fish feeds it not only bends its rays into a cup shape to hold on to its prey, but multitudes of tiny suckers spring up to help, and the prey finds escape impossible. Oysters are generally so quick to close their shells in time of danger that we cannot understand why they should allow the

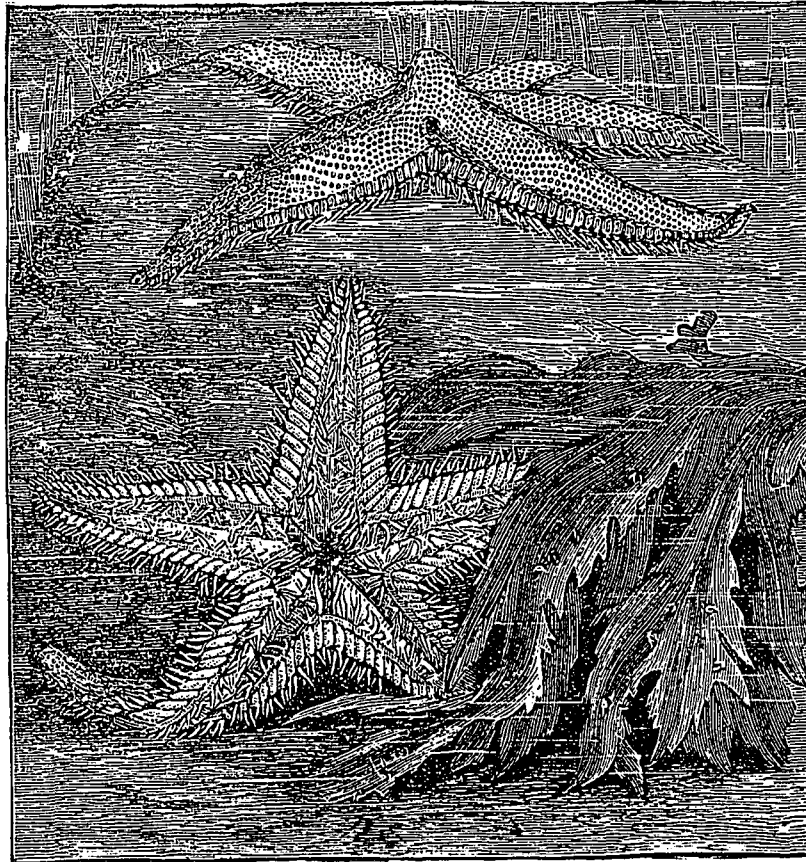


FIG. 3.—STAR-FISH AT HOME.

sluggish star-fish to catch them napping. It has been suggested that the star-fish drops into the shell some liquid which paralyzes the oyster, but this no one knows.

Star-fish have a liver and intestines. Their organs do not lie wholly in the central portion, but they extend into the five

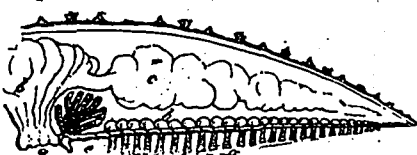


Fig. 2.—Interior of Ray.

hollow arms. They also have nerves, which surround the mouth and pass down each arm, where they end in a red eye speck. This, you see, gives the star-fish five eyes. You would think that with such a number of eyes that they could see everything that is going on. But these eyes are not perfect like yours, and it is very probable that they can see but little. Star-fish are said to be careful of their eggs, carrying them with the suckers near the mouth.

A gentleman who was watching a star-fish in a large glass dish wished to examine the eggs closely, so he parted the suckers

around the mouth, and took the eggs away. After a time he placed the eggs back in the dish, and was surprised to see the star-fish move toward them, and placing itself over them, fold them again in its suckers. Thinking this must be accidental, he took the eggs again, and putting the star-fish in a larger dish, with some obstacle in the middle, he dropped the eggs in the opposite end of the dish. The star-fish, creeping over the obstacle, went immediately to the eggs and took possession. The experiment was tried the third time, and, as before, the mother lost no time in gathering up the eggs and snugly tucking them away under her suckers.

The star-fish's fondness for fresh oysters is a serious matter to the oyster-grower, and causes him to lose large quantities of his valuable property. It is estimated that the damage every year to the oyster beds between Staten Island and Cape Cod amounts to \$100,000. Large numbers of star-fish sometimes appear suddenly and unexpectedly upon shores where oysters are raised. They seem to be washed in from the deep sea, and settling upon the oysters, they begin their work of destruction, and consume many bushels in a short time. These attacks occur chiefly in the latter part of summer or early in the fall, and are much dreaded by the owners of oyster beds.

An account is given of an oysterman on the Massachusetts coast who, after a few rainy days, discovered that the star-fish

able, hospitable dispositions. They never wrangle or fight among each other. Gossip is unknown.

They are faithful husbands and fond fathers. They form singularly strong friendships together. These ties, formed in boyhood, continue through life. A man will sacrifice his property, his labor, even his life, for his friend.

In another place, he asserts that they have so profound a reverence for the Creator that they never undertake the least enterprise without asking his aid. They have, also, a deep respect for their own integrity, and never in their history have been known to break a treaty made with a weaker people.

Mothers teach their daughters the duties which will make them good wives and household managers. The politicians among them work against each other without wrangling, abuse of character, or open insults.

The most prominent trait of this people is, according to this writer, their respect for the aged. Children are taught from their birth not only that the old must be treated with reverence and affection, but that they must share in all amusements. Their conversation is sought for, their advice is asked; they are never contradicted.

He mentions one case, in which some of these Americans were lost in a forest under the guidance of an old man. After wandering all day it was discovered that a lad in the party knew a path out of the wilderness, but had kept silent, following the others deeper into the swamps, because "interference on his part would have been disrespectful to the aged guide."

Our credulity says the *Youth's Companion* refuses to credit this story of any modern boy, in the United States.

It is true, however, for the book was written by a careful, impartial observer, John Heckewelder, a hundred years ago; but it was not of white Americans that he wrote, but of the Delaware Indians.

How many of these traits of character belonging to the "savages" whom we have exterminated can we boast of to-day?

## ON PIKE'S PEAK.

The officer in charge of the United States Signal Service Station on the top of Pike's Peak passes his days in a low, flat building made of stone, and anchored and bolted to the granite boulders. During the winter he has no connection whatever with the rest of the world. No human being can ascend to his station, and it is almost impossible for him to go down. Lee Meriwether, who ascended the snow-covered mountain one July day, says that the signal officer's face wears that care-worn, depressed expression which comes from unbroken solitude.

"You don't often see snow in July?" he said, after I had thawed out before a blazing fire.

"Not often. You don't yourself, do you?"

"Yes, two or three times a week. Snow is my only water supply. That boiler there," pointing to the stove, "is full of melting snow. Even in the heat of summer there is always enough snow at my door to furnish all the water needed."

"Does not life become weary and desolate here, so far from the world?"

"So much so that I sometimes fear it will drive me crazy. My official duties are light; they require only an occasional inspection of the instruments. The rest of the time I have nothing to do but read.

Too much reading becomes wearisome. Sometimes I stand at the window with my telescope. The wind without is keen and cutting as a knife.

"I can see the houses of Colorado Springs," he continued, "twenty miles away; see the visitors sitting in their shirt sleeves, sipping iced drinks to keep cool, and the ladies walking in white summer robes. Then I lower the glass; the summer scene is gone. Green trees and animal life, men and women, fade away like creatures in a dream, and I am the only living thing in a world of eternal ice and snow and silence."

SATAN, the great accuser, doth not only accuse the brethren unto God, but doth also accuse God unto the brethren.

## STRANGER THAN FICTION.

A German who had passed many years in intimate intercourse with the people of a certain region of this country, wrote a book describing them, which is admitted to be accurate in all essential points.

He says that the Americans he describes are noted for their peaceable, charit-