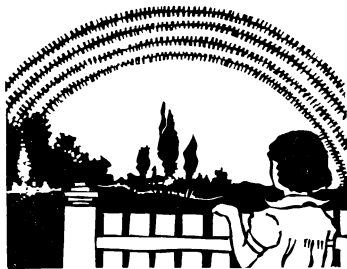


ELEMENTARY SCIENCE SECTION

## THIS EARTH OF OURS



## The Rainbow

*There are bridges on the rivers,  
As pretty as you please;  
But the bow that bridges heaven,  
And overtops the trees,  
And builds a road from earth to sky,  
Is prettier far than these.*

We must all feel as the poet does who wrote "my heart leaps up when I behold a rainbow in the sky!", because there is nothing half so beautiful a creation of nature as this arch of colors that appears in the sky after a summer shower.

During these hot months before the coming of the real rainy season, we often have a sudden shower in the afternoon. As you have learned, much water evaporates into the air when the sun is hot and when this vapor of the clouds gets cold, it changes into drops of real water and fall as rain. We have all watched at one time or another an approaching thunderstorm as it rolled up heavily from the west with dull rumblings and clouds suddenly turned black, flashes of lightning and a cold wind to be followed by a deluge of rain.

Then when it had passed away and the sun came out again and everything looked fresh and clean, lo up there in the sky is the colorful smile of nature, the rainbow! Across the heavens it

*(Please turn to page 166)*

## HOMES IN THE ANIMAL KINGDOM

## Homes of Silk

How would you like to live in a silken home? But you perhaps say to yourself that such a luxury is only for the sons and daughters of kings and not for common people like the rest of us. It has never entered your mind, has it, that lowly creatures like spiders and caterpillars live in homes of silk!

Spiders spin silk. Some line the walls of their caves with silk. Some make wonderful traps of silk, their webs, in which to catch their food! Webs are most beautiful to look at in the early morning when there is a little dew on them so that the fine silken lines are easy to see. Some spiders spin firm silken bags in which to keep their eggs until they hatch. Have you never secured such a spider's bag and given it to your grandmother or old neighbor? Old people say it has medicinal value.



Some spiders spin silk to help them travel through the air. The silk is a sticky sort of fluid while it is in the spider's body but when it touches the air it hardens into silken fiber. That is why you cannot drop a spider to the ground; the instant you drop it a long silken thread emerges from its body and with the aid of this "life line" it swings easily to a place of safety.

But the creature that really stays for a time encased in its home of silk is the caterpillar when it is to turn into a pupa. Caterpillars as you

## THIS EARTH OF OURS

*(Continued from page 150)*

spreads in bands of red, orange, yellow, green, and blue but before you can fully satisfy your eyes with its beauty, it has disappeared just like a dream. But in your mind must be the question: what causes a rainbow to form in the sky?

When you are at home, see if you can find a triangular piece of glass; then hold it in a darkened room and allow a ray of sunshine to pass thru it. You will find out that a band of many colors will come out and if you name them you will have: red, orange, yellow, green, blue and two other shades of blue-indigo and violet. These are said to be the seven colors of the spectrum.

Sunlight is not really one white color but is a mixture of all these colors. Light ordinarily travels in a straight line but the triangular piece of glass called a prism owing to its shape breaks up the white light into its various elementary colors and they are spread out in a rainbow-colored band.

Coming back to our natural rainbow, it is an immense spectrum formed by the sunlight falling on the raindrops, but you can only see it when the sun is behind you and the shower of rain is in front of you. It is because every rain-drop is a ball that the bow is curved.

Long ago when people did not yet know what caused a rainbow, they had many legends to explain it. They said that if you could reach the end of the rainbow you would find

## YOUNG WRITERS

*(Continued from page 163)*

## A STORY OF A POOR FARMER

Once there lived a poor farmer. He was so poor that he worked hard everyday. Even then he had not enough money to support his family.

In the village where this poor man lived there was a rich family. They had a large garden beside their house. They had planted many kinds of vegetables and fruits. They had a servant to watch their garden every day.

One day, this poor man passed by. He saw the garden with several kinds of ripe fruits and vegetables. He wanted to get some of them. He got a basket and jumped over the fence, while the gardener was sleepy. He entered the garden and hid under the trees. He began to think, "If I could steal a basketfull of those fruits and vegetables, I would sell them. I shall use the money to buy a hen. When the hen will have chicks, I shall sell them. I shall use the money to buy a pig. When the pig will have little pigs, I shall exchange it with a horse. When the horse has little colts, I shall sell them, and with the money I shall buy

a pot of gold there. Others said that the rainbow was the bridge to heaven. Do you know of other explanations of the rainbow that you have heard old people give? Tell your classmates about them.

## PLANTS AND THEIR

*(Continued from page 155)*

criticism has the healthy effect of keeping us awake. Human beings as well as plants and animals have to be alert and on the look-out for these enemies and this danger causes them to put out the best in them to provide themselves with means of defense and ways of outwitting their foes. In the game the best man wins and the fittest animals and plants survive.

some cows. When the cows will have calves, I shall sell them all. Then I shall have much money. I shall be able to buy a piece of land and build a new house. On the side of my new house, I shall make a large garden. I shall plant many kinds of fruits and vegetables I shall watch my garden every day so that the thieves can't get in. I shall be a rich man." While he was thinking about that he felt so happy that he spoke very loud. The gardener woke up and looked for what had happened. He ran toward the man and found out that the farmer was stealing fruits from the garden.

He caught the farmer and took him to the municipal building. After the poor farmer had promised that he would not do it again, the municipal president set him free.

*Domingo Tam  
Tanjay, Negros Or.*