### 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