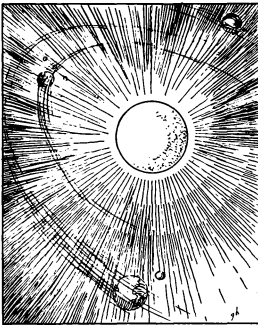


## A VISIT TO THE SUN



**I**N the last issue of *The Young Citizen*, you read about an imaginary visit to the moon.

This time we shall take an imaginary trip to the sun. While the moon is smaller than our earth, the sun is a million times larger than the earth. Unlike the moon and the earth, the surface of the sun is neither solid like the rock, nor liquid like water, but gaseous.

Sunspots are vent holes from which masses of hot gas are shot out at terrific speeds. They are a most important feature that a passenger in a rocket will see on the outer portion of the sun. The material ejected from the hole is of a blinding brightness. Part of this mate-

### PHILIPPINE FISHES—The Papakol or Pugot

In the rivers and seas in the Philippines we find many kinds of fishes. Some of them are useful. They give us food. Others are worthless and even dangerous, because they are poisonous. Among the poisonous fishes, there is one which we find in parts of our seas where there are corals. In Tagalog these fishes are called "papakol", and in Visayan "pugot". There are many kinds of fishes belonging to this class. Some of them have very brilliant colors, but the great majority are ugly-looking. One class has a dark-blue color.

Their food consists of snails, oys-

terial which reaches the earth may produce a display of Aurora Borealis. Passing over one of these spots in a rocket will be like passing over the funnel of a steamer in an airplane.

The earth, the sun, and the stars are probably made up of the same elements. The greatest difference between the sun and the earth, for instance, lies in the state of intense heat in the sun. Just as ice can be made fluid by melting, and water may be turned to steam by heating, and steam be broken up into molecules by heating, so, in the sun, the heat is sufficiently great to break up even the molecules into atoms, and the atoms themselves into pieces.

The pressure at the center of the sun is so great we cannot even imagine its greatness. If we could take a pinhead of matter at the temperature of the core of the sun, it would emit its radiation in the form of a terrific blast against which nothing could stand. Even a hundred yards away, the blast would be so strong as to blow over any fortifications which have ever been built. It would speedily shrivel up any man who ventured within a thousand miles of it.

*Note:*—This article is based on a work of Sir James H. Jeans, one of the foremost living astronomers.

ters, and other animals living in shells. When they find pearl-oysters, they destroy them. In this way the "pugot" or "papakol" causes loss of money. Their strong teeth and jaws enable them to crush the shells and thus get at the soft flesh inside. The body of one of these fishes is quite flat, slightly rounded, and covered with large rough scales. The mouth is small and low. It has short jaws where we find a single row of separate, stout, and powerful teeth. Its eyes are very far back and high up.

Sometimes you see this kind of fish in the market. In some parts

## HEALTH SECTION THE DANGER OF GOING BAREFOOTED

"Pablo, you used to be very bright and active. What has happened to you? Why do you look dull and sleepy?" Miss Mendoza remarked when she called on Pablo for the third time and caught him not paying attention. A year ago, Pablo was one of the brightest boys in the class.

Miss Mendoza referred Pablo's case to the school nurse, who consulted the school physician. The doctor examined Pablo. He was pale and thin. His eyes were dull and he had the feeling of being interested in nothing. His belly was a little too big for his body. He coughed slightly but persistently.

The doctor prescribed a medicine for Pablo. A few hours after he had taken it, he excreted a bunch of worms knotted and twisted together.

"Where did my boy get those ugly worms, Doctor," Pablo's mother asked.

"From the ground," the doctor answered. "Perhaps your boy walks barefooted, or plays with mud. The eggs of worms, which are found in the intestines, pass out with the human waste. These eggs hatch into tiny worms that remain in the dirt until they find entrance into the body through the pores of the skin. The worms are carried by the blood to the intestines, where they make their home. They suck the digested food that should make the child's body strong. Hence the child grows pale and weak."

"I did not know such worms caused so much harm. I thought it was natural for everybody to have worms during childhood," Pablo's mother said.

She thanked the doctor and explained to Pablo the necessity of using some kind of footwear.

of the Philippines those of moderate size are eaten. But according to some scientists, they should not be eaten because their flesh is poisonous.

(Please turn to page 161)