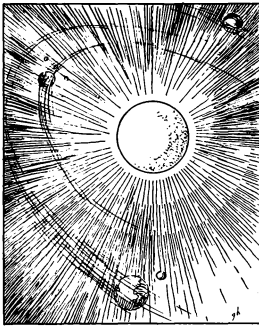


## A VISIT TO THE SUN



**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 Duqol

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.

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## THE COURTS UNDER THE CONSTITUTION

The Constitution of the Philippines contains rules which make courts or judges independent. For instance, a judge may not be discharged from his office as long as his behavior is good. He has the right to continue in office until he reaches the age of 70 years or until he has become incapacitated. Thus he may not be threatened with expulsion from office if he decides a case against any government official, even if such official is the President of the Philippines himself:

Another way by which the Constitution protects the independence of a judge is by prohibiting the lowering of his salary at any time while he is in office. No officer may, therefore, cut the salary of a judge who refuses to give him favors.

The protection given to judges by the constitution is made stronger still by the rule which says that he may not be transferred from one district to another without the approval of the Supreme Court. The governor of a province may dislike a judge for deciding a case against him. He may want the judge removed from his province to another. But if the Supreme Court does not approve the transfer, the governor or any other official has no way of getting rid of a judge.

The highest court of the Philippines under the constitution is the Supreme Court. It is composed of eleven members. One of them is called the chief justice and the other ten are associate justices.

The Supreme Court has two important duties to perform. One is to decide cases of great importance coming from the lower courts. Another duty is to declare whether a law passed by the National Assembly or an order issued by the Presi-

dent of the Philippines is not contrary to the rules found in the Constitution. If the Supreme Court finds that a law or an order of the President is contrary to any rule of the Constitution, it may declare the law or order invalid. An invalid law of the National Assembly or order of the President has no force. It need not be obeyed by the people. It cannot give any person any right. No one may be punished for violating its provisions.

The Constitution requires that before a law may be declared invalid, at least two-thirds of all the members of the Supreme Court agree to its invalidity. If less than two-thirds of the justices are of the opinion that the law is invalid, the law will remain valid. In other words there must be at least eight justices who should vote that the law is invalid.

The Supreme Court is given another duty by the Constitution. This duty is to make rules which shall be followed by any person and their lawyers in the trial of cases. These rules are called rules of procedure and practice. They must be followed by a person who has a case to be presented in the courts. These rules declare how a person should take his case to a court, how a lawyer should appear in court, and how he should present the case of his client. The National Assembly, however, has the power to make changes in these rules of procedure made by the Supreme Court.

Another duty or power given by the constitution to the Supreme Court is the power to allow or permit persons to act as lawyers. A young man wants to be a lawyer. He studied in a law school. He

graduated with the degree of Bachelor of Laws. It does not mean that when he has this law degree he can act as a lawyer for any person. He must first pass an examination. This examination is given by the Supreme Court. These rules may also be changed by the National Assembly.

The Constitution fixes the salary of the chief justice of the Supreme Court at ₱16,000 a year. Each associate justice is given a salary of ₱15,000 a year. The National Assembly, however, may change this amount. But once changed the salary may not be decreased any more during the term of office of the justices concerned.

No person who is not a lawyer may be appointed to any judicial position. Thus even a justice of the peace, who occupies the lowest place in our judiciary, has to be a lawyer.

A justice of the Supreme Court must have been five years a citizen of the Philippines. He must be at least forty years old and must have been for at least ten years a judge of a court of record or must have been engaged in the practice of law in the Philippines for at least the same length of time.

## POISONOUS AND . . .

(Continued from page 155)

In other lands, such as Cuba and Mauritius, where this fish is also found, they are not allowed to be sold in the market because they do harm to human beings. According to one physician in the island of Mauritius, the "papakol" or "pugot" causes a bad effect on the stomach of the person who eats it. The muscles of his stomach contract, and afterwards the same effect will be felt throughout his entire body. The person then feels a sickening pain. His breathing becomes hard and difficult; and then, if he is not treated at once, he dies. In case this kind of poisoning happens to you, you should take some medicine that will make you vomit, so this doctor advises us.

Even those kinds which are not exactly poisonous, we find that they do not taste well. They are a wholesome food.