

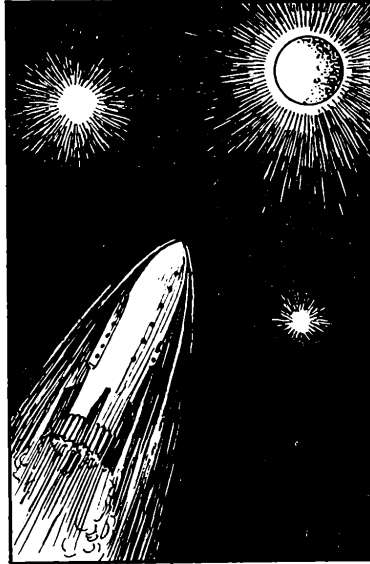
## A VISIT TO THE MOON

**Y**OU have heard about voyages to the bottom of the sea. You have read about voyages to the poles and journeys to mountain peaks, through dense tropical forests, and across pathless deserts. How would you like to think of a visit to the moon?

If we were to go to the moon, we would have to make the trip in a rocket. It would have to run about seven miles per second at the beginning to overcome the pulling force of the earth. This means that at the twinkling of an eye we must cover a distance of about eleven kilometers. Going at the rate of a mile per second or almost a hundred kilometers per hour afterward, we should reach the moon in two days.

Our earth is so beautiful because of the colors produced by the atmosphere such as the oranges and reds of sunrise and sunset, the purple and gray of twilight, the blue sky of full day. Our rocket would carry us in a few seconds beyond the atmosphere, the air and dust and clouds that surround the earth. We would then find the sky above us suddenly turn black while the moon before us perfectly clear. Because there is no atmosphere on the moon, there are only two colors—sunshine and shadow, white and black; everything in the sunshine is white, everything else black.

The moon is much smaller than the earth and, therefore, exerts a much smaller gravitational pull. Because of this condition, we can carry big loads which we cannot carry while on earth. As our bodies weigh almost nothing, we can jump to great



heights, as high as 36 feet. A broad jumper can cover a distance of 120 feet.

For lack of an atmosphere, there is no air pressure at all on the moon. Hence, water boils at a very low temperature and water evaporates very quickly. We must, therefore, guard our drinking-water from evaporation. Otherwise, we have to go without it.

Would you enjoy a walk in a place where there are no plants, animals, or men?

The moon is such a dead world, just a great mirror reflecting the sun's beams down to us. I could hear your sigh of disappointment as you say, "Then it is not worth all the trouble."

There is another reason why you would not find your journey on the surface of the moon enjoyable. You have seen hard pieces of rocky or metallic substance fall on our earth. They are commonly called shooting-stars. They rarely cause damage on earth because their fall is checked by the atmosphere. In the absence of atmosphere on the moon, the explorers on it would be under a continuous hail of fire from the meteors from the outer space.

Changes of temperature on the moon are violent. In case of an eclipse to shut off the sun from the moon, its heat which is greater than that on the equator will suddenly give place to a cold more intense than anything known on earth. This condition is again due to lack of an atmosphere that can store up warmth and to the volcanic ash on its surface which is a very poor conductor of heat.

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