

THE DISCOVERY OF FIRE

An Imaginative True Story

THE MAN was a savage—a prehistoric savage who lived thousands and thousands of years ago. He crouched on the rock beach, intent on his work. He had found a piece of dark, smooth stone, almost the right shape for a hand ax. With a rock which he held in his right hand he was chipping the dark stone to a thinner, sharper edge.

It was slow work, but the man knew of no other way to make tools and weapons. And these a man must have, for otherwise how could he eat, or even protect himself and his children from being killed by the great cave bear, or eaten by the terrible saber-toothed tiger?

The man shivered a little, for the wind was very cold, and he felt the chill even through the thick, shaggy bear-skin that he was wearing.

The stone with which he was hammering did not work as well as he wished; so he looked around him, selected another that fitted his hand better, and returned to his work of patient pounding and chipping. Then a strange thing happened.

When he struck the dark stone with the new stone rock that he had picked up, suddenly little bright points of light flew from it. The man dropped the rock, a bit frightened. There must be magic in this! But after a while, curiosity overcame his fear, and he picked up his hammer, eager to see whether the same thing would happen a second time.

Again sparks flew as he struck the stones together. His courage rose. He crashed the rocks, and a shower of sparks flew from them. One spark happened by

chance to hit a crumpled dry leaf that lay near by, and at once it flamed into orange light.

The man had never seen fire before, except once during a great storm, when flame from the sky struck a tall tree in the forest, and with a terrible roar one tree after another had vanished in heat and choking smoke and red glare.

But this was a little tame fire, not at all like the monster that had devoured the forest. The tiny flame paled and went out, and the leaf was gone. But no other harm was done, so this magic could not be too terrible.

The man gathered several dry leaves, heaped them into a little pile, and, somewhat frightened by his own daring, he struck his magic stones together again and again. He had to try a number of times before one of the points of light hit his little leaf pile.

Then the miracle happened once more. This time the orange light flamed higher and gave a warmth pleasant to the man's chilled fingers.

The man jumped up and picked up his two precious stones. He would go back and show the others the great feat he could do. He was almost as proud of it as if he had been able to kill one of the great beasts that crashed through the forest at night, shaking the earth with their weight, and making men tremble in their caves. He could show the tribe something which none of them had ever seen before, and they would honor him as a great man.

In silent wonder, mixed with fear, the men watched his excited gestures and

listened to his halting story. He used grunts and signs more than words, because he could not talk as we do. He showed them the magic of the crashing rocks. From that time the tribe treated him with great respect. The man was now something more than a good worker—he was a magician.

After awhile in what is now France where this tribe lived, the days grew colder and the length of daylight shortened. Dark clouds were in the sky, and white flakes of snow fell.

Late one day when it was beginning to get dark, the man returned to the cave. The air inside seemed even colder than the world without. Somehow into the mind of the man came the thought of his magic stones and the pleasant warmth that had flared up for a moment when the spark fired the dry leaves. How good it had felt to his cold fingers! Could he do it again? He went and got his treasured stones from their hiding place, and gathered a few leaves.

At first the man did not succeed in his attempt. The dead leaves which he had collected were wet from the melting snow. The bright shower of sparks that flashed from the stones he struck together vanished. They left no orange glow from the wet leaves.

But the man knew how to be patient.

Again and again during the cold days that followed he tried to work his magic, and one day he succeeded. The pile of leaves flamed into sudden warmth and brightness. Shouting with joy, the man heaped more leaves on the first ones.

There were a few small twigs mixed in with the leaves, and these snapped and crackled in the blaze. A warmth like sunshine spread from this beautiful, leaping creature. The man had done another great magic.



Man's First Mastery of Fire

Then the other tribesmen began to search for magic stones like those of this man. They spent many weary days striking pieces of rock together in their hunt for the kind that could summon heat and light and beauty. Finally they found a few of the magic stones.

But all of the tribesmen had very much to learn about the strange creature they had managed to bring into their caves. If the pile of leaves and twigs were small, the creature would be gentle and warm their hands, but if the pile were large, the flames were angry and filled the air with a whiteness that hurt the eyes and stung the throat.

And never must they try to touch this creature. If they stood at a little distance from the flames, their bodies were pleasantly warmed, but if one was too greedy

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AN HOUR GLASS

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ly in a fine but constant stream. Turning this bottle upside down on the top of the other, as shown in the picture, we let the sand run for an hour and then take the top bottle off. We remove the rubber covering, and tie it on the second bottle, into which the sand has run for exactly an hour. Then, after removing the surplus sand from the first bottle, we invert the other over it, and let the sand slowly run back, checking it carefully to see that it takes exactly an hour to run through.

Then, keeping the bottles one over the other in the position shown in the picture, we bind some adhesive tape round and round the necks to keep them together, and our hour-glass is complete and ready for use.

A JUMPING FROG

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as in the picture. Having pulled the stick over, lay the bone, or frog on a table, and in a moment or two the glue will cease to hold, and the springiness of the twisted string will cause the bone to jump quite a distance.

DISCOVERY OF FIRE

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for the heat, the fire leaped, and terrible pain struck the hand that dared to touch it. It must be a sacred thing not to be treated without respect.

After this all the tribesmen used the strange brightness for warmth on cold days. But they soon learned that almost anything they left near it would be destroyed by the leaping flames, and nothing would be left behind but a gray powder. So whatever they cared for they kept out of the fire's reach, and little by little they learned how to live with the strange spirit.

Thus probably occurred the discovery of fire thousands and thousands and thousands of years ago by prehistoric man.

REVIEW QUESTIONS

1. Why is this called "an imaginative true" story?
2. Tell how the prehistoric man secured a spark of fire.
3. What did he think of it? Why?
4. What happened next probably?
5. Had the man ever seen a forest fire?
6. What had caused it?
7. Tell of the discovery

of fire for warmth.

8. What things did these men learn about fire? How?

9. Did this story interest you? Why?

10. Tell this story in your own words.

11. Why will the stone called "flint" make a spark when struck? (See the word "flint" in the encyclopedia.)

12. Was flint useful in making a fire before matches were invented?

13. How were the first guns fired? (See the encyclopedia.)

14. What causes the fire to burn?

15. Why must a small fire have air in order to burn?

16. Why will coal burn?

17. Why will a rock not burn?

18. Make a list of the useful purposes of fire, such as heating, cooking, etc.

19. If fire gets beyond control, what is the result?

20. Have you heard the old saying that "fire is a useful servant, but a cruel master"?

21. Is this true? How is it true?

22. Do you know how to start a fire with bamboo sticks? Tell about it.

23. Why will a magnifying glass start a fire?

24. Why will water "put out" fire?