



OCEANIAN PRODUCING A FLAME.

## Fire and Fire Making.

BY H. DEVENPORT.

It is very difficult for us to imagine a time when such a thing as fire was unknown. Fancy a state of affairs when cookery was an undiscovered art, and when warm water had never been heard of! But such a time there must have been; and even in recent days, tribes have been met with in out-of-the-way parts of the globe who had no conception of the meaning of fire, and seem to have managed very well without it.

For instance, two Englishmen were wrecked on the coast of Australia. The natives were friendly, and protected them; and the Englishmen, being hungry, began to prepare food for themselves. They thought they would like some stew, so they set about making a fire—their proceedings all the time being viewed with wonder by the curious onlookers. The first light, and a substitute for a saucepan having been found, they filled it with water, and placed it over the flames. Presently it began to hiss, and then to bubble. But this was too much for the savages, who at once took to their heels, thinking that the water was alive, and might hurt them.

Similarly the Ladrone islanders, when discovered by the explorer Magellan, expressed the greatest astonishment as they saw him, with the aid of

a tinder-box—of which more presently—light a fire of sticks. As the fire burned up they were half frightened out of their wits, and it was only with great difficulty that they could be persuaded that the flame was not alive; and that the heat which came from it, so far from being the bite of some strange creature and hurtful, could be made of the greatest service to mankind.

So that you see it is quite possible to exist without the means of procuring fire; but there are very few tribes who have not discovered for themselves the uses of artificial heat, and how to get it whenever they require it.

In their case, however, the obtaining of fire is a very long and tedious process—not that the length of the operation matters a very great deal to a savage, to whom time is not of the slightest value; but he is, almost without exception, remarkably chary about exerting himself more than he can possibly help.

Some tribes get a light by rubbing two pieces of dry wood together; and if you want to gather an idea of the difficulty of this process, just try it for yourself. You will probably find that you might rub away for a week right off and never see the slightest sign of smoke, or of anything approaching a flame.

Others, such as the inhabitants of Tahiti, squat down, and scrape a bit of pointed wood up and down another piece placed on the ground, until the little bits of dust which are rubbed off by the friction catch fire. The fire-maker has at hand some very dry moss, and by blowing on the spark, he manages to puff the moss first into a smoulder and then into a flame, and so can light his fire—as we should say.

Then there are others who, rapidly twirling a bow—one end of which rests against the shoulder and the other against a piece of wood fastened to the stem of a tree—contrive, after much long and patient labour, to get fire.

The Esquimo has invented a more ingenious arrangement. He twines a thong round a stick, and placing one end of the latter between his teeth, and the other in a hole in a block of wood, twirls it until the flame comes. Let us hope that his teeth are strong ones. You and I would soon have to go to the dentist if we were to indulge often in such an operation.

But there are some who

have shown still greater ingenuity, for these have invented a weighted drill; and, going to work exactly as a man does who wants to bore a hole in a plate of iron, they soon have fire, without a very great amount of labour in procuring it.

So late as the year 1820, fire was obtained in Hanover for a particular purpose by means of friction. No doubt this was a survival of ancient usage, but in the market-place there stood a couple of posts, and a crosspiece, which rested in holes made for the purpose, twirled by the aid of a thong, produced the flames for lighting the alarm-fire of the beacon which stood close at hand.

The southernmost part of the Continent of America is, as many of you know, called Terra del Fuego. This means the "Land of Fires," and it got its name from the fact that its discoverers, on first sighting it, saw a great number of fires burning on the shore. They could not understand the meaning of these; but the fact was, they were burning because the natives had much difficulty in lighting fires, and wished to save the trouble of kindling the flames again if they were once allowed to go out.

And yet the natives of these parts were almost as far advanced in the art of procuring a light as were civilized people until within the last sixty or seventy years, for they made their fire by striking a piece of quartz against a piece of iron pyrites; and this was exactly what our grandfathers and grandmothers were wont to do, except that these latter used a piece of flint and a piece of steel.

It was anything but pleasant in those days to get up on a cold, dark, winter morning, and chip, chip, chip away with the flint at the hooked piece of steel which went over the knuckles of the left hand of the operator. When she—for the morning fire is usually lighted by a female—was lucky enough to get a spark to fall upon the burnt linen which was in the tinder-box, she would have to blow away until the linen burst into a flame. Then, having ready her matches—which were pieces of wood tipped with brimstone—she would apply one to the flame, and henceforth all was plain sailing.

If this was the best method of getting a light known to the civilized world, it is not surprising that savages, whose methods were much more tedious, took good care of fire



GAUCHITO GETTING A LIGHT.

when once they had it. To this day many a savage will walk miles to take a light from some fire which has been already kindled, rather than undertake the kindling of a flame for himself. In the southern seas, travellers frequently come across islanders in their canoes, who are carrying a small fire on a little raised stage to protect it from the spray of the waves. And in the East—in patriarchal times—the people suffered from equal difficulties in this respect. You will remember that Abraham, when he ascended Mount Moriah to sacrifice his beloved son, carried the fire for the sacrifice with him.

When matches were first invented—a little more than fifty years ago—they were nothing like so convenient as those in present use, and rendered necessary the carrying of a bottle of asbestos moistened with sulphuric acid, in addition to the matches themselves; and they were valued so highly that they were sold at one shilling a box. Now-a-days a much better article can be had at two-and-a-half cents a box.—Selected.

If you cannot pray over a thing, and cannot ask God to bless you in it, don't do that thing. A secret that you would keep from God is a secret that you should keep from your own heart.



INDIAN FIRE DRILL.



ESQUIMO OBTAINING A LIGHT BY FRICTION.