

If he only had the quick rifle, with which whitemen and a body guard of guides hunt down a single quarry, he would be safe enough now. But the old musket is slow loading, and speed will serve him better than another shot.

Then the snow-shoe noose slips completely over his instep to his ankle, throwing the racquet on edge and clogging him back. Before he can right it, they are upon him. There is nothing for it now but to face and fight to the last breath. His hood falls back, and he wheels with the moonlight full in his eyes and the Northern Lights waving their mystic flames high overhead. On one side, far away, are the tepee peaks of the lodges; on the other, the solemn, shadowy, snow-wreathed trees, like funeral watchers—watchers of how many brave deaths in a desolate lonely land where no man raises a cross to him who fought well and died without fear!

The wolf-pack attacks in two ways. In front, by burying the red-gummed fangs in the victim's throat; in the rear, by snapping the sinews of the runner's legs—called ham-stringing. Who taught them this devilish ingenuity of attack? The same hard master who teaches the Indian to be as merciless as he is brave—hunger!

Catching the muzzle of his gun, he beats back the snapping red mouths with the

butt of his weapon; and the foremost beasts roll under.

But the wolves are fighting from zest of the chase now, as much as from hunger. Leaping over their dead fellows, they dodge the coming sweep of the uplifted arm, and crouch to spring. A great brute is reaching for the forward bound; but a mean, small wolf sneaks to the rear of the hunter's fighting shadow. When the man swings his arm and draws back to strike, this miserable cur, that could not have worried the Trapper's dog, makes a quick snap at the bend of his knees.

Then the Trapper's fact give below him. The wolf has bitten the knee sinews to the bone. The pack leap up, and the man goes under.

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And when the spring thaw came, to carry away the heavy snow that fell over the Northland that night, the Indians traveling to their summer hunting grounds found the skeleton of a man. Around it were the bones of three dead wolves; and farther up the hill were the bleaching remains of a fourth.*

*A death almost similar to that on the shores of Hudson's Bay occurred in the forests of the Boundary, west of Lake Superior, a few years ago. In this case eight wolves were found round the body of the dead trapper, and eight holes were empty in his cartridge belt—which tells its own story.

THE SLANDERED FROG

By LYNN ROBY MEEKIN

OF all creatures in the animal kingdom the frog has suffered most from slander, prejudice, and ignorance. We are told in our boyhood that frogs cause warts on our hands, and we grow far into maturity and not only fail to seek the truth, but calmly hand down to our children a falsehood that was old a thousand years ago. We read about poisonous toads in literature four and five centuries old, and we accept the untruths along with the traditions of generations, although we may have the latest encyclopædia at our elbows.

It is granted that the Bible does not give the frog a very high character, and that may account for impressions which have resisted the influence of time and of science, for many to-day believe all the Bible says, even when it uses speech and animals figuratively. Still, it may be observed in passing that in the plagues that came upon Egypt, the frogs appeared on the land after the waters had become uninhabitable, and the flies and insects came in devastating swarms after the frogs died. In the Psalms is this verse: "He sent divers sorts of flies among them, which

devoured them; and frogs which destroyed them." This is no attempt at theological interpretation, but it would be scientific to say that the frogs destroyed the flies.

That, indeed, is one of the useful services that the frog performs. Even the common toad, instead of producing warts and carrying poison, is about the best friend the farmer has, for it protects his crops by eating millions upon millions of destructive insects, and does for him what his own unaided efforts could never accomplish.

But that is not all. If it had not been for the frog, man to-day would know far less about himself than he does. Dr. Ecker has called the frog "the physiological domestic animal," and next to the chicken the frog has afforded the most important material for obtaining knowledge about the nerves and muscles and the spinal cord; and it was the web of its feet that first disclosed the truth about capillary circulation. So, both as a means of information and as a faithful worker in the fields and byways of the bread-earning world, the frog has a large claim upon our respect and appreciation. Instead of being venomous the frog—even the toad—is not only a harmless but a very useful member of the earth's great family. Moreover, the frog is a wonderfully built creature. Books of many hundreds of pages have been written about it, with plates showing its amazing construction, and disclosing a multiplicity of nerves and muscles which seem to reach the impossible. But they are all there, and the frog knows how to use them. Then, too, the frog has individuality. For instance, having no ribs in its curious stomach, it is obliged to swallow its breath rather than to breathe. The ten bones in its vertebral column are beautifully adjusted. Its hand has five fingers—that is, four good fingers with the rudiments of the fifth. Its lightning tongue, fixed in front of the mouth, and well supplied with a viscid secretion, is death to the swiftest of insects, upon which it delights to dine. Then its power of propulsion, whether swimming or leaping on land—especially with the bull-frog—is astounding, but when the elaborate system of muscles in its hind feet is dissected the whole thing is explained. If man had proportionately the same power he would not need elevators.

Batrachians—*batrachos*, the frog—differ from all other vertebrates in having both gills and lungs; it changes from a fish-like thing to a four-legged creature with lungs; it has cold blood, a heart with three cavities and no lower teeth. Its eggs are about a sixteenth of an inch in diameter, and it is hatched in about ten days. In excavations of ancient ruins frogs have been found alive. It is not possessed of occult powers, although in Egypt it was once worshipped as a deity. Even the old idea about the tree-frog being a precursor of rain is not borne out by the scientists, but that does not keep many of the Germans to this day from keeping tree-frogs captive in order to know about going to picnics. Wood frogs hibernate two feet below the surface of the ground. A naturalist recently wrote that a green frog "frequently captures fish as long as itself, sitting for hours with the fish's tail projecting from its mouth waiting for it to digest." As this is written, the morning paper in a New York village reports that a resident found a bull-frog with a young chicken about two-thirds swallowed, and evidently enjoying the over-abundance of the contract.

In this country the main interest is naturally in the bull-frog. More frogs are eaten in the United States than in France, where there are regular froggeries; and, with few exceptions where frogs are cultivated in the vicinity of New York, nature keeps up an abundant supply. The frogs that reach the American table as a rule live their own lives in their own way, thriving along gentle lakes and streams on worms, mollusks and insects, with cool bits of shade for quiet contemplation and digestion.

Bull-frogs, the monarchs of the tribe, are like some people, in that they are not appreciated until they are dead. There is not much to admire in the doleful voice, solemnly calling "jog o' rum," "jug o' rum," as if he were an old toper with an unquenchable thirst. As he sits in his favorite place with the dignity of a judge, and the seriousness of a school trustee, he is not beautiful. His suit of green, with the stripes of olive, is good so far as it goes, but the dusky blotches on his wardrobe suggest patches or the need of ben-sine. In his expression fear and sadness mingle, for he resents the snakes that like

to swallow him, even as much as he likes to swallow other things.

The *rana catesbiana*, as the bull-frog is scientifically known, was found by the early visitors to this continent, and among the stories printed in the eighteenth century about his abilities was that a New Jersey specimen had leaped four yards at once, and had upon a wager distanced a young Indian. This record, however, although solemnly printed, does not stand. Modern investigators limit his leaps to something under eight feet. Possibly, however, the bull-frog, like the dollar in the story, went farther in the old days than it does now.

But the leap itself is a remarkable performance—quick, certain, tremendous; the two legs that become dainty morsels for the feast act like catapults, operated by electricity; a black blur through space, a chug; on the surface, and your bull-frog is safe below. There are varying stories about the size of the bull-frog. The largest specimen in the United States Museum measures 17 inches from tip to tip, when extended.

One way to catch the bull-frog is with a rod and a line, and a good stout hook on which is placed a fly or a piece of red flannel, for brilliant color attracts him al-

most as powerfully as food, if indeed, he does not regard it as some new luxury coming his way. In his aggressive movement towards anything red, the bull-frog is well named. The bait is dangled before him, and suddenly his cavernous jaws yawn, he gives a quick leap, and if good luck go with the fisherman, he dangles on the hook, and, jumping and squirming, feels a good deal heavier than he is. There is fun in catching the bull-frog in this manner. The weight of his assault upon the hook when he propels his body earnestly to his destruction, makes you feel for the moment as if you had got a whale, and then you must act quickly, for if the frog gets into the water and has much liberty on the line, he will manage to reach the roots of his home below, and then you will have a great time getting him out if you ever do. The probability is that you will lose your line and hook in the effort. Sometimes after a frog is captured, old hooks will be found still stuck in his mouth, the reminders of other efforts to end his existence. Commercially, the hook and line method is not preferred. There is novelty about it and it is good sport, but it takes long patience, much seeking, and the catch is seldom large.

THE NUTS OF COMMERCE

By ROBERT BLIGHT

I HAVE come to the conclusion that the world is growing too prosaic. As I wandered through the woods one morning, in the fresh, spicy air that follows a touch of frost during the early hours just before sunrise, the nuts lay in profusion over the road, along the path on the hillside, and in the glades of the woodland. The foliage overhead, all around, and down the vistas that led out into, the sunlight, was a mass of glory, scarlet, red, russet, and gold. Were it not for the dread of the merciless pencil of an editor wearied with the repetition of a tale of autumn tints "as old as the hills," I

could go into raptures over the sight. But where were the "lads and lasses" out for a "nutting"? Not one was to be seen. And yet, under a walnut tree scores of tough cases were scattered over the ground; beneath the hickory that hung over the road hundreds of glistening nuts had fallen ready to hand from the receptacles split open by the frost; and along the row of chestnuts gleaming in their golden dress the burs lay wide open, disclosing the glossy brown twins and triplets standing in the centre of the rosette.

As I stood among them, I had a vision of scenes described by poets and limned by