HUNTER
AND
TRAPPER

THE AMERICAN BLACK BEAR.

THE

HUNTER AND TRAPPER.

BY

HALSEY THRASHER,

AN EXPERIENCED HUNTER.

ILLUSTRATED.

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PREFACE.

In giving this little work to the public, I do it with considerable delicacy, knowing my inability to write for others to read, as I have never studied these things.

I am a blacksmith by trade, but when I was a boy I became fond of a gun and a trap, and my first success in my shop was to make a steel trap. It was my aim to become an expert trapper, and I tried my hand at catching foxes.

Many a dollar have I paid to cunning old men to learn the art, and I have succeeded pretty well, too; but why has not some man of experience written a book explaining the art of successfully trapping the different kinds of fur animals?

I am old, but the thing is in me yet, and I love to catch the mink, and the otter, and the ring-tailed coon, and to bring down a big horned buck and dress his hide to make mittens and gloves; and I propose to tell the boys how to do it. Old men, too, may learn something from me, for I have learned a little here and a little there; and have studied out some things for myself, and have bought piles of recipes,—some of them worthless, sure enough.

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I have studied the nature and habits of animals of different species, and a plan that was good to capture the otter, the mink, and the beaver, forty years ago, is just as good now as then. The nature of animals doesn't change like the nature of men; we have grown wiser while they have remained the same. The mode of capturing them when I was a boy and the way used now may be put together, and succeed better than either one alone.

Men are traveling through the country selling recipes at a high price to teach how to dress skins. I propose in this work to teach all these things, so that a man may have them in a neat little volume for reference at any time. I shall also treat upon angling for the trout, the bass, and the pickerel, which I think I understand. I hope to make it all so plain that even the inexperienced will, in some measure, succeed.

H. T.

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THE HUNTER AND TRAPPER.

CHAPTER I.

DEER HUNTING.

Where deer are plenty they are often seen in fields and in the woods, but although they are often shot in one of these happen-soes, it takes something more than this to make a successful deer hunter. It requires an understanding of the habits of the animal. In the spring of the year, when the deer is poor, and worthless as food, and the hide is thin and good for nothing, he is careless as to the approach of man, and may be seen in the meadows and fields searching for food.

I do not know that they would at this time be unhealthy as food, as it is said that the deer is never sick. I certainly never saw a sick deer, although I have killed hundreds in my life. Some of them were cripples, but none of them seemed to be diseased. The deer has no gall in his liver, but in the month of June I have found cavities in the liver filled with a substance resembling gall, having round,

flat objects moving in it. I have seen several of these in one liver, but never in August or September.

While in this condition the animal is dumpish and dull, but as cool weather comes on, he wakes up; and now, my boys, look out. In September the buck begins to harden his horns. He lies in side hills facing the sun, and rubs his horns against little bushes to get off the bark or velvety skin. Now is the time to get a crack at him, if you can, for his meat is excellent for food. But you will have to be sly and keep to windward of him, for he is on the look-out, and if the wind blows from you to him, he will scent you. To know how the wind blows, ever so little, put your finger in your mouth until it is wet and warm, then hold it above your head, and the wind will cool it on the side from which it comes. This is a hunter's trick. Now proceed to hunt *against* the wind, and when you discover a deer, raise your rifle and aim at the knee of the fore leg: then raise the muzzle slowly until you sight the body, (following up the leg) and then haul off. Don't hold your breath, for that will make you tremble, but breathe freely until you get ready to pull trigger.

This is for September. In October the buck is very shy and the doe twice as much so. She goes into thickets to hide from the buck, thus keeps well hid from you, while the buck passes around the thicket watching for her to come out. When he gets sight of her, they both set off as if routed by a hunter. During this month but few deer

are killed. In November the fun begins. Then the doe comes out to the buck, and the spring fawn generally keeps with its mother, so that you may get sight of the three at once, and a good steady marksman sometimes gets all three of them on the spot. To do this, shoot the doe first; the buck and the fawn will both stay around. Next shoot the buck and then the fawn, so as to have the three. I want to tell you never to go and see what you have shot, without first loading your gun. The deer may not be very badly wounded, and will jump up and run away unless you have your gun ready to stop him.

This reminds me of a couple of hunters, John Weiss and George Meyers. They started out on a deer hunt with about ten inches of loose tracking snow. John soon discovered a fine large buck, and at once took aim and unhitched the contents of the old rifle. Down goes the buck, and away goes John to cut his throat. When he gets to him, down goes his gun into the snow. George hears the report of the gun and comes up about this time. John had laid hold of the buck with the intention of letting blood, but up come the hind legs and wipe John off and throw his knife out of his hand some distance. John makes a spring to mount him again, and succeeds in straddling his back just as he begins to rise. George had now come within hailing distance, and cried out in broken English (for they were Dutchmen) "Hang on, Chon! Hang on, Chon!" and away went buck, "Chon" and all. Well now, John found himself in quite a fix, going through the.

air at a great pace. The ground over which he ran was hilly and covered with oak brush, and the old buck made for the clumps of brushwood to wipe the rider off, if possible. But John had learned something, too: he found the buck's horns, that lie back on his neck when he runs, to be of use, not only to hold on by, but to guide his beast, and now they came to the top of a steep hill, clear of brush for a distance, while near the bottom was a thick clump of brushwood. Now John expected his death, and commenced to pull on the old buck's horns to turn him around. To his great joy he succeeded in turning him, and when they got to the foot of the hill, the buck was so disheartened, that he stood still. John worked one hand into his pocket, got out a small knife, opened it with his teeth, and reached around and cut the buck's throat; and he sat there, until down he went, and up came George, both as highly gratified as ever two boys were; but some time was spent in hunting up the gun that was buried in the snow.

The deer is afraid only when there is real danger. He is not afraid of you when you are at work driving team, or hoeing or chopping; but take a gun and begin to poke about, and you will find him off. I once saw a yearling doe standing far out in a forsaken field. I had no gun and no means of killing it. There was a little snow on the ground, which had a crust on it in the open field. My attention was called to the deer by a neighbor's dog, which stood barking at it. I had just stepped out of my shop

trap and went to bed, pretty sure of catching him. I went out quite early the next morning, and to my surprise, there lay my trap bottom side up and not sprung, but entirely naked. This same thing occurred many times, and after turning it over the fox would dung in it into the bargain. Old hunters said my trap was not clean, or the fox would not be able to smell it and know where it was. Being at work in a blacksmith's shop, it was suggested to me to take a piece of rusty iron and to place it near my trap in the bed. This I did, and when I went out next morning my trap was gone. I found it on top of a garden fence with a beautiful gray fox in it. He had dragged it this far, and here got stuck fast. In after years I learned more about the fox.

HOW TO BAIT THE FOX PREVIOUS TO SETTING THE TRAP.

Go into the field some distance from the house or barn, and make what we call a *bed*, three feet in diameter, or thereabout. Wood ashes will do, but hay chaff is best. Oat chaff is good, wheat chaff is better, and buckwheat chaff better still. Make it deep enough to cover the trap, and have some under the trap to keep it off of the ground or snow. Make it smooth and level, and put some beef scraps on it and throw some around it. This will induce the fox to come up to the bed, and after a few trials he will step into it and pick up the scraps, and perhaps turn it bottom side up to see what there is in it. When you have got him coming regularly and taking the bait, wash

your trap clean in weak lye, grease it, and rub off all the rust and dirt. Then hold it in the smoke of burning hen's feathers until it is well smoked. Chain it fast to a piece of wood about two feet long, and as big as your arm. Now take the trap, chain, and clog, open a hole in the bed, and bury them neatly in the chaff, having a piece of wood under the trap to keep it steady, and a sheet of paper over it so that the chaff will not prevent its working easily. Cover everything up neatly, and sprinkle the bait as usual upon the bed.

Approach the bed only from one side, stepping always in the same tracks, and leave as little sign as possible that you have been there. If snow has fallen since the fox was last there, take a meal sieve and sift a little snow over the heap and over your own footprints for some distance back from the bed. Now I expect you will catch him, but if he smells the trap and wont come to the bed while it is there, take it out and clean it better, and melt some beeswax, and with a feather smear it all over the trap and chain. Now put it in the bed again, and you will be quite sure of the fox.

The following is the plan of a great Canadian hunter, Mr. Philemon Pennock. He says: — Select a rise of ground in a back field, make a bed of ashes or mould large enough to receive your steel trap level with the surface. Bait with cheese or scraps from lard. When the fox takes the bait, set your trap as follows: turn the springs toward the jaw that holds up the pan of the trap.

Put the trap low enough when covered to be level with the surface. Put hay chaff inside of the jaws level with the pan. Then put a paper over the pan reaching to the inside of the jaws. Then cover with ashes or mould, and make the bed look as it did before the trap was set. Bait with cheese or scraps, or fresh meat of any kind.

Another way is to bury the entrails of sheep or other animals in mellow ground, making a little hill over them. Set your trap just at the edge of the hill in the dirt, always using the chaff and paper, and keep your trap clean from rust. Scent with musk or lavender water.

Here is another from an old trapper in the State of Ohio: —First prepare the trap, then hold it in the smoke of burning oat straw until it begins to sweat. Then dry it off with a woollen cloth, and throw it into spring water for one or two hours. After that, dry it off without letting it rust. Make the bed with clover or buckwheat chaff, making it as hard as possible with the hand, except a hole in the centre for the trap, which set in and cover lightly with chaff. After the trap is set, take a feather and sprinkle a little oil of amber very lightly over the bed.

Another common-sense way of catching the fox is to bait him as usual, and clean your trap as clean as possible, not only from rust and dirt (these should not be in your trap any way), but of all human scent, such as it would get by handling with your naked hands, or in any way touching your body. This is what the fox becomes cunning about; but a trap washed out in ashes and water,

laid by until it is dry, and then handled with a pair of clean gloves, will no more scare a fox than would so much stone covered up. Don't spit about the bed, nor track about it, and when you have caught a fox, don't handle the trap with your bare hands, and you may catch a dozen without more cleaning.

THE BEAVER.

CHAPTER III.

HOW TO HUNT AND CATCH THE BEAVER.

During the greater part of the time since the settlement of America by Europeans, the beaver has been a favorite object with hunters. The general aspect of the beaver is that of a very large muskrat, but the greater size of the beaver, the thickness and breadth of its head, and its horizontally flattened, broad, and scaly tail, render it impossible to mistake it for any other creature. When closely examined in its movements, both on shore and in the water, it also closely resembles the muskrat, having the same quick step, with great vigor and celerity, either on the surface or in the depths of the water.

Beavers have long been the theme of the naturalist's admiration, on account of their apparent sagacity and skill in building their habitations. They are not particular in the site they select for their dwellings, but in a lake or pond where a dam is not required, they are careful to build where the water is sufficiently deep. The materials used in constructing their dams are the trunks and branches of small birch, mulberry, willow, poplar, alder, elm, ash, etc. The strength of their teeth and their perseverance may be estimated by the size of the trees they cut down. Dr. Best informs us that he has seen a mulberry tree eight

inches in diameter which had been gnawed down by the beavers. I have seen both ash and elm of that size cut down by them. These are cut in such a manner as to fall into the water, and then floated towards the site of the dam. The figure of the dam varies, according as the stream has a gentle or a rapid current. Along with the trunks and branches of trees, they intermingle mud and stones, to give greater security, and the dams remain long after the beavers have been exterminated. The dwellings of the beavers are formed of the same material as the dam, and are adapted in size to the number of inhabitants; there are seldom more than four old ones, and six or eight young ones. The walls are very skillfully and strongly constructed, and the whole fabric is a curious evidence of the sagacity of the animal. To capture beavers residing on a small river or creek, the Indians find it necessary to stake the stream across, to prevent the animals from escaping, and then they try to ascertain where the vaults or washes in the banks are situated. This can only be done by those who are very experienced in such explorations. The hunter is furnished with an ice-chisel, lashed to a handle four or five feet in length. With this instrument he strikes against the ice, as he goes along the edge of th banks. The sound produced by the blow informs him when he is opposite one of these vaults. When one is discovered, a hole is cut through the ice sufficiently large to admit a full-grown beaver, and the search is continued until as many of the places of retreat are discovered as

possible. During the time the most expert hunters are thus occupied, the others, with the women, are busy in breaking open the beaver-houses, which, as may be supposed from what has been already stated, is a task of some difficulty. The beavers, alarmed at the invasion of their dwellings, take to the water and swim with surprising swiftness to their retreats in the banks; but their entrance is betrayed to the hunters watching the holes in the ice, by the motion and discoloration of the water. The entrance is instantly closed with stakes of wood, and the beaver, instead of finding shelter in his cave, is made prisoner and destroyed. The hunter then pulls the animal out, if within reach, by the introduction of his hand and arm, or by a hook designed for this use fastened to a long handle. Beaver-houses found in lakes or other standing waters offer an easy prey to hunters, as there is no occasion for staking the water across.

Among the Hudson Bay Indians every hunter has the exclusive right to all the beavers caught in the washes discovered by him. Each individual, on finding one, places some mark, such as a pole or the branch of a tree stuck up, in order to know his own. Beavers caught in any house are also the property of the discoverer, who takes care to mark his claim.

The number of beavers killed in the northern parts of this country is exceedingly great, even at the present time, after the fur trade has been carried on for so many years, and the most indiscriminate warfare waged un-

interruptedly against the species. In the year 1820, sixty thousand beaver skins were sold by the Hudson Bay Company, which we can by no means suppose to be the whole number killed during the preceding season. If to these be added the quantities collected by the traders from the Indians of the Missouri country, we may form some idea of the immense number of these animals which exist throughout the vast regions of the North and West. It is a subject of regret that an animal so valuable and prolific should be hunted in a manner tending so evidently to the extermination of the species, when a little care and management on the part of those interested might prevent unnecessary destruction, and increase the source of their revenue. The old beavers are frequently killed within a short time of their littering season, and with every such death from three to six are destroyed; the young are often killed before they have attained half their growth and value, and of necessity, long before they have contributed to the continuance of their species. In a few years, comparatively speaking, the beaver has been exterminated in all the Atlantic and in the Western States, as far as the middle and upper waters of the Missouri; while in the Hudson Bay Possessions they are becoming annually more scarce, and the race will eventually be extinguished throughout the whole continent. A few individuals may, for a time, elude the immediate violence of persecution, and like the degraded descendants of the aborigines of our soil be occasionally exhibited as melan-

choly mementos of the tribes long previously whelmed in the fathomless gulf of avarice. The business of trapping requires great experience and caution, as the senses of the beaver are very keen, and enable him to detect the recent presence of the hunter by the slightest traces. It is necessary that the hands should be washed clean before the trap is handled and baited, and that every precaution should be employed to elude the vigilance of the animal.

The bait which is used to entice the beavers is prepared from the substance called castor, obtained from the glandulous pouches of the male animal, which contains sometimes from two to three ounces. This substance is called by the hunters *barkstone*, and is squeezed gently into an open-mouthed phial. The contents of five or six of these castor bags are mixed with a nutmeg, twelve or fifteen cloves, and thirty grains of cinnamon, in fine powder, and then the whole is stirred up with as much whiskey as will give it the consistency of mustard prepared for the table. This mixture must be kept closely corked up, and in four or five days the odor will become more powerful; with care it may be preserved for months without injury. Various other strong aromatics are sometimes used to increase the pungency of the odor. Some of this preparation, smeared upon the bits of wood with which the traps are baited, will entice the beaver from a great distance.

The castor, whose odor is similar to tanners' ooze, gets the name of barkstone from its resemblance to finely powdered bark; the sacks that contain it are about two inches

in length. Behind these, and between the skin and root of the tail, are found two other oval cists, lying together, which contain a pure, strong oil of a rancid smell.

During the winter season the beaver becomes very fat, and its flesh is esteemed by the hunters as excellent food, but those occasionally caught in the summer are very thin and unfit for the table. They lead so wandering a life at this season, and are so much exhausted by the collection of materials for building, or the winter stock of provisions, as well as by suckling their young, as to be generally, at that time, in a very poor condition. Their fur, during the summer, is of little value, and it is only in winter that it is to be obtained in that state which renders it so desirable to the fur traders.

Beaver hunting is a laborious occupation. With your beaver traps on your back you start into the wild woods and go to some small branches or creeks that empty into lakes or large streams. Follow these up until you discover small trees, cut down by the beaver. It is not exactly like chopping done with an axe, but it is fairly chopped after all,—cut smoothly from above and below, lengthwise with the grain. If the cut seems fresh and new, the beavers are close by. Don't make much noise, nor leave much sign behind you, if you intend to catch them in a trap.

We will suppose this is late in the fall, just before the winter sets in, and that you suddenly come upon a dam as you travel up the little stream, and it proves to be an

old dam of long standing with a large pond of water above it. You may naturally conclude that there is a large family of beavers, say eight or ten in number. Of course you want to catch them all in your trap, so hunt carefully around the pond and you will find their feeding place, where they have eaten the bark off from their feed wood. Here set your trap in four inches of water, with a twelve-pound stone fastened to the end of the chain. Fasten to it also a piece of bark twelve or fourteen feet long, the other end being fastened to the shore. When the beaver is caught he will make for deep water, and the stone will sink him and drown him. The bark will let him go far enough, and will enable you to trace the trap and pull him out. The bark should be fastened to a stake under water, and the slack should be coiled up and put under the stone. The whole apparatus, except the trap, should be nicely covered with mud. If you find the place where they haul in their timber, set a trap there in the same way. Also just at the mouths of their holes, under water. Always have the trap sufficiently weighted, or the beaver will come ashore and amputate his leg. When you set the trap at the feeding place, smear the wood around it with the castor scent before described.

Now I must tell you of one of my beaver hunts. When I was a boy I went with one of my comrades, loaded with our guns, traps, blankets, and provisions, to the head of a small stream in the middle of a great cedar swamp. We followed the stream through swamps and

thickets for a mile or so, sometimes crawling on our hands and knees, and sometimes climbing over fallen trees. By and by our little creek grew broader, and as we began to leave the swamp, it spread into a large pond with a dam about thirty rods long. On one side the land was rather low, on the other side a steep bluff, rising directly from the water to the height of about eighty feet. The bluff was covered with a growth of small poplar and birch. The beaver had made roads or slides from the very top to the bottom, some smooth and neat. They cut their wood on the very top of the bluff, and slid it down into the pond.

Now here was a chance to catch a beaver, but I lacked just such a little book as this to tell me how to do it. It was near night, and we cut a hole in the dam, and set one trap there and another at a feeding place; then we went over behind the hill to camp for the night. It was not very far away, the hill being a narrow one. Here we struck a fire and prepared our supper of broiled pork and bread, and got ready for a night's rest. But the scent of the broiled pork attracted the attention of a pack of gray wolves of the bigger sort, and when we had got fairly down and asleep, with our guns under our heads, the whole pack set up a howl which made us dream of wolves until I awoke, whispering to my companion; this caused him to start up and speak aloud. One old she-wolf, which had come up within a few feet of us, commenced to bark outright. Just then my old gun poured out a stream of

fire, that looked a rod long in the pitch darkness, and the whole pack set up a howl that made the woods roar again. A few discharges of our guns, one at a time, made them change their minds, and we started up our fire, which drove them off to the distance of about half a mile, where they kept up their howling until daybreak. The muss upset our beaver catching for that night, and finally, when we did get a couple in the traps, as they were not weighted, one of them ran away with the trap after cutting a dry ash pole nearly in two in several places, and the other drew himself ashore and cut off his leg, leaving that in the trap to tell the story.

When you cut a beaver dam, don't make a hole more than six inches deep. Wade in the water while you are doing it; don't step on the land, and don't spit on it; neither handle it with dirty hands. Set the trap as before directed in about four inches of water where they would naturally swim up to the gap in the dam, and you will be sure to catch them.

Another mode is to take a poplar or alder stick or pole, and stick it in the water in a slanting direction near the feeding place. Set the trap near the bottom of the stick, and as they work down in gnawing off the bark for food, they will get into the trap. This plan works well after the water is frozen over.

CHAPTER IV.

HOW TO CATCH THE OTTER.

The otter is a shy animal, seldom seen by day, and yet it is a hovering creature. He is an amphibious animal, and will sometimes go forty or fifty rods under water without coming to the surface to breathe, while he frequently makes a land journey of two or three miles, to pass from one stream to another. When there is snow on the ground the otter travels mostly by sliding. He takes two or three steps and then turns over on his back and slides eight or ten feet, on the level, and much more on descending ground. They propel themselves along with their hind legs, which are quite long and partly web-footed. They are very fond of playing in the snow; they will seek out a steep place, directly at the water side, crawl to the top of it, and then face about and go head first down into the water; then up they climb and at it again, having great sport. One of these slides is the best place for catching the otter in a steel trap, which should be set with a heavy stone, chain, and strip of bark, exactly as described for the beaver, in about four inches of water near where they climb out to crawl up the slide.

The otter is a great hand to catch fish, and seems to have some means to attract them, and make them so tame that he can pick them up as he pleases. It is supposed by some that he drops his musk or oil in the water, and calls

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the fish in that way. How that is I don't pretend to know, but he has been seen to climb up on a big stone or log, and after sitting there a little while, to plunge into the water, soon returning with a pickerel or a sucker, when he would sit and eat it, and when finished, make a dive and fetch out another. One mode of hunting or trapping the otter is to take a vial of otter musk and go to some place where a log lies in a stream, with one end sticking out of the water. Set your trap on the log where the water is about four inches deep, and smear some of the musk on the upper end of the log. Or you may set your trap alongside of a stick or any other object, on which you can put the scent, taking a bush or sapling with the leaves on, sharpening its lower end and sticking it through the ring of the trap chain; then set it up in the water as though it grew there, for a clog to your trap and a mark to find it by.

In all of these preparations you must be careful to leave no sign of your having been around; every place where you have stood, and every thing you have touched, should be washed by having water thrown upon them.

It is better to set your traps with a canoe, or, in a small stream, by wading. In hunting for the otter, it is of no use to look anywhere, except where there are plenty of fish, for they live mostly on this food. They eat crawfish, and I think some clams, but I am not able to say whether they eat any kind of fowl. They are to be found at the inlets of little lakes, and they frequent small streams

that have trout and chub in them. They go into big rivers, too, and they may be found in winter near quick water, where they will have holes through the ice at which they come up and feed. If the water is not more than a foot deep, fasten a big stone to your trap and set it down on the bottom, being careful to leave room for them to pass to and fro, between the ice and the trap; otherwise they will spring it with the belly and not get caught. It must be at least a foot deep from the ice to the trap to allow them to get caught; and if the water is from three to six feet deep, bait the trap with a little trout, or dace, or sucker, fastened into the pan lengthwise of the trap. Then sink the trap, right side up, directly under the hole, and you will catch him by the nose, if the trap is smart enough.

There are various other ways to outgeneral this sly, cunning animal. One of these is after this fashion. Go to the place where he burrows in the bank, making a hole under water; set your trap directly in the mouth of the hole, and when he goes in or out, you will catch him. Another way is to find some bushy point under cedars or other thick trees, where the bank rises directly up from the water; there make a slide in the fall of the year, that will look as though a log had been drawn endwise down into the water. Choose a handy place to set your trap, where the water is shoal at the edge and deepens rapidly. Sprinkle sweet oil or other musk about the slide. In early spring set your trap as directed above, and you will catch the first otter that comes along.

CHAPTER V.

HOW TO CATCH THE MINK.

This little animal, which is much like the weasel, has, of late years, become so valuable, that no pains is spared to obtain his hide. It is but a few years since that a mink skin would not bring above thirty cents. The value of the fur was not known. At this time, although he is so small a creature, a prime northern skin is worth from ten to twelve dollars. The mink is shaped much like the otter, and although he appears to be no more fitted for swimming than the weasel, yet the water is his home. He eats fishes and frogs, and craw-fish, and now and then gets into the barn and steals chickens, and goslings, and ducks, and crawls into the cellar and eats up the sausage meat, and whatever he can lay his jaws to. He is a pilfering little rascal, and yet so simple and foolish that he will run into a naked trap. For the sake of something to eat, he runs up streams of water and crosses the land from one lake to another,—a regular renegade. He burrows in steep banks, or under old roots, or in the rocks. The young are brought forth in May or June, in litters of five or six,—black looking little things.

To catch this animal, you have only to be acquainted with its habits. He follows streams of water, hunting every nook and corner for something to eat. Place your trap near the edge of the water, (so that it will be covered about an inch deep,) directly in front of a steep bank or rock, or something on which you can hang your bait, about eighteen inches above the level of the trap, which must be so close to the shore that the mink cannot get to the bait without stepping on it. The bait should be fresh fish or frogs, or the head of some bird or fowl. He is very fond of brains.

Another plan is to set your trap on the land about two feet from the shore, covering it with a few leaves, moss, grass, or loose dirt, or anything that will not prevent the jaws from closing. Hang the bait about eighteen inches above it, and scent it with a mixture made of equal parts of honey, sweet oil, and essence of peppermint. About a teaspoonful of this on the bait will cause them to come from a long distance. Some use wooden traps, with which they are quite successful.

The following is a good plan: Set your traps about two feet back from the water, and from forty to eighty rods apart, up or down the stream. Then walk over the line, drawing after you the carcass of a muskrat, or a roasted crow, or almost any fresh meat; and any mink that crosses this line or trail will follow it to the trap. It is also a good plan to set your trap where the mink must walk over it to get at the bait. He is a great fellow to catch

muskrats, which he loves to eat, and you may bait the trap with muskrat carcass and set it in a rat house, where you will often find handfuls of little fish that the mink has brought there. In the winter time he travels along springy brooks, pulling out frogs, and here he may easily be caught. You may also catch them in winter at the sides of big springs, or along the springy sides of ponds and swamps, where they like to roam.

CHAPTER VI.

HOW TO HUNT AND CATCH THE MUSKRAT.

The musquash, or muskrat as it is often called, is another peculiar American animal, which is so well known as scarcely to require description. It is also very widely distributed over the United States, frequenting alike land bordering upon salt and fresh water, choosing swamps with dry, sandy banks, or earth embankments, in which it burrows. It is ten or twelve inches long, with a thick-set, arching body; head short, but rat-like; and the gnawing or front teeth very large, long, and powerful. The hind feet are very long, and a short web is found only between the longest toes; yet the animals are rapid and strong swimmers. The tail of the musquash is compressed vertically, that is, it is flat, the edges being above and below. The beaver, which the muskrat greatly resembles in its habits, and which is naturally close akin to it, has a broad, horizontally flat tail. Like the beaver, the musquash builds his dam-like house in the swamps, ponds, and marshes, setting the house upon the end of a log, or something that will swim, in the event of a flood, otherwise they would be drowned out; and where they are frozen down in time of low water, when the flood comes, they have to abandon the house and go to their holes in the

THE MUSKRAT.

banks, or they drown in their houses, being shut in by ice. The materials used in building are roots and grass, and mud, carried together by mouthfuls and completely packed; pond lily tops, where they grow, form a large part of the house. They have a nice little chamber above the water, where they sleep, with an aperture through which they can dive into the water at any alarm from without; the house on the outside has the appearance of a heap of half-rotten manure, with some sticks in it. These houses they commence to build about the first of October, or when frosty nights begin to prevail, and they abandon them when warm weather comes again. This house-building is a mutual thing; if there were ten houses in a pond, and you should destroy nine of them, they would all go the tenth, and there, by carefully managing, you might catch the whole. They eat the roots of aquatic plants, calamus, pond lilies, etc., and are very fond of fresh water shell fish, especially the clam. So far as their food goes, they do the farmer little damage. The name muskrat is obviously derived from the strong odor of musk. "Musquash" is said to be the Indian name, and is preferable, for he is not a rat in any proper sense, but, so to speak, a beaver on a small scale. I shall now try to tell you how to successfully hunt and trap him. As soon as the ice goes off in the spring, you should commence, as his fur is then at its best.

The muskrat drops his dung on logs or sticks resting on the bank, with one end in the water. When you find his

"sign" on a log, chop a notch in it and set your trap about an inch under water, putting the chain-ring over a tally stick or over a stake driven into the log, in such a position that the muskrat may get into water deep enough to drown him. So go along near the shore in your canoe, hunting out these resorts of the muskrat, and set your traps as directed. On a moonlight night at this season of the year, you may go with your boat or canoe into some sly place, and then set up a squeaking noise as much like a rat as you can. If any are within hearing they will soon make their appearance, and you may take aim at the head and shoot. This is a good way to hunt them along the edge of drowned land, and in ponds and lakes. Another good plan is to set your trap in two or three inches of water, at the places where they crawl ashore to dig for roots, and if you place a bit of parsnip, sweet apple, or carrot, on the end of a stick just over the trap, you will be quite sure of a catch.

Do not commence hunting too early in the fall; they do not bring forth their kittens until midsummer, and about the first of September they are but little things with very black pelts, and hardly worth the catching. But as soon as frosty nights come, and they begin to build their houses, you may go to work setting your traps two or three inches under water, at the place where they haul up their building material. At this season they feed chiefly on aquatic plants, and form large beds of loose stuff at their feeding places, and you may set your trap in these beds.

In winter, when the ice has made a bridge over all, go to one of their houses, and on the south side make an opening through the side directly into their chamber, and set your trap at the entrance of the dive-hole. Close up the opening that you have made, and you will soon catch the rat. If there are other houses, destroy all but this one, to which the whole colony will come, and you may catch them all; or you may have a one-tined spear made of round three-eighths rod, about eighteen inches long, with a strong beard near the point. Have this fixed to a handle, say four feet long. Go very softly up to the south side of the house, and drive in your spear in a slanting direction, a few inches above the ice. You will often transfix two at a time. Or you may demolish the house and watch the dive-hole, spearing the animal when you see his nose come up.

You may use a scent to call the muskrat in the beginning of the year. There are various things that will do it. Perhaps the strongest is found in the female rat, in a small bag which holds from thirty to forty drops, and lies near the vagina. Carrying this scent in a vial, go to a log which lies with one end in the water, set your trap and fasten it as above directed, and put a drop or two of oil on the log just above the water. The first rat that comes along will be yours. The oils of rhodium and amber can be used in the same manner to advantage.

CHAPTER VII.

HOW TO CATCH THE MARTEN.

The Pine Marten, a native of the North, and an inhabitant of the pine forests, whence it derives its name, is abundant in the northern portions of British America, and is not uncommon among the wooded ravines of the northern United States. It builds its habitation chiefly on the tops of the fir, or seizes on the already formed nest of the squirrel, or some bird, whence it drives the owner, and enlarges for its own convenience. It is of rather less size than the common Marten, but its fur is finer and darker, and the throat and breast yellow, instead of white. In summer it assumes a lighter tinge, and its hair becomes shorter: in winter its toes are well protected by long wool, which drops off as the weather gets warm. Its habits are similar to the common Marten, but it is more fierce; it never meets the wild-cat without a deadly encounter, and is sometimes victorious even over the eagle, when that bird pounces on its prey, seizing the aggressor by the throat, and bringing it lifeless to the ground. Formerly, the fur of this species formed a lucrative article of export from the United States. At present immense quantities are brought from Siberia, and in

one year the Hudson Bay Company alone sold fifteen thousand skins.

The Sable inhabits the same countries in the North, and has sometimes been confounded with the former, which it strongly resembles in structure and habits; but Professor Pollos, who examined it and its native soil, has assigned it its place as a distinct species. It is somewhat larger in size than the Pine Marten; its head is rather more slightly depressed, and its muzzle more elongated, the soles of the feet more villous, and finally, the fur on its body is more beautiful, soft, long, black, and shining, and the hair turns with ease either way. The skin is consequently more valuable, and one of them not exceeding four inches broad has sometimes been valued as high as seventy-five dollars. The tails are sold by the hundred at from twenty to forty dollars. The exiles in Siberia are required to furnish a certain number of skins annually, from which the Russian government is said to derive a considerable revenue. The smell of the Marten tribe is rather agreeable. They are taken in traps, and also hunted with the musket.

The Marten is easily caught. The common way is to set dead-falls a quarter of a mile apart on the banks of streams, or through brook and wilderness, hauling a trail of liver, or the body of roasted crow from one to the other. The dead-fall is so well known that it is not necessary to describe it.

In using the steel trap, bait with the bodies of crows,

chickens, partridges, fresh fish, liver or entrails. Stake the bait in the hollow roots of trees, under logs, or under the edges of rocks; then set your trap in such a manner that they will have to go over it to get the bait; fasten it with chain and stake, and cover it up with moss or leaves. Or set your trap in some convenient place, where you can suspend the bait eighteen inches above it in such a manner that they cannot possibly climb up to it, for they will certainly do this when they can.

The Marten may be caught in a wooden trap in the following manner. In the side of a tree, with its bottom about eighteen inches from the ground, cut a square hole six inches wide, eight inches high, and five or six inches deep. Cut a pole about twelve feet long, and square off one end so that it will play up and down easily in the hole, and so that when it is raised against the top, there will be five inches space below it; that is, have the squared end only three inches thick, and a little narrower than the width of the hole. Let the other end rest on a forked stick, so as to hold it in a horizontal position. Raise the squared end against the top of the hole and set it with a standard and spindle near the back of the hole. Bait the spindle with any of the meats named above. The Marten, in trying to get the bait, pulls out the standard, and lets down the pole, which catches him by the head.

It may be well to state where the Marten is to be found. It is chiefly above the latitude of 45°, in northern New York, on the so-called John Brown track, and in all north-

ern Canada, from fifty to one hundred miles north of Lake Ontario, from its eastern end to Lake Huron. In that country there are immense cedar swamps with great pine ridges, and along their borders the Marten may best be hunted, by setting a line of wooden traps, ten miles long or so, which is as much as can be attended to in one day.

The Marten may be followed by his tracks, which are about the size of a small cat's. He always travels on a jump, making only the mark of two feet close together, the pairs being about two feet and a half apart. When closely pursued he takes to a tree, and is a splendid climber.

CHAPTER VIII.

HOW TO CATCH THE FISHER.

The Fisher, or Black Cat of our hunters, is a small, yet powerful animal, standing nearly a foot from the ground. It was formerly very abundant in the Middle States, but is now confined to the thinly settled northern districts. It is a nocturnal species, and lives chiefly on the smaller quadrupeds; but also devours frogs, fishes, and serpents. It climbs with great ease, and takes up its abode in the trunk of a tree. The form of the body is typical; head broad, nose acute, ears about three inches from the nose, broad, rounded, and distant; the fore feet are shorter than the hind ones, and the soles of both are covered with short hair; the color is grayish over the head and anterior parts of the body, dark brown or black behind.

The name of Fisher, which has been censured as not applicable to the animal, is, however, that by which he is best known, and which it has received from its characteristic habits. Richardson states that it feeds on the hoard of frozen fish stored up by the inhabitants. We are informed by a person who resided many years near Lake Oneida, where the Fisher was then common, that the name was derived from its singular fondness for the fish used to bait traps. The hunters were in the habit of

soaking their fish over night, and it was frequently carried off by the Fisher, whose well-known tracks were seen in the vicinity. While I have been engaged catching Marten, having a line of wooden traps several miles long, the Fisher would get upon the trail, and destroy all the traps he came to, taking the bait as he went. It brings forth two young ones at a time, annually. The hunting season for the Fisher in the northern parts of Canada and the Western States commences about the tenth of October, and lasts till the middle of May, when the fur becomes less valuable. The ordinary price is a dollar and a half per skin, but for two or three years past they have fetched ten dollars, although they are not so fine nor so highly valued as the Sable.

After finding my Marten traps torn, I had to devise some way to stop that, by capturing the Fisher. I found that he would never go in at the door of the trap, but would pull up the cover, and so take the bait without being caught. I at once built a string trap, with two holes, one above the other, making two doors to enter the trap, and so arranging that when one sprung, both would spring; so that if he went in at the upper or lower door he was equally certain to be caught.

I found, however, that he always went in at the top. The Fisher may also be caught with a good double spring steel trap, by using the following precaution. First bend down a small sapling, and fasten the top under a hook, previously driven in the ground for the purpose. To the

end of the sapling fasten the chain of the trap, set it, and cover it up neatly with leaves or other light substance, hanging the bait about two feet above the trap, with no other possible means of getting to it but to reach up over the trap. When he is caught and twitched about, he pulls the pole from under the hook, and is jerked up into the air, trap and all. This will prevent his gnawing off his leg, which he would surely do if he had the trap to himself. About the best bait that I know of is fish, but chicken or fresh meat of any kind will do very well.

When the Fisher travels he makes his tracks in the same manner as the Marten, only his feet are about the size of a fox's, and his jumps are about three feet long, unless he is hurried, when they are four or five feet long. When you see these tracks in the fresh fallen snow, make up your mind to catch the animal. It will take you all day perhaps, but then you will have the booty.

Although he is a nocturnal animal, yet when routed in the day-time he travels at a great rate, but if you have a good dog you may soon overtake him. When hard pressed he may take to a tree, but will be more likely to run into a hollow log. In the first place you may shoot him, but in the second the axe comes into play.

You may scent the trail leading from one trap to another as you do for the Marten, and the same trap will answer for both animals, and you will sometimes catch a Coon or a Mink.

CHAPTER IX.

HOW TO CATCH THE RACCOON.

The raccoon is well known in the greater part of the American Continent; and the raccoon hunts form the burden of many laughable stories. This animal possesses the mischievousness of the monkey, united with a blood-thirsty and vindictive spirit; he slaughters the tenants of the poultry-yard with indiscriminate ferocity, and this in many cases leads to his own destruction, by exciting the vengeance of the farmer.

Being peculiarly fond of sweet substances, the raccoon is occasionally very destructive to fields of Indian corn. While the ear of the corn is still young, soft and tender, in the milk, and is very sweet, it is then eagerly sought by the raccoon. A family of them, five or six in number, frequently enter fields of corn, and in one night do considerable damage, both by the quantity of grain they consume, and the number of stalks they break down.

The raccoon is an excellent climber, and his strong, sharp claws effectually secure him from being shaken off the branches of trees. In fact, so tenaciously does this animal hold to any surface upon which it can make an impression with its claws, that it requires a considerable exertion of a man's strength to drag him off, and as long as a single foot remains attached, he con-

tinues to cling with great force. The conical form of the head, and the very pointed and flexible character of the muzzle or snout are of great importance in aiding the raccoon to examine every vacuity and crevice to which he gains access; nor does he neglect any opportunity of using his natural advantages, but explores every nook and corner with the most persevering diligence and attention, greedily feeding on spiders, worms, or other small insects which are discovered by his scrutiny. Where the opening is too small to give admittance to his nose, he employs his fore paws and shifts his position, or turns his paws sidewise, in order to facilitate their introduction and effect his purpose. This disposition to feed on the grubs or larvæ of insects must render this animal of considerable utility in forest lands, in consequence of the great numbers of injurious and destructive insects he consumes. He is also said to catch frogs with considerable address, by slily creeping up, and then springing on them with both paws. The general color of the raccoon is blackish gray, which is pale on the under part of the body, and has, over considerable part of the neck, back, and sides, some fawn, or light rust-colored hair intermingled. The tail is covered with hair, and is marked with five or six black rings around it on a yellowish white ground. The entire soles of his feet are bare. When standing, he rests upon his feet from heel to toe, flat like a bear, but in walking he goes upon his toes only, like a cat.

There are many caught and killed about cornfields, but

THE RACCOON.

the fur is then not very good. Later in the fall, and during the winter and spring, up to the middle of spring, it is excellent, and when the pelts are well dressed they make good mittens; putting a whole skin in each one they reach up to the elbows. In the spring of the year, when the snow begins to go off the ground, the raccoon is easily found. On a warm night they come out from their hollow trees, make a circuit, and return on their back track. By watching for their return, you are quite sure to find them, one, two, three, or four, altogether. When you go out to hunt them, take an axe with you, and fell some hollow tree in which they have their nest, and see what fun you will have in trying to outrun the little ring-tails.

Later in the season, when the ground is bare, and the ice is out of the creeks and ponds, they travel along the muddy shores in search of frogs, of which they are very fond. Take a good smart trap and set it on the edge of the water. Fasten it well, and bait it with fish or fowl of any kind, placing the bait above the trap as for a mink, or behind the trap, in such a way that the coon can only get at it by going over the trap. Scent the bait with oil of anise. You may also catch him with a pole trap, baited with frogs, fish, or a bit of partridge. When you find coon tracks in the mud, you may set your trap with a little oil of anise rubbed on the under side of the pan, covering it up with leaves or moss. The first one that comes along will stick his fore paws into the trap, feeling for the bait.

CHAPTER X.

HOW TO HUNT AND TRAP THE BEAR.

The American black bear is of two kinds. One is short-legged and has a heavy body, sometimes weighing five hundred pounds, and is black all over. The other is longer legged, not generally so heavy, and has a brown face. This one is a great racer. Wherever there is much woods or forest, there bears abound. They are not put together like the dog or hog, or any other animal. Their fore legs bend like a man's arms, and they use them in the same way.

They are great hog eaters. Their mode of catching the hog is to take him up in their arms and squeeze him some, commencing at the same time to take their dinner out of the shoulder and neck at the back of the hog, while alive, and squealing as only a hog can squeal.

Bruin will carry a hog as heavy as himself, holding him in his arms clear of the ground, crossing a stream on a log as steadily as a man could do it. He is not troubled with a tail when in an upright position, for he has no tail to speak of. His ears are small, his mouth large, his teeth strong, his fore paws like a man's hand, his hind feet and legs much like a man's feet and legs. I have skinned a fat bear and stretched him out, lying on his face, his

white fat making him look very much like a man. No animal kind I ever saw bears so near a resemblance.

When he travels along he makes tracks with only the fore part of his feet, but when he sits or stands, a full-sized track with his hind feet may be seen, or when he is walking upright.

He is a great natural boxer, and it is not easy to hit him with a club or any such weapon, for he defends himself like a well-trained pugilist, while a slap from his ugly paw tells on man or beast.

He is a great hand to fight dogs, sets himself up on end and cuffs them right and left, one clip being enough to make a cripple.

The bear is very fond of sweets, and will go any length to rob bees of their honey. It is one of their curious tricks to climb a tree where bees have stored their honey, and gnaw them out. Their constant growling about the bees' stings often shows their whereabouts to the hunter. They also rob a bee-house when they have a chance, and they are often betrayed at the hog-pen by the squealing of the hogs. Nothing suits them better than to find a hog in a pen, and no one to oppose them. They will climb in and out again, hog and all. They are very fond of corn in the roasting-ear state, and it is not slow the way they will sit up to a hill of corn and take the ears. I have seen them in a field of wheat or oats standing on their hind feet, and with their fore paws gathering the grain to their mouths with great handiness. They are

very fond of acorns, beech nuts, huckleberries, and all kinds of sweet berries, and they will go some distance to get apples. In fact, it is a good plan to set a bear trap under a sweet apple tree. They are quite as hard to get a shot at as a deer, being wild and watchful.

The bear is very fond of water and loves to swim, and you can overtake him with a boat; but mind to shoot him before you go too near, for if you fail to kill him he is bound to get aboard if the boat stays right side up, and if your gun is not loaded he will stand as good a chance as you to get ashore alive.

It is a rare thing for a bear to attack a man, but you must not assault the female when she has cubs, or you will pay for it. Old Mr. Pomeroy, hunting his cows one morning, saw a she-bear standing in his road. Says he, "Old girl, I'll give you a scare;" so he pulled his old frock over his head and made at her with a great "boo." But old Mrs. Bruin never flinched, but dove right at him, and he turned and put for home as hard as he could go, with one sole of his shoe partly loose, flapping as he went, and the old bear right at his heels, warming his butt at every jump, almost to his house door. The old man said she never could have made any impression on his stern, for it was dried up as hard as a butternut.

The bear is a hibernating animal, and goes into winter quarters as soon as cold weather sets in. Some times they stay out until the snow is quite deep on the ground. But they generally make for their dens before

this; sometimes they take up their quarters in a hollow tree, climbing up and letting themselves down inside, and sometimes they have a hole scooped out of the earth, and have a great lot of stuff gathered to stop the mouth of the hole, drawing it after them as they go in. If mast and nuts are plenty in the fall, they will go in fat and will not get any poorer. They lie and suck their paws all winter.

It is here that they bring forth their cubs, from two to three in number. When they first come out in the early spring, the cubs are about the size of large kittens. They make a crying noise, very much like a little baby. The mother will defend them to the last, and it is very dangerous to offend her if not well prepared. If the bear is taken when young, it is easily domesticated and taught many tricks.

After the snow has fallen, if you come across a bear's track, follow it up, and sooner or later you will trace him to his den. If this is a cave in the earth, you can block it up with logs of wood until you are prepared to kill him.

One mode of trapping the bear is as follows: Go to that part of the wood that is frequented by bears and cut some logs about six feet long. Lay three of them down parallel, occupying a space of about six feet wide from outside to outside. Then lay other logs across these close together, as you would lay a corduroy-road, and pin them down to the sleepers thoroughly. Then lay up four sides, cob-house fashion, two feet high, thoroughly pinned

together, with a door cut in one side, two and a half feet wide. This is the bottom half of the trap. Now build a similar box, that, when turned upside down, will slide into the bottom one, so that the space will not be above eight or ten inches when they are dropped together. Now cut a log of wood, say twelve inches through and twenty feet long, and pin the top box directly across the end of this. Support the beam across a log in such a way that the box can be moved up and down, so as to open or rise out of the bottom and make a space of three feet. Set this with a standard and spindle baited with a chunk of some kind of fresh meat, daubed with honey, honey and oil of anise being at the same time well smeared over the inside of the trap. The heft of the top house and beam, when sprung, should be enough to crush any bear that might chance that way. Another good way to catch a bear when he has been committing depredations on a hog or other farm animals is to set a big steel trap in a spring hole or swampy place, putting a natural looking bit of moss on the pan for him to step on, and hanging a bait of the dead animal where he can only get it by going over the trap.

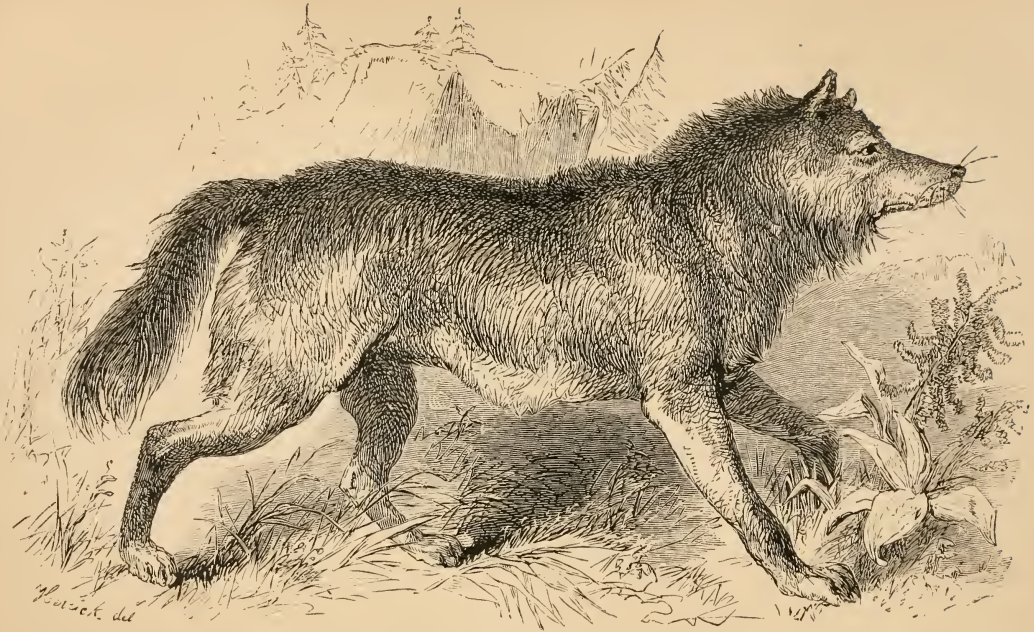
Where bears come into cornfields, they often set spring guns to shoot Mr. Bruin; but that is a dangerous way of doing it. I have known men to be killed instead of the bear. It is a good way to hunt the bear with a dog that understands him, and will only nip him in the hams. This will soon cause him to tree, and he is a pretty good climber for so large an animal. He climbs almost exactly

as a man does, but if you are careless about going up to the tree to shoot him, he will come down not exactly like a man. He puts his arms around the tree, and lets go and comes down with a big scrape or slip, striking the ground with his butt sufficient to make him bound three feet high. But he is ready for off, and you have lost your shot. So be careful and go up slily and shoot him out.

CHAPTER XI.

HOW TO HUNT AND TRAP THE WOLF.

There are several varieties of wolves in the United States. The prairie wolf, of two or three different kinds, is but small, and is easily trapped or shot. He is not so destructive among sheep as the large gray wolf of the timbered country, and it is about these that I shall have the most to say. They are confined to no particular location, but travel about from one place to another. Still they have their particular routes, as from one swamp to another, and where their course brings them near a settlement, they sally forth at night to steal a sheep, if these are kept out and are not penned. Killing sheep is a business they understand, and they will cut the throat of one about as slick as a knife can do it. They are greedy creatures, and always want to kill the whole flock. I have known as many as thirty to be killed in a single night by one wolf,—nothing done but to cut their throats. When the she-wolf can find an old bear's den, she will take possession of it to have her puppies, usually about the last of April or the first of May. These follow her all the summer and fall, when they start off on their own hook to see



THE AMERICAN GRAY WOLF.

what they can catch to eat. When deer are plenty, it seems as though they could catch one whenever they please. I have often seen how they operated, one or more running directly on the track, and one on each side. After a short run, they would close in, and the venison was sure to be taken. There seemed to be no possibility of escape. In fact, they are great hunters; some will hide in a run-way, while the others drive the deer along. I have often heard the gang, belonging to an old slut with an old dog in company, set up their how-de-low, from the blow of a conch shell to the barking of a puppy dog, screech and scream, all at once,—utter confusion.

It is no sign whatever that they have caught anything because they make such a noise, although when one wolf catches game or finds a deer or any such thing, he goes off a short distance and sets up a howl that makes the welkin ring; and when joined by his comrades, they go together and feast on their booty. While the wolf is calling the others together, should you remove the bait or body, when the pack return with the one that caught it, and they find nothing there, the unfortunate beast pays with his life the penalty of his false alarm. Wolves often catch deer on ice, and while they have gone to call the pack, men have often removed the body, and then from a safe distance watched the tragedy I have spoken of.

To my mind the wolf is the shyest creature I ever tried to get a shot at, and to catch one in a trap you must use the same caution that I recommended in trapping for fox-

es. Never touch the trap with your bare hands, unless you are going to set it under water.

The best way to trap wolves is to take the carcass of a dead horse or other animal and draw it to a spring-hole, and then set your trap exactly as recommended for bears.

Wolves may be poisoned by the wholesale. Where there are wolves in the country, they have, as I said before, regular routes over which they travel several times during the winter. By close observation you can learn about when they will be along,—within a week or so, at any rate. Now hunt up an old horse that is about to die, lead him to the spot that you have selected, kill him, and skin him. Take pieces of lard about the size of a hazel nut, and slices of tough flesh from the horse large enough to thoroughly enclose the lard. Spread the lard a little on one side of the flesh, and sprinkle upon it as much strychnine as can be taken up on the point of a knife blade. Mix this with the lard; then roll up the meat neatly and tie it slightly, so that the strychnine cannot be exposed on the surface, and lay it down on the carcass of the horse. Put about a dozen of these baits exactly where you can find them at any time. When you come again to examine the place, as many pieces as are gone, just so many dead wolves you may expect to find within two or three rods of the spot. I have known a whole gang to be killed in this way in one night.

Foxes may be killed in a similar manner, only very much less strychnine is necessary. When the wolf, the fox, or

any other animal is killed with strychnine, the carcass should be burned at once, lest fowls or other domestic animals get poisoned by it, and the hide should be immediately tarred with alum and salt, as described in the chapter on dressing skins. If this is delayed, the hair and fur will come out and spoil the looks of the skin. If wolves kill a sheep or calf, or any other creature, for you or your neighbors, take the body to some place out of the reach of domestic animals and put poison about it as above directed, and you will be sure to make them keel over.

You can so scent your boot soles with a mixture made of the oil of rhodium, oil of fenugreek, oil of cummin, and flour of sweet fennel, as to make the wolf follow your track or trail. By going far into the wilderness and traveling among the swamps, you can fetch the wolves into your neighborhood, but they are not pleasant neighbors to have.

CHAPTER XII.

HOW TO TRAP THE POCKET GOPHER.

The pocket gopher is a destructive little animal. He digs roads under the surface of the ground, leading in different directions, wherever he is likely to find food. He will not permit this pathway to be open to the light, except while it is necessary in throwing out his dirt. His manner of doing this is very curious. He is provided with two pockets, one on each side of his head, which he fills with dirt, and then comes to the surface, and with a dexterous movement discharges his load, scattering it for a distance of ten or twelve inches. When this dirt begins to form a heap around his hole, he roots it away with his nose after each discharge; and when it is too far from the place where he is burrowing to fetch the dirt out at this hole, he closes it up tight, and at a distance of ten feet or so, proceeds to make another, and so on through the field, eating off the roots as he goes. He appears to know where to steer, and he can burrow straight for a turnip patch or a stack of corn or wheat.

After many experiments, I learned to trap him. I set my trap in the mouth of the hole, and he would bring dirt and cover it up while stopping the hole, which he never

leaves open. I then dug in with my hand, and placed it beyond where he began to drop the dirt, and so caught him. This succeeded every time.

And now I will tell you how to hunt him. Any where, where you see his work, that is, little hills of fresh dirt thrown up, you may go with a little stick, or whip stock, and push it down around the hillock until you strike his road. Right here, I want you to understand that you can't dig into one of these hillocks and find the hole. He so effectually closes it up that I never saw one opened where it was first made. When you have struck the track, dig down until you come to it, which is sometimes as low as eight or ten inches. Then, with your hand, dig it out large enough to slide in your trap, reaching your arm in to the elbow. The best trap to use is the little one spring kind, of the Newhouse make. Having pushed the trap in, go away, without further fixing, and perhaps in an hour, perhaps in three or four days, you will catch the lad.

When you cut the hole, he may be at one side of it or at the other. If he is in the opposite end from where you have set the trap, he may fill up the hole, and in that case you must change the position of the trap.

CHAPTER XIII.

FISHING FOR TROUT, PICKEREL, AND BASS.

The trout, I mean the live trout, is the prettiest fish to look at that swims, and he is full as good to eat as he is to look at, that is, if he is properly cooked.

Most folks know something about fishing, yet there are few who fish with much success. Some men take a rod and line, and if there are any fish in the brook will surely have their share of them, and I propose to show you how the thing is done, so that if the fish are there you must catch them.

In the first place, a man or a boy must have at least a moderate share of common sense, in order to be successful in fishing for trout. Then he must have a good hair line of gray horse hair that is not easily seen in the water, or a fine hair or gut line. I have seen some good lines made of sea grass. But nothing is so good as the hair line, as it will not twist around the brush, never kinks, and rarely gets tangled. You also want a good Limerick hook, not too small, what is commonly called a bass hook. A little hook will catch little trout, but is not strong enough or large enough to catch big trout. A big hook will catch big trout, and occasionally little ones, too. For bait, you want a piece of hog's liver. I suppose a piece of beef's

liver would do, but they say it is not so good. Cut it up the size of a bean, leaving a portion of the outside on each piece, to make it tough. Angle-worms are said by some to be the best bait, and they can be improved in this way: Put them in a box large enough to hold a little earth with them; on this pour a small quantity of sweet cream, and in a few hours they will have eaten enough to appear white, or kind of striped. Now take smallage (celery) jam it up, and put it among the worms and dirt, and start for your fishing. When you can get no better bait, any fresh meat will do, and any bait is improved by being mixed with tincture of assafœtida, which has the effect of causing the trout to bite when he otherwise would not. Some use sweet sicily, and some the oil of anise. The sicily root is chewed, and spit upon the bait; the oil of anise is put in the box with the bait. Remember this, a frightened trout will not bite for you, nor for anybody else, and you must go to the creek very slyly, or they will see you and run away. Most of the trout do run away, and so we catch but the smaller part of them. It makes no odds how good the bait is, they won't bite if they are frightened; so, you see, in order to have much success, you must use some strategem—that is, crawl up to the edge of the stream and throw the line over skilfully, and, if they have not seen you, they will snap as quick as a gun lock. Perhaps two or three, or a dozen, will try to catch it first; certainly it is the finest sport ever indulged in. Take the fish off your hook, and don't flourish with

your rod meanwhile. If they are likely to see you, you had better squat down while you are baiting your hook. You should have a basket with you to slip the trout in as you catch them, occasionally putting in some leaves to prevent their getting jammed. Putting them in a bag spoils them, by their continually rubbing together; but a basket and leaves keep them looking as beautiful as themselves. I saw the handsomest picture of a trout in the *American Agriculturist*, that I ever saw.

In fishing for trout, you must keep your bait continually moving, with a sort of twitching motion, or floating down with the swift current. Mind you, they lie and watch just at the foot of the little rapids in the creek, to catch any live worm or hopper that will help to fill a hungry belly. If you have no bait, a piece of woolen rag may catch one, and then you can cut a bit of what is called the throat-latch, or of the narrow part next to the tail, and upon this put a little assafœtida, and they will bite it well.

The best time to catch the trout, that is, the time when they are in the best condition to eat, is about the middle of April. From this to the middle of May or first of June they are good, but not so good as earlier in the season. In the fall they move to their spawning ground, and perform their important duty before the fall of the leaf. While they are on their beds, they do not seem to be so easily frightened, and you may often see hundreds lying close together.

With a little care you may catch nearly all of them, although some of them, and the largest ones at that, will not bite. In such a case, have three hooks fixed like a grapple, and with your line swing it under their heads, so that a light twitch will fetch the hooks into their belly. Some catch them with a slip-noose made of annealed wire, or brass wire, and fastened to the end of a rod, so that it may be slipped over their heads.

Trout may be caught at any season of the year, if you can only find where they are. In winter they move into deep holes of water, and by cutting a hole in the ice over one of these deep holes, and baiting with liver, you may catch them, even when it is so cold as to freeze them stiff in a few moments.

PICKEREL fishing is quite different from trout fishing. There are several distinct kinds of fish called the Pickerel, different sorts having the same name in different countries. In Canada, for instance, the Pickerel is a short, chunked, weasel-eyed, yellow fish; in this country it is a long, slim, spotted, flat-headed fish, and a regular fish eater, closely allied to the muscalonge; in fact, some persons cannot distinguish between them. They are fished for in the same way, and their habits, so far as I know, are exactly alike. As soon as the ice goes off, in the spring, the Pickerel and muscalonge go to their spawning places near the banks of the streams, among bogs, and where the bottom is muddy.

They frequently get into the drowned lands where the

high water of spring has flowed, and you may see them lying, two and two, sometimes with their back fins out of water, and many are caught by shooting and spearing. The best way is to go on to these spawning places in the night in a boat, with a good, bright light, and to pick them up with a spear, which is fine sport indeed. Farther along in the season, you may catch them with a hook and line. A small frog or a small fish makes a good bait, but you can do just as well, and it is more convenient, to have a spoon hook, such as you can buy at any store where they sell fishing tackle. Your line should be about sixty feet long.

When you have everything prepared, put out in your boat, throw out your hook and trolling line, and go ahead just fast enough to keep the bait dancing or skipping along the surface of the water. Keep near to the shore, on the shoals, especially if the river or lake is skirted with bulrushes. If there are any pickerel or muscalonge about, you will soon have business, especially if your bait is taken by a fellow weighing twenty pounds or so.

The best time in the day for this sort of fishing is from seven to eleven in the morning, and from two to five in the afternoon.

It is about useless to go a-fishing for Pickerel in midsummer, as they bite slowly then, and are, withal, poor and soft, and unfit for food. But during the winter they are excellent, and are easily caught in the following manner:

Make a box six feet square and six feet deep, and turn it upside down on the ice over a hole about twenty inches across. Have a door in the side of the box through which you can go in and out. You may also have a bench and a stove inside, to keep yourself snug and warm. When you are in, close the door so that it will be quite dark; then you can see for some distance in the water, but it is best to be where it is only about two feet deep. Bait your line with a little wooden fish, weighted with lead, and with tin fins. Keep this playing about in the water, and the pickerel, which are always on the lookout for prey, will come after it, and you can coax them up near to the surface and then strike them with a short bearded spear.

Another way to fish through ice is to set a lot of lines about thirty feet long with a cork float to keep the hook off the bottom, baiting it with a small live fish. The rest of the line may lie coiled up near the hole so that it will pay out easily, and the other end of it may be fastened to a little bush stuck up in the ice. When the pickerel takes the bait, he runs away with it as he swallows it, and the long line is needed to give him a chance to do this. The shaking of the bush will show when you have a bite, and you can attend to twenty lines at once, and have more sport.

Fishing for bass is quite another business. To my mind, they are a much better fish than the pickerel. There are several kinds of bass,—the black, the striped,

and the yellow; the last two kinds are the best, and in April and May they are very fat, and next to the trout for eating.

You can make some headway in spearing them in early spring, but the better way is to catch them with a trolling line, with a spoon hook or spinner. From the middle of June to the middle of July, they are spawning, and do not like to bite. In the fall and winter I have never succeeded in catching many. Quite early in May a fishing rod with a strong line and hook, baited with a small frog, will answer very well. I have also known them to be quite successfully caught with a gill net.

I have said nothing about scenting the bait for these fish, as I consider it useless.

CHAPTER XIV.

HOW TO HUNT THE HONEY BEE.

The Indians say that the honey bee is the white man's forerunner, and it is to be found wherever the pale-faces have settled. In many parts of the country they are quite plenty, and honey is excellent eating. Still the honey of wild bees is not so good as tame honey, because the latter is made from white clover and buckwheat. However, when wild honey is made from bass-wood blossoms and leaves, it is almost as good as that made from buckwheat.

The bees are in our forests, and if you will have a little patience, I will tell you how to find them, and to get their honey.

First; in early spring, before the snow goes off, after a warm day or two the bees come out and fly about in the air, dropping their filth in the shape of dark yellow spots all over the snow in the neighborhood of their tree. When you see this upon the snow, begin to look for a bee tree. As the spring opens, and the snow goes off, they get very hungry, and if you offer them honey they will take it very soon, and you may line them directly to the tree.

I now propose to tell you how to get a true line of bees. We will say it is in the month of July. This is

early for hunting bees, and they don't care much about your honey, because there are so many swamp flowers for them to gather from, and you must get something they like better. Take corn cobs (without the corn,) and lay them lengthwise in a trough, and pour a little chamber lye or urine upon them, and let it stand out of doors for a day or two, when the bees will come to it and fill themselves at this season more eagerly than with honey.

Now lie down on your back so that you can see them against the sky, and watch which direction they take. After they have taken a turn or two they will strike straight for home. The point of a swamp, or a high hill, will sometimes make them curve a little, but otherwise they will strike a *bee line*, as the saying is. When you are sure which way they go, set one stake with the top painted white, to enable you to see them better, at the place where you stand, and another at the point over which they disappeared. By these two you can take the range for the third, and so on, and now you have your line started, and have only to follow it straight on to strike the bees. Two men can set the stakes much faster and more easily than one.

A surveyor's compass, if you know how to use it, will answer the same purpose, but staking is very correct,—only start right, and *don't doubt the bees*, for they will fly straight, I assure you.

Another plan is to set the trough farther on in the line of flight, from time to time, until you reach the tree.

The usual time for hunting bees is after the first frosts in the fall of the year; and now I will try to lead you into a regular bee hunt.

Provide yourself with a tin pail, or a wooden box, (with a bail and cover,) having a capacity of about two or three quarts; also a nice plain glass tumbler; a piece of a shingle with a handle to it (this is to cover the tumbler with); some new, good honey; a piece of clean honey, comb, and a piece of refuse comb that the honey has been pressed out of.

Now start and go where you have seen bees at work; some winter blossoms may be there in bloom, on which you may find the honey bee.

Then take your piece of clean comb and fill it with honey (made thinner, if necessary, by the addition of water or urine, which is better) and set it on the top of a stump or some place fixed for it. Next proceed, in the following manner, to catch a bee: Take the tumbler in one hand and the shingle in the other. When you see the bee on a flower hold the tumbler in such a way that you can knock him into it with a very light blow, and shut him in with the shingle. Carry him to the prepared honey-comb and turn the tumbler bottom side up, when he will rise up, and you may withdraw the shingle and set the tumbler over the honey-comb. Then take a handkerchief or your hat, and cover the tumbler with it, and the bee will at once settle down and commence to fill himself; when he gets steadily at work, take the tumbler away so

that he will be at liberty to start for home as soon as he is satisfied. Now watch closely which way he goes, and for this you must be where you can see all around, for when he first rises he will swing around in a circle several times until he is thoroughly acquainted with the ground, and then he will strike his bee-line for home, and you ought to be able, particularly under the morning sun, to see him fly for twenty rods. Presently more will come, and they will fly back in the same direction; then set your tumbler over such as may be on the comb, slip under the shingle, take up the honey and start on the line as far as you could see or had the range. There make a stand again, and proceed as before; so continuing, you will come to the tree, or to where they will fly so crooked as to baffle you completely, when you may make up your mind that you are in the right neighborhood. They will swing around and rise very high to pitch down to their nest, or they will fly past the tree and turn and come back toward it. You should have a small pocket spy-glass with which to examine the tops of tall trees, or to examine any suspicious looking one.

If you should not succeed in finding blossoms with bees on them, you should make a fire and heat some stones red hot, and lay on them some of the refuse comb I spoke of, and when this begins to burn, it will raise quite an odor of honey and beeswax, which the bees will smell out from quite a distance. When they come to it, catch them under your tumbler, and proceed as before directed.

Sometimes the bees will come from different directions, in which case you must mark the back of one of them with chalk, so that you can see which way he goes.

Sometimes they don't seem to like honey, and then it is a good plan to put in a little oil of anise,—say two or three drops to a gill.

When you have found the tree in which the bees have their hive, and are ready to cut it down, fell it so that it will strike on some small tree that will let it down easy, and if you want to save it for a skip or breeder, saw out the piece that the bees are in; first, if it is much shattered, drawing it together with a chain and putting hoops around it. The bees will repair any damage that may be done inside, if they have warm weather enough to do it in.

If you want to save it, it is best to mark the tree and let it stand until spring, and then cut it down and take it home, when the bees will have plenty of time to commence the season of honey-making. If there is a large, rough hole for them to stow away in, they will make as much again honey during the season as they would do in the woods. If you want much honey, have a large place for them. If you set one hive on another, and leave no open space, they will work on and fill up and breed, and never swarm. In this way two hundred pounds of honey may be obtained.

You must have the hive so well fixed, top and bottom, that mice and pismires will be excluded, leaving only a suitable aperture for the bees themselves to go in and out.

This they will guard against all intruders,—moths, hornets, or robbing bees from other swarms. My experience is, when you see a robber come to the bee hole in the hive, you will know him at once by his fine singing noise and the manner in which he alights on the board to avoid the sentry. Have your knife ready and cut him in two; they won't do this many times before they will stop it altogether.

In the month of July the bees make a loud, humming noise at their hives, and in walking through the woods you may hear them fifteen rods. Many are found in this way, and it is about the best way to hunt them when they are plenty during this month. About the middle of the afternoon the drones are out, and you may hear them for twenty rods.

It is at this season that it is best to use *stinking bait*, as we call it. I told you before how to make it; they like it better than honey.

Another way to make this bait is to take a wooden trough that will hold about six quarts, and put in it about four quarts of rotten mould or muck earth, a small handful of salt, and two quarts of urine. After two or three days the bees will commence to work in it, and they will fill themselves about as quickly as they will with honey.

CHAPTER XV.

HINTS ABOUT SHOT-GUNS AND RIFLES.

Shot-guns are of various sizes and patterns. The best size, I think, weighs about eight pounds,—double barrelled. The best kind, in my opinion, is the laminated steel twist gun.

The gun should put about six shot within the size of your hand at a distance of eight rods, and for ducks and all large game it should be a strong shooter.

The most important point in the gun is the construction of the barrel, that is, the shape of the bore. If this is a perfect cylinder,—of *exactly* the same size from muzzle to breech,—the gun is worthless, as it would shoot with no force. In order to be a strong shooter it must be a little the largest at the breech. Of course it will "kick," but kicking is not always a sign that the gun will carry shot well, even though it be a strong shooter, and for this reason the contraction of the bore toward the muzzle may be too rapid, or too great, so that the lines of opposite sides of the bore would cross each other too short a distance in advance of the muzzle, so that the shot would cross each other and so scatter. If these lines cross within a dis-

tance of five or six rods, when the shot have flown eight rods, they will scatter over a wide space. As the shot leave the gun they hug the sides of the bore, and if this is of equal size through its whole length, they will commence to scatter as soon as they leave the muzzle, and the gun will be of no use; but if the bore gathers toward the muzzle so that the charge is concentrated at the proper distance, the gun will shoot well.

If your gun scatters too much, it is because it is too large or too small at the breech. This you can determine by going to a gunsmith, who will cast lead in the barrel. If this will push through the whole barrel with a uniform pressure, it is of the same size throughout and must be made larger at the breech; this is done by casting a block of lead on the end of a rod near the breech, and working it up and down with emory powder in such a way as to grind it off more at the breech than toward the muzzle. Try it occasionally until at a distance of eight or nine rods it will plant six shot within the size of your hand, placing them in threes, here and there. If it still scatters too much, work out the breech a little more, until it springs sharply in firing and throws the shot as you want it to.

The same principle holds true with regard to the rifle. It will not shoot strongly, unless it is a little smaller at the muzzle than at the breech.

They make rifles in great perfection now-a-days, but they are not all accurate shooters. Very many breech-loaders

are not,—not shooting closely and steadily, yet a fifteen shooter is certainly an excellent weapon with which to face a bear, if one can be obtained that will shoot steadily. Still, I am not certain that this is the case.

I like the Henry rifle on many accounts, for you need carry no powder-flask, bullet-pouch, cap-bag, nor ramrod. Your wiper is in the end of the breech. You need not cover this rifle from the rain, and it would go off just as well if it had lain under water all night. It carries a half-ounce ball, which is quite large enough.*

There are double-barrelled rifles, loading from the muzzle, which are accurate shooters, and can be depended on every time.

For bear or deer hunting, I prefer balls that weigh about fifty to the pound.

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* Probably if our author had known the Spencer Rifle, which carries seven charges in its magazine and is a capital arm, he would have given it the preference over the Henry, as did our army during the war.—[Ed.]

CHAPTER XVI.

TRAPS.

For catching the mink, coon, fox, or any small animal that may cross a stream of water on a fallen tree, be the same large or small, a wooden trap may be used that may be made in about half an hour's time by any man or boy who has a little ingenuity.

Where a tree or pole has fallen or been placed across a brook, any small animals travelling in that vicinity will, more or less, cross upon it, and I have long been puzzled to find a trap that would catch them. I have seen the necessity for such a trap and have waited for other men to invent it, but none was forthcoming; and at length, by persevering, I contrived the following simple and easy plan, shown in fig. 1.

The letter *A* represents the brook; *B*, the tree crossing it; and *C*, the bed-piece of the trap, lying at right angles to the pole, one end resting upon it and the other (it may be 20 or 30 feet long) lying in the crotch *H*, which is driven into the bed of the stream. *D* represents the dead-pole lying over the bed-piece *C*, working up and down between the two guides, *E E*, the hinge end of it resting in the crotch *H*. The trap end reaches to two posts, *I I*, which hold up the trigger and cap piece *G G*, tied to-

gether with a bit of stout cord or bark. When the trap is set, the dead-pole lies on the end of the trigger *G*. The long strip of wood marked *F*, with one end tied to the dead-pole with a bit of bark, at *K*, we will call the tongue. This reaches through between the guides *E E*, and the

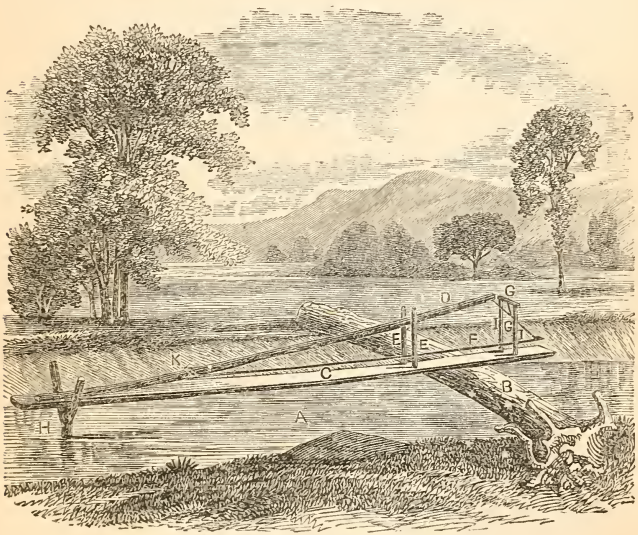

Fig. 1.—TRAP FOR MINKS, COONS, ETC.

trigger posts *I I*, being long enough to catch the end of the trigger in a notch made in the end of the tongue. The pressure of the dead-pole upon the trigger lifts the tongue from the bed-piece and enables you to set the trap high or low, as you please, according to the size of the animal you are after, whether a squirrel or a coon.

The tongue may be made of a round piece of wood, about the size of a hoop pole, split in two and placed flat

side down. It should be four feet long. The bed-piece should be enough larger than the dead-pole to enable you to set the guide and trigger posts *E E*, and *I I*, into it, driving them into auger holes, or, the ends being cut wedge-shape, into splits made with an axe.

This trap may be set in the same manner on the top of a fence to catch squirrels, or across the beaten path of any animal that will step on a pole to jump over it if he finds it in his road.

The dead-pole should be raised from six to ten inches, according to the size of the animal you want to catch. This is regulated by making the trigger shorter or longer.

I will now try to describe a wooden trap that may be built with little labor, in which you may easily catch a bear. The only tools necessary are a good, sharp axe, and a two-inch auger.

Go to the usual haunts of the bear, or to some place to which he makes frequent visits, and lay down a bed-piece or log, say ten inches in diameter and twelve feet long. Directly on the top of this place a dead-pole of the same diameter, and the full length of the tree, or thirty feet long. Let the small end of the dead-pole be somewhat elevated, so that it may lie fairly on the whole length of the bed-piece. At the centre of the bed-piece build a house-like enclosure (about two feet wide and three feet long on one side of the bed-piece) by driving down straight pieces of good timber about three inches in diameter, set firmly in the ground so as to be four feet high,

and covered over so strongly that a bear cannot unroof it to get at the bait that is to be put inside. The end of the house next to the bed-piece will hold it firmly and will serve as one side of the guides for the dead-pole to play between. Stakes of the same sort should be driven down at the other side of the bed-piece, one opposite each end of the enclosure, to complete the guides, and these should be connected with the others by extending the roof over them.

Three inches from the outside of the enclosure, on the side toward the but-end of the dead-pole, and nine inches back from the bed-piece, drive down a large, solid post. Cut a groove or notch in the top of this, to hold the lever and keep it from rolling. This post should be about two and a half feet high, or sufficient to raise the dead-pole two feet at the entrance of the trap.

Make a strong lever, say five feet long, to rest in the groove at the top of the post, and support the dead-pole over one end of it, so that the other end will come down by the side of the enclosure.

Now drive another stout post at the outside of the house near its back end, so that the lever will pass down a little outside of it. In this post, on the side toward the dead-pole, cut a notch with the square side above, so that a latch stick placed over the end of the lever, to hold it down, will be pressed up against it and held there. This latch stick should pass through an aperture in the side of the enclosure or house and reach nearly across it, its other end being held up by another post having a notch cut

with its square side below. The latch will now hold the lever under its outer end, be pressed up against the flat side of the notch in the post outside of the house, and pressed *down* against the flat side of the notch in the post inside of the house.

Next, take a forked stick of good size and lay it across

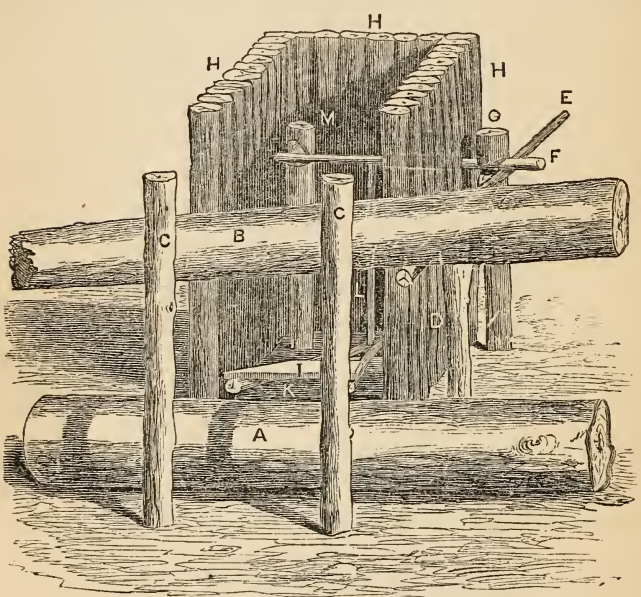

Fig. 2.—TRAP FOR BEARS.

a bed-piece on the bottom of the house so that it will play up and down over it. Put the crotch end under the latch stick, and let the two prongs reach nearly to the bed-piece of the trap. Pin a board or other flat piece of wood across these for the bear to step on, and set a post (by

means of an auger hole) in the crotch end, reaching to the under side of the latch stick. When the bear steps on the board and presses it down, he will raise the crotch end, and the post will throw the latch out of the notch, when it will no longer hold the lever, and the dead-pole will fall across his back. The dead-pole should be heavily weighted by laying logs across it. The trap should be baited with honey, for the bear will always risk his life to get at this. Fresh meat will bait it for the wolf or for a dog.

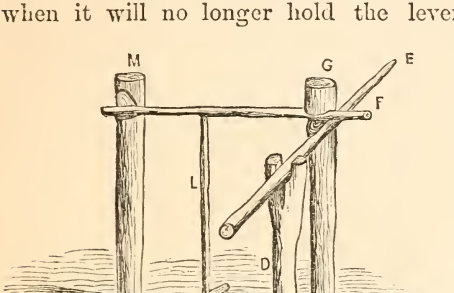

Fig. 3.—TRAP FOR BEARS—SECTION.

This is preferable to the steel trap, for there is no danger of catching men or cattle in it; and its cost is trifling. The plan, fig. 2, page 80, will help the description: *A*, the bed-piece; *B*, the dead-pole, of which a section only is shown; *C C*, the guides; *D*, the lever post; *E*, the lever; *F*, the latch; *G*, the latch post outside of the house; *H H H*, the house or enclosure; *I*, the treadle for springing the trap; *K*, the bed-piece, across which the treadle is balanced; *L*, the post to knock off the latch; *M*, the latch post inside of the house. In fig. 3 some parts of the trap are given, which are obscured in fig. 2.

CHAPTER XVII.

DRESSING AND TANNING SKINS AND FURS.

HOW TO DRESS THE SKINS OF THE BUCK AND THE DOE, AND TO PREPARE THEM FOR MAKING MITTENS, GLOVES, ETC.

There are various ways of dressing these skins, but some are easier and better than others. Several of the recipes given below have been hawked about the country at five dollars each.

We will commence with what is called oil-dressing, and, to begin at the beginning, the directions would be, "first catch your deer." As soon as the hide is taken off from the deer's back, it should be grained; to do this, provide yourself with a beam eight inches through, and six feet long; put two legs in one end, and let the other rest on the ground, so that it will stand at a steep slant. The beam must be of hard wood, shaved smooth, without a ridge in it.

Provide yourself with a knife. One made for the purpose is best, but you may make a very good one by taking an old shaving knife and grinding it square across the edge, until it has a face about a sixteenth of an inch across. Then whet the corners smooth, so that they will

not cut the skin. A piece of a scythe, with a handle at each end, makes a good fleshing knife.

Now sit down, with the highest end of the beam against your belly, and lay on the skin, hair side down, and proceed to take off all the flesh and fat, and every unequal substance before you turn the hair side up. Then commence to grain, with the neck of the skin next to you, and shove against the hair, having a firm hold of the knife, and shoving with some strength, when off will go a streak of the grain, and so proceed until it is all off. This is the way to grain a green hide just taken from the animal.

To grain a dry hide, first put it in a tub or barrel of warm water, and let it lie for twenty-four hours, and then add to each half barrel of water a pint of good slaked lime, and let it stand twenty-four hours more; then proceed as with a fresh skin.

When the work is properly done, the skin will be as clear as glass, with no streak of grain or other uneven substance left; unless it is in this condition, it will not dress well.

Now, in order to dress one buck skin, take eight quarts of fresh rain water and warm it, and put in one pint of soft soap. Put in the skin while the liquid is warm, and work it with the hands, or punch it with a stick, until the soapsuds is quite worked into it, say twenty-four hours. Then take it out and pass it between two sticks, or pass it through a good wringing machine. Then pull it until it is dry, in the hot sun, or before a hot fire. Next stretch

it out to its full size, and spread on some soft grease, or any animal oil, until it is well oiled through. Then heat up the suds again, and apply half as much more soap, and put in the skin again and work it well for a time, and let it lie twenty-four hours longer. Then take it out and pull it dry, as before. For all doe skins, and for yearling bucks, this will be enough, but old buck skins must go in once more, and when pulled dry again they will be as soft as velvet.

The best grease to use is butter, which is the greatest softener in the world, and a less quantity will answer than of any other grease.

When the skin is dressed and pulled dry, you may apply ochre to make it yellow, or hang it up in a smoke-house and smoke it with a smudge of rotten water elm, which will make it a beautiful reddish yellow.

Another process is to let the skin lie in clear water until the hair will slip off, and then grain it on the beam. This is a very good way. I have practised it, and found the leather as tough as that of the green hide.

Take the brains out of the head of a deer, or of a hog, tie them up in a cloth, and put them into a gallon of water, and boil for an hour; then squeeze the cloth so as to press through as much as you can; let it stand until you can barely hold your hand in it without scalding; then put in the grained skin, working it continually for two or three minutes; then take it out, wring it, and pull it dry. If not soft enough, heat up and put in again;

then work it and dry it as before. No doubt it will be done by this time, but if it is still a little hard, apply a small amount of butter, and work it in thoroughly, and then smoke, as before directed. This is the Indian dressing. There is no doubt that the first recipe—the oil-dressing—is the best of all.

Tanning.—The first thing to be done preparatory to tanning a hide or skin is to soak it, as no hide can be tanned unless it has been soaked and properly broken on a fleshing beam. Soak in soft water, and, unless the hides have been salted, add a little salt to the water. Green hides should remain in until thoroughly well soaked, say from ten to twelve hours, according to thickness; dry hides from two to six days. All hard or unbroken spots must be softened after soaking. To remove the hair or wool, immerse the hide or skin in a liquor composed of ten gallons of cold, soft water, eight quarts of slaked lime, and eight quarts of hard wood ashes. Let it soak from two to six days, or until the hair or wool slips off easily.

If it is desired to keep the wool or hair clean, instead of using the liquor, take equal parts of slaked lime and hard wood ashes, and make into a thin paste, with water. Spread this on the flesh side, and then roll up the skin, flesh side in, and place it in a tub or barrel, barely covering it with water. Let it soak from one to ten days, or until the hair or wool can be easily removed; then take

the hides from the soak, and scrape off the hair and flesh with a fleshing knife.

The hides, by being soaked in the lime liquor, are raised too much to be submitted to the tanning liquor. They must first be reduced to their original thickness, by being entirely freed from the lime. This is done by what is termed "bating."

A bate is made of ten gallons of cold, soft water, one half bushel of wheat bran, and a quarter of a pound of sulphuric acid. It should be prepared a day or two before using, in order that the bran may ferment. By using lukewarm instead of cold water, the process will be hastened. Put the hide into this bate, and let it remain until it is reduced to its natural thickness and is as soft as a green hide. Then remove it and rinse it in soft water, and work it out, at least once, over the fleshing beam. For a thick hide, a second rinsing and working will be necessary.

Tanning Liquor.—For light hides, add one-half bushel of wheat bran to ten gallons of soft, warm water, stirring it in. Let it stand in a warm room until it ferments, then add seven pounds of salt, and stir it until it dissolves; then add slowly, and stir in, two and a half pounds of sulphuric acid. Into this liquor put the hide, and handle it until it is perfectly saturated.

This tan will impart no color to the leather, but will act as a mordant for setting a variety of bark or vegetable

colors. This tan liquor, when properly prepared, has a sour, pungent taste, sharper than the keenest vinegar, but is not so strong as to injure the tongue or hands. This is the test for the strength of the liquor. If it becomes much reduced below this test, while the hides are in it, it must be strengthened. To do this, remove the hides; then skim off the bran, which is now worthless, and add to the old liquor fermented bran, salt, and acid, as before. Light hides should remain in the tan liquor from four to twelve hours. Then rinse them in soft water, two or three times, pushing out all the tan from the fur or hair. All tanned skins should be thoroughly rinsed before applying the liquid stuffing, which is composed in the following manner.

Take one-third leached lye, and two-thirds tanner's or neat's foot oil, beat together, and apply with a stiff brush. Give calf skins two coats, furs one light coat, and deer skins two coats, one on each side. Hang them in the shade to dry. When half dry, take them on the beam over some yielding substance, and by pushing the edge of the flesh knife stoutly over the leather in all directions, it will become soft and pliable.

In treating a calf skin, when the liquid is nearly dried in, apply a thorough coat of water-proof stuffing.

All hides and skins when drying are like full cloth. When wet, they contract or pull up, and have to be stretched. To do this, take the hide after the liquid stuffing is dried in, dampen it, and place it on the fleshing

beam over some yielding substance like a sheep skin. Then use the flesh knife, (a circular knife, like the cook's chopping knife.) By pushing the edge stoutly in all directions over the leather, it will become stretched, and be made fit for the various uses to which it is to be put.

The following is a simple way to dress deer skins. First have them grained as already directed. Then, into a two gallon stone pot, put two quarts of rain water, one oz. sulphuric acid, and one gill of salt.

Put in the hide, work it well for two or three minutes, wring it out, pull it dry, and smoke it.

COLORING HIDES.

Black.—Use logwood clear; dry, and then use copperas water to make it black. Don't use too much copperas.

Drab.—Pulverize blue clay with soft soap, add blue vitriol, or extract of logwood, to shade the color as you wish.

Dark Brown.—Seven lbs. of oak bark, six lbs. of young fustic, one lb. of logwood. Strike in with strong alum water.

To Buff Buckskin.—Take five parts of dry whiting and two parts of yellow ochre, and mix them with water to a stiff paste. Mould into balls, and lay by to dry. When the dressed skin is dry, rub the ball over the surface, and scour the powder in, and nap the leather by going over it with sand paper, folded over a small piece of

half round wood; or rub the leather down with pumice, stone.

Buff or Dark Brown.—Take equal parts of pulverized, unslaked lime, and litharge, and mix to a thin paste with water; apply it with a brush. One or two coats will give a light buff or buckskin color, which every additional coat will deepen. By adding ammonia and nitrate of silver, a beautiful black color is produced. This color may be so applied as to give a leopard skin appearance, and in the hands of an ingenious person, a beautiful effect can be produced.

Another.—One oz. of crystalized nitrate of silver, eight oz. carbonate ammonia, one and a half pints of rain water. Cork tight. Apply to the surface of the fur with a brush. One application will make a brown, and by repeating it often enough, the color may be deepened to a black.

TO DRESS FOX SKINS.

Commence to skin the fox by ripping down the back of each hind leg until the slits meet at the crotch. Don't rip up the belly, but skin the body whole. Skin the tail by putting a split stick over the bone of the tail, between the hide and the body. Hold it tight, so that it will scrape the bone of the tail, and then pull this out of the hide. Draw the hide over a board, made ready of a width from end to end, and when it is dry, slip it off and turn it fur side out; then it is ready to sell.

BEAVER SKINS.

Rip the skin as you would that of a sheep. Stretch it to its full size in all directions, and nail it on a board to dry. It may be dressed by a mixture of equal parts of rock salt and alum dissolved in water, with coarse flour stirred in to make it about as thick as cream. Spread this on about half an inch thick, and when dry, scrape it off. If this is not enough, put it on a second time.

To make it into furs, pluck out the long hairs.

OTTER SKIN.

Skin him nearly the same as the fox, only that the tail must be ripped up, and when the hide is turned down to the four legs, they must be skinned out carefully. Slip the skin over a board that will not fit it so tightly as to injure the fur. Stretch out the tail, and hold it in place by tacking it with small nails around the edges. If it is a real black fellow that shines like a crow, probably you will get eight or ten dollars for him. It may be dressed in the same manner as a beaver skin.

MINK SKINS.

The same directions in all respects as for the foregoing, save that after the paste gets dry it should be scraped off with the bowl of a spoon, taking care to keep the skin stretched tightly, so that the astringent matter will not shrink it too much.

The skin may be dressed as soft as velvet, and the alum and salt will set the hair securely.

During the warm, summer months the mink is nearly stripped of his fur, the skin is thin, and the buts of the hair stick nearly through, making the pelt black.

The skin is in its prime from midwinter until about the middle of May.

MUSKRAT SKINS.

These skins are very tender, and the flesh is very tough, so that they will not bear fleshing until they have lain for at least six hours in the tan liquor described above for light deer skins. After this it should be fleshed over the flesh side of a sheep skin, with the circular fleshing knife. The fur may be enlivened by being rubbed with a mixture of equal parts of scorched bran and clean white sand.

RACCOON SKINS.

These should be nailed on a board to dry, and smeared with a paste made of equal parts of alum and salt dissolved in a weak solution of sulphuric acid, say 2 oz. of alum, 2 oz. of salt, 1 drachm of sulphuric acid, 1 pint of water, and a little wheat bran. When nearly dry, scrape it off with a spoon, and work the skin very soft.

This may be done by rolling up the skin, instead of nailing it on a board; or it may be put in the tan liquor recommended for light deer hides.

BEAR SKINS.

Tan in the same manner in all respects as the Raccoon skins.

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