The Newhouse trapper's guide

Sewell Newhouse, Oneida, ltd


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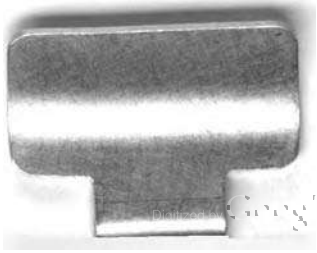

THE NEWHOUSE

Trapper's Guide

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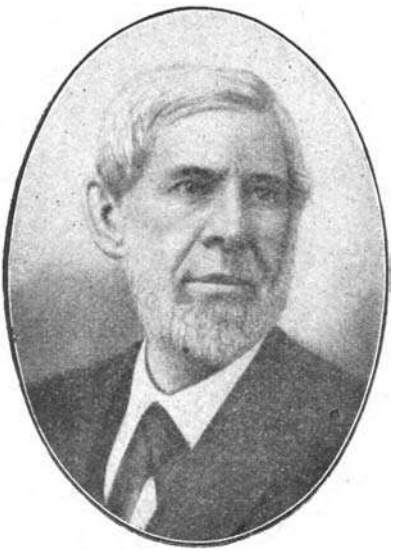

S. Newhouse

INVENTOR OF THE
ONEIDA COMMUNITY NEWHOUSE
TRAP

LIST OF ILLUSTRATIONS

PREFACE

To the Twelfth Abridged Edition

Trapping and hunting wild animals bring a man face to face with nature. He studies the woods, the running waters, and the growing things. He learns the ways of animals and birds. Even a little experience in woodcraft is valuable. The boy who has started off alone with a few traps on his back, and catches Muskrats, Mink or Skunk, is different from the boy who has never done these things. He has more self-reliance and courage, and these stand him in good stead all his life.

For more than thirty years the NEWHOUSE TRAPPER'S GUIDE, first written by Sewell Newhouse and other trappers and sportsmen, has held its place as the foremost authority on trapping. Mr. Newhouse was not only a practical trapper, who had spent years in the woods, but he was also the first maker of steel traps of modern design. He was a genuine lover of woodcraft, and his knowledge has proved useful to a host of trappers who came after.

This twelfth edition of THE GUIDE contains fresh illustrations and valuable new reading matter drawn from the experiences of successful trappers of the present day; also a great many practical suggestions by trappers, these alone being worth many times the price of the book.

The conditions which surround life in the woods are constantly changing as the old trapping grounds become settled and fenced in, the frontier crowded back by railroads and farming; but the business of trapping keeps up. More steel traps are sold now than ever before, and more furs are caught. The cunning animals learn the ways of man, and some of them not only survive, but thrive, amid the farm lands.

It is our purpose to keep the NEWHOUSE TRAPPER'S GUIDE strictly up-to-date, so that whoever buys it may feel that he has a knowledge of the latest and best methods of trapping, of curing and marketing the skins, and of camp life in general.

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THE TRAPPER'S GUIDE

By S. Newhouse

I. PRELIMINARIES

Wild animals are taken for various reasons besides the value of their furs. Some are sought as articles of food; others are destroyed as nuisances. In these cases the methods of capture are not essential. Animals that are valuable for food may be run down by dogs, or shot by rifle or shot gun; and nuisances may be destroyed by poison. But for the capture of fur-bearing animals, there is but one profitable method, namely, by steel traps. Other methods were much used by trappers in old times, before good steel traps were made; and are still used in semi-barbarous countries, where steel traps are unknown, or cannot be had. I will briefly mention two or three of these methods, and the objections to them, and after that give my views of the true method.

THE DEAD-FALL

This is a clumsy contrivance for killing animals, which can be made anywhere, with an axe and hard work. It consists of two large poles (or logs when set for bears and other large animals,) placed one over the other and kept in place by four stakes, two on each side. The upper pole is raised at one end high enough above the lower to admit the entrance of the animal, and is kept up in that position by the familiar contrivance of the stick and spindle, or "figure four." A tight pen is made with sticks, brush, etc., on one side of this structure at right angles to it, and the spindle projects obliquely into this pen, so that the bait attached to it is about eight inches beyond the side of the pole. The animal, to reach the bait, has to place his body between the poles at right angles to them, and on pulling the spindle, springs the "figure four," and is crushed.

The objections to this contrivance are, first, that it takes a long time to make and set one, thus wasting the trapper's time; and second, the animals caught in this way lie exposed to the voracity of other animals, and are often torn to pieces before the trapper reaches them, which is not the case when animals are caught in steel traps,

properly set, as will be shown hereafter. Moreover, the dead-fall is uncertain in its operation, and woodsmen who have become accustomed to good steel traps, call it a "miserable toggle," not worth baiting when they find one ready-made in the woods.

POISONING

Animals are sometimes poisoned with strychnine. I have myself taken foxes in that way. I used as much strychnine as would be contained in a percussion cap, inclosed firmly in a piece of tallow as large as a chestnut, and left on the fox's bed. After swallowing such a dose, they rarely go more than three or four rods before they drop dead.

The objection to this method is, that it spoils the skin. Furriers say that the poison spreads through the whole body of the animal, and kills the life of the fur, so that they cannot work it profitably. Poison is used very little by woodsmen at the present time, and dealers dislike to buy or handle skins that have been poisoned.

SHOOTING

This method of killing fur-bearing animals, is still quite prevalent in some countries. It is said to be the principal method in Russia, and is not altogether disused in this country. But it is a very wasteful method. Fur dealers and manufacturers consider skins that have been shot, especially by the shot-gun, as hardly worth working. The holes that are made in the skin, whether by shot or bullets, are but a small part of the damage done to it. The shot that enters the body of the animal directly are almost harmless compared with those that strike it obliquely, or graze across it. Every one of these grazing shot, however small, cuts a furrow in the fur, sometimes several inches in length, shaving every hair in its course as with a razor. Slits in the skin have to be cut out to the full extent of these furrows, and closed up, or new pieces fitted in. Hence when the hunter brings his stock of skins to the experienced furrier, he is generally saluted with the question, "Are your furs shot or trapped?" and if he has to answer, "They were shot," he finds the dealer quite indifferent about buying them at any price.

STEEL TRAPS

The experience of modern trappers, after trying all other methods, and all kinds of new fashioned traps, has led them almost unanimously to the conclusion that the old steel trap, when scientifically and faithfully made, is the surest and most economical means of capturing fur-bearing animals. Some of the reasons for this conclusion are these: Steel traps can be easily transported; can be set in all situations on land or under water; can be easily concealed; can be tended in great numbers; can be combined by means of chain and ring with

a variety of contrivances (hereafter to be described) for securing the animal caught from destruction by other animals, and from escape by self-amputation; and above all, the steel trap *does no injury to the fur.*

And here I think it my duty as a true friend to the trapper, to give him the benefit of my experience and study in regard to the form and qualities of a good steel trap, that he may be able to judge and choose the weapons of his warfare intelligently.

REQUISITES OF A GOOD TRAP

The various sizes of traps adapted to different kind of animals, of course require different forms and qualities, which will be spoken of in the proper places hereafter. But several of the essentials are the same in all good traps.

1. *The jaws should not be too thin, nor sharp cornered.* Jaws made of sheet iron, or of plates approaching to the thinness of sheet iron, and having sharp edges, will almost cut off an animal's leg by the bare force of the spring, if it is a strong one, and will always materially help the animal to gnaw or twist off his leg. And it should be known, that nearly all the animals that escape, get free in these ways.

2. *The pan should not be too large.* A large pan, filling nearly the whole space of the open jaws may seem to increase the chances of an animal being caught, by giving him more surface to tread upon in springing the trap. But there is a mistake in this. When an animal springs the trap by treading on the outer part of a large pan, his foot is near the jaw, and instead of being caught, is liable to be thrown out by the stroke of the jaw; whereas, when he treads on a small pan, his foot is nearly in the center of the sweep of the jaws, and he is very sure to be seized far enough up the leg to be well secured.

3. *The spring should be strong enough* This is a matter of good judgment, and cannot well be explained here; but it is safe to say that very many traps, in consequence of false economy on the part of manufacturers, are furnished with springs that are too weak to secure strong and desperate animals.

4. *The spring should be tempered scientifically.* Many springs, in consequence of being badly tempered, "give down" in a little while, *i. e.*, lose their elasticity and close together; and others break in cold weather, or when set under water.

5. *The spring should be correctly proportioned and tempered.* Without this, the stronger it is and the better it is tempered, the more liable it is to break.

6. *The form of the jaws must be such as to give the bow of the spring a proper inclined plane to work upon.* In many traps, the

angle at the shoulder of the jaws is so great, that even a strong spring will not hold a desperate animal.

7. To make a steel trap lie flat so that it can be hidden nicely, turn the spring around toward the jaw that is fastened, then pull the loose jaw down.

8. *The jaws must work easily on the posts.* For want of attention to this, many traps will not spring.

9. *The adjustments of all the parts and their actual working should be so inspected and tested that every trap shall be ready for use—"sure to go," and sure to hold.*

German and English traps are almost universally liable to criticism on all points above mentioned; and many of the traps made in this country fail in one or more of them.

In addition to the foregoing requisites, every trap should be furnished with a stout chain, with ring and swivel. It is important that the swivel should be well made so that the eyes will turn freely; otherwise the animal caught may escape by twisting off either his leg or the chain.

HOW TO USE THE STEEL TRAP

In treating of the capture of particular animals, I shall have occasion to refer frequently to several contrivances that are used in connection with the fastening of steel traps. I will therefore describe the leading contrivances here.

THE SPRING POLE

In taking several kinds of land animals, such as the Marten and Fisher, it is necessary to provide against their being devoured by other animals before the trapper reaches them, and also against their gnawing off their own legs, or breaking the chain of the trap by violence. The contrivance used for this purpose is called a *spring pole*, and is prepared in the following manner: If a small tree can be found standing near the place where your trap is set, trim it and use it for a spring as it stands. If not, cut a pole of sufficient size and drive it firmly into the ground; bend down the top; fasten the chain ring to it; and fasten the pole in its bent position by a notch or hook on a small tree or stick driven into the ground. When the animal is caught, his struggles, pulling on the chain, unhook the pole, which, flying up with a jerk, carries him into the air, out of the reach of prowlers, and in a condition that disables his attempts to escape by self-amputation or other violence. The size of the pole must be proportioned to the weight of the game which it is expected to lift.

THE SLIDING POLE

Animals of aquatic habits, when caught in traps, invariably plunge at once into deep water; and it is the object of the trapper, availing himself of this plunge, to drown his captive as soon as possible, in order to stop his violence and keep him out of the reach of other animals. The weight of the trap and chain is usually sufficient for this purpose in the case of the Muskrat. But in taking the larger amphibious animals, such as the Beaver, the trapper uses a contrivance which is called the sliding pole. It is prepared in the following manner: Cut a pole ten or twelve feet long, leaving branches enough on the small end to prevent the ring of the chain from slipping off. Place this pole near where you set your trap, in an inclined position, with its small end reaching into the deepest part of the stream, and its large end secured at the bank by a hook driven into the ground. Slip the ring of your chain on to this pole, and see that it is free to traverse down the whole length. When the animal is taken it plunges desperately into the region toward which the pole leads. The ring slides down to the end of the pole at the bottom of the stream, and, with a short chain, prevents the victim from rising to the surface or returning to the shore.

THE CLOG

Some powerful and violent animals, if caught in a trap that is staked fast, will pull their legs off, or beat the trap in pieces; but if allowed to drag the trap about with a moderate weight attached, will behave more gently, or at least will not be able to get loose for want of purchase. The weight used in such cases is called a clog. It is usually a pole or stick of wood, of a size suited to the ring of a trap-chain, and to the size of the game. As the object of it is to encumber the animal, but not to hold it fast, the chain should be attached to it near one of its ends, so that it will not be likely to get fast among the rocks and bushes for a considerable time. The usual way is to slip the ring over the large end of the pole and fasten it with a wedge or back the chain up through the ring, to make a large loop, which can be slipped over the clog.

THE BUSH CLOG

FOR FOXES AND SOME OTHER ANIMALS

Some experienced trappers recommend fastening a fox trap to the butt of a suitable bush cut for the purpose, as a better clog than a pole, intending that the Fox should be able to drag it a short distance. He will not go very far with it, and another trap can then be set in the same place where he was caught. One trapper claims that he caught eight Foxes in one season in a cattle path, and in the same trap-bed, by this method.

THE BALANCE POLE

In some cases where no sapling grows near the place where you wish to set a trap, such as could be used for a spring pole, a balance pole can be rigged. Get a suitable pole and pass it through the fork of a tree or a forked stake driven in the right spot. Fasten a weight to the end opposite the trap, and then elevate this weight by fastening down the trap end of the pole so that it will be released by the struggles of the animal when caught, when the weight will throw both animal and trap in the air. See picture of a mink caught in this way on page 37. This is from an actual photograph.

WEIGHTED CORD

In some situations the same result as the above can be obtained by running a weighted cord or wire over a hook, a nail, or a branch of a tree, fastening the trap to the other end. The main thing is to see that it will work easily and smoothly and the weight not fall off.

RULE FOR BAITING

There is one general principle in regard to baiting animals that may as well be recorded and explained here, as it is applicable to all cases. It is this: Never put bait on the pan of the trap. The old-fashioned traps were always made with holes in the pan for strings to tie on bait; and many, if not most novices in trapping, imagine that the true way is to attract the animal's nose straight to the center of action, by piling bait on the pan, as though it were expected to catch him by the head. The truth, however, is that animals are very rarely taken by the head or the body, but almost always by the leg. When an animal pulls at a bait on the pan of the trap, he is not likely even to spring the trap, for he lifts in the wrong direction; and if he does spring it, the position of his head is such, especially if the bait is high on the pan, that he is pretty sure to give the jaws the slip. Besides, bait on the pan calls the attention of the wary animal to the trap; whereas he ought to be wholly diverted from it, and all signs of it obliterated. Bait should always be placed so that the animal in attempting to take it shall put a foot on the pan. This can be done in several ways, all of which will be explained in detail hereafter. But this general direction can be given for all cases that are not otherwise prescribed for: *Place the bait either on a stick above the trap, or in an enclosure so arranged that the animal will have to step in the trap to reach it.*

PROPER OUTFIT OF TRAPS

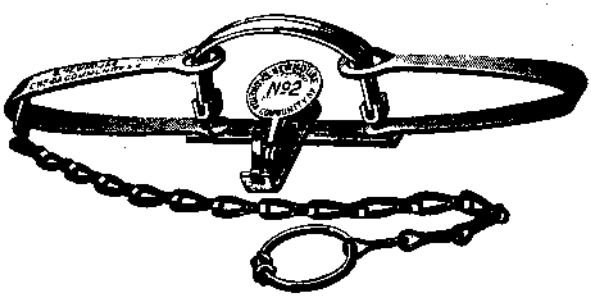
In preparing for a trapping excursion, the novice naturally inquires how many traps he shall take along. If the question were simply how many traps he could tend, I should probably say from one to two

hundred. But the main question really is, how many traps can he carry? If he is going on a marsh, lake or river, where he can travel by boat, or into a region where he can carry his baggage by horse and wagon, he may take along all the traps he can tend—the more the better. But if he is going on foot by overland routes into the rough, woody regions where most game abounds, and consequently must carry his baggage on his back, he will probably find that seventy-five small traps, or an equivalent weight in large and small ones, will be as many as he will like to carry.

PROFITS OF TRAPPING

The provident candidate for woodcraft will want to know what wages a man is likely to make at trapping. I will give him a few instances of what I have done, and then he may judge for himself. I have cleared seven dollars a day for a five-weeks' trip. A man who once trapped with me caught fifty-three Muskrats in one night, which at present prices would be worth from ten to fifteen dollars, according to the season. I know several men in Jefferson County, New York, who paid for good farms with furs that they caught within eight miles of home. It is not uncommon for two men to make five hundred dollars in a trapping season. But too much reliance must not be placed on these instances. Good weather, good trapping-grounds, good traps, good judgment, and good luck must be combined, to secure good profits.

Cold Shut Link



II. CAPTURE OF ANIMALS

SEASON FOR TRAPPING

Furs are in their best condition when they are taken in cold weather. In winter the flesh side of the skin is of a creamy white color, and such skins are rated as prime by the buyers. The fur is then thick, glossy, and of the richest color; and the tails of such animals as the Mink, Marten and Fisher are then full and heavy. The texture of the skin itself is firm and strong.

With the advent of warm weather, the skins become softer and more spongy, and the animals begin to shed their coats. The inside of the pelts turn dark, two dark strips along the back usually appearing first; the hairs loosen, the furs are no longer prime, but are comparatively valueless.

Because of these changes, the length of the trapping season in any locality depends on the coming and going of cold, frosty weather.

and the further north one traps the longer the season will be, at least in the Northern Hemisphere.

But there is a difference in animals in regard to their furs being prime, even in the same locality and with the same weather. Skunks are about the first to get in good condition in the fall. They may sometimes be trapped in October in the north, but November is safer. They begin to shed their coats in February, when most fur-bearing animals are at their best. By November the Raccoon is prime, and the Otter, Badger, and Wild Cat may also be trapped in our Northern States. By December most animals are prime, although Muskrats and Beaver are at their best from January to May. It will be seen that those which become prime early in the fall go out of condition early in the spring, and vice versa. For trapping Muskrats in particular, the best time is spring, while Mink, Marten, Fisher, Bear, Foxes and Wolves are at their best in mid-Winter. It does not pay to trap after warm weather begins.

GENERAL METHODS

Boys and other beginners will doubtless be glad to get a general idea of the ways of trapping wild animals, before proceeding to consider the various species, and the practice best suited to taking them; for such general knowledge will, from the start, be of the greatest help to everyone in choosing the plan best suited to the particular circumstances met.

As you read this NEWHOUSE TRAPPER'S GUIDE, you will notice that certain classes of animals have habits much alike, and that the experienced trapper takes advantage of such habits, and traps those classes on pretty much the same general principles. For example, there is a class to which the Mink and Otter belong, which like to wander along the banks of streams in search of food. Being expert swimmers they are almost equally at home in the water or on land. Their habit is to examine everything they come to, and explore all the little side streams and ditches; so where a rivulet, or little brook empties into the larger stream, there they are sure to go. Having found such a place, if you set a trap there properly, you are pretty sure of a catch if any of those animals are passing that way. To set the trap properly, study the situation. If the water is shallow in the mouth of the rivulet, you can place some obstruction so that the animal will have to pass through a narrow place in which you will set the trap. Sometimes the situation is such that it will be easiest for the animal to walk in the water through the narrow place. In that case you set your trap in the water where he will be most likely to step in it, covering it lightly with mud or wet leaves. This is called a water-set. It requires good judgment, such as must be gained mainly by experience, to tell just where an animal is likely to put down his foot as he walks over a certain spot, and to arrange obstacles, such as sticks stuck in the bank, so that they will lead him to step where you

wish him to, and yet so that they look perfectly natural and not excite his suspicion. We can give you a general idea of how to proceed, but there are nice points in the doing of these things which every trapper has to work out for himself.

Sometimes, where the situation is such that a Mink, Otter, or other such animal is likely to walk along the bank of the stream close to the water, an old log, or a large pole may be shoved over the bank so that one end will rest in the water, and so that the animal will have to hug the bank to pass it. Then dig a little pit in this narrow place just large enough to hold the trap. Cover the trap with dead leaves or loose earth, taking care that no lumps get under the pan to prevent the trap from springing. Make everything look perfectly natural and your chances will be good. When a trap is set on land in such a situation it is called a land-set or dry-set.

In all cases where the trapper plans to catch an animal by fixing obstructions so that it will go through a narrow place, he should set his trap so that the bottom piece and jaws are in the line of the path the animal will take, and not across it, because if set straight in line the jaws are less likely to throw the animal out when the trap springs.

Culverts under railroads are often used by wild animals of wandering habits, like the Muskrat, Mink and Otter, as they will never cross over a track when there is a way under. If water is running through the culvert such animals will be following the stream, and their signs may be found.

If the bank of the main stream is rather high and steep, an animal of this class is likely to swim for quite a distance until good footing can be found on the lower part of the bank again. But he will always swim close to the bank and be ready to climb out of the water at the first good chance. So if you shove an old, half rotten log over the bank at such a place and set a trap on the lower end of it, just under water, covering and hiding it skillfully, the animal is very likely to climb up and put his foot in it. If there is no old log handy, perhaps you can dig out a little pocket in the bank, making the floor of it under water, and set the trap there, putting a bit of moss on the trap. This, if well done, would look natural to such an animal, and he would not hesitate to climb out there.

These methods are all good but there are others which will occur to you as you study the art.

Then there is another class of animals, like the Muskrat and Beaver, which is most easily trapped at the entrance to their houses, or their holes in the bank. For these the trap is usually set under water at the mouth of the entrance, the depth varying from two or three to eight inches, according to the size of the animal. Where bait is used in trapping Muskrats, for example, there is quite an art in placing it so that the animal will have to step in the trap to get it. Old trappers claim they can usually catch a Muskrat by either foot desired, simply by the way they place the bait. This requires study and practice.

Still another class of animals, like Foxes and Wolves, which roam about without caring to keep by water, follow their sense of smell in searching for food. The trapper takes advantage of this fact by attracting them with things they like best, after putting out a supply to be eaten before a trap is set, to get them in the way of coming to that place for more. These animals will travel miles when they smell something they like. Then the trapper carefully places his traps, concealing all signs, and so does a profitable business.

In regard to the use of scents and odors in attracting animals, there is much difference of opinion; but all are agreed in this, that wild animals like the scent or smell of their own kind and are attracted by it. Many animals like the strong odor of the Skunk and Muskrat. Foxes and Wolves, like Dogs, will urinate where others of their kind have done so. A few drops of the musk of any animal will attract others of his species. This is a general fact to be borne in mind while trapping.

In setting traps in any situation there are some points the beginner must constantly bear in mind, such as these:

1 To see that the trap sets level and on a firm bed. Dig a little place for the bottom and cross piece to rest in, if necessary.

2 To see that no dirt, stone or stick has got under the pan of the trap in a way to prevent its springing. In trapping for large animals, where there is danger that smaller animals might spring the trap, put a bunch of sheep's wool or a little twig under the pan; giving it just enough support to avoid this danger.

3 To never allow carelessness in setting or concealing the trap. The beginner must take all the care he knows how to do. Even then the animals will often *laugh at his unskillful ways as they pass by the traps.*

4 When possible conceal the trap by lightly covering it with dried grass, dead leaves, powdered rotten wood, or other such material, choosing whichever will look most natural in the location.

5 Where the trap is set in shallow water and a bit of moss is put on the pan to make it look like a dry, safe stepping place, never use all dry moss, because it will swell when wet and the animal would not get caught high enough on the leg to hold.

In Part IV of THE GUIDE, entitled "Life in the Woods," will be found a very complete description of the outfit needed for somewhat extended expedition, for trapping or hunting; but there are a few things every boy ought to have, even if he only traps in his father's pastures and woods, such as a hatchet, which will take the place of both axe and hammer; some staples to fasten the trap chains to trees, logs or stumps; a few lengths of wire to lengthen the chain when necessary to let the animal reach a deep hole and drown; the proper

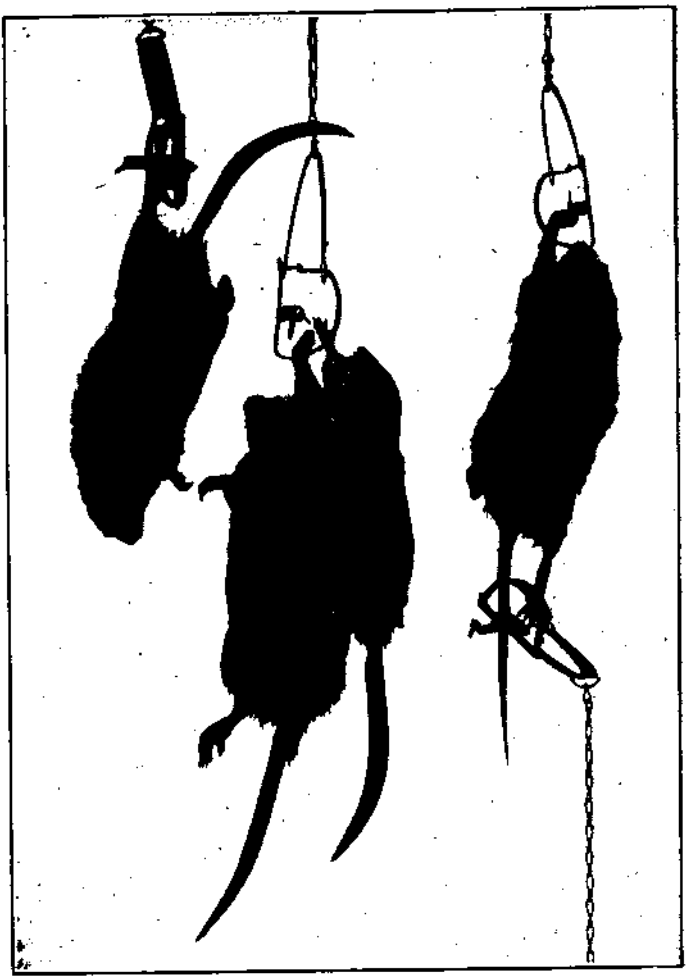
bait, etc. Keep these in mind and in one or two trips your own experience will show what you require.

If a boy wishes to learn to trap and can arrange to accompany some experienced trapper who is visiting his traps, it will be of great advantage, for he would learn more in a week than he could from his own first experience in months. But such a boy must bear in mind, although it will be well not to speak of it, that no one trapper knows it all. They have different ideas and ways, and disagree on many points. So the boy must observe quietly, saying but little, and study the art for himself.

These remarks will give you a general idea of what you have to do. Now read carefully what is said in the following pages about trapping each variety of animal, and you will have about all the knowledge of the subject possible to get from books. The rest must be worked out in the woods.

As most of our states have made laws regulating the times and seasons when animals may be trapped or hunted, it will be well for everyone to inform himself in regard to this before starting out on his campaign.

If you wish to keep in close touch with other trappers and their latest methods, subscribe for and read the bright magazine, "HUNTER-TRADER-TRAPPER," for terms of which see our advertising pages. It is well illustrated, not by clumsy wood-cuts, but by half-tones from actual photographs taken by trappers, who now go into the woods equipped with cameras to catch such views.



The Muskrat

THE MUSKRAT OR MUSQUASH

This is an animal of amphibious habits. Its head and body are from thirteen to fifteen inches in length. The tail is nine or ten inches, two edged, and for two thirds of its length is rudder shaped and covered with scales and thin, short hair, the edges being heavily fringed. The hind feet are slightly webbed, making the Muskrat an expert swimmer. Its color is brown above and ashy beneath.

Muskrats are nocturnal in their habits, but are frequently seen swimming and feeding in the day-time. They can go from ten to fifteen rods under water without breathing. Their natural food is grass and roots; but they will eat clams, mussels, fle-h, corn, oats, wheat, apples and many vegetables. They thrive best in sluggish streams or ponds bordered with grass and flags. The roots of these plants are their chief support, and from the tops they construct their abodes These structures are dome-shaped, and rise sometimes to the height of five or six feet. The entrances are at the bottom, under water, so that the insides of the houses are not exposed to the open air. The Muskrats live in them in winter, gathering into families of from six to ten members. Hundreds of these dwellings can be counted from a single point in many large marshes.

Muskrats have a curious method of traveling long distances under the ice. In their winter excursions to their feeding grounds, which are frequently at great distances from their abodes, they take in breath at starting and remain under water as long as they can. Then they rise up to the ice, and breathe out the air in their lungs, which remains in bubbles against the lower surface of the ice. They wait till this air recovers oxygen from the water, and then take it in again and go on till the operation has to be repeated.

The hunter sometimes takes advantage of this habit of the Muskrat, in the following manner: When the marshes and ponds where Muskrats abound are first frozen over and the ice is thin and clear, on striking into their houses with his hatchet for the purpose of setting his traps, he frequently sees a whole family plunge into the water and swim away under the ice. Following one of them for some distance, he sees him come up to renew his breath in the manner above described. After the animal has breathed against the ice, and before he has had time to take his bubble in again, the hunter strikes with his hatchet directly over him and drives him

A Muskrat House in the Marsh

away from his breath. In this case he drowns in swimming a few rods, and the hunter, cutting a hole through the ice takes him out. Mink, Otter and Beaver travel under the ice in the same way; and hunters have frequently told me of taking Otter in the same manner.

In summer, Muskrats live in banks and hollow trees that stand near a stream; and sometimes, for want of suitable marshes and ponds, they remain in the banks and trees through the winter. They are very prolific, bringing forth from six to nine at a birth, and three times a year. The first kittens also have a litter, which attain about the size of house rats in September. They have many enemies, such as the Fox, Wolf, Lynx, Otter, Mink and Owl. They are found from the Atlantic to the Pacific, and from the Rio Grande to the Arctic Regions. But they do not inhabit the alluvial lands of Carolina, Georgia, Alabama, and Florida.

The modes of capturing the Muskrat are various. Some of them are good at certain seasons and in certain conditions of the ice; but for general service there is no means of capture so reliable as the steel trap. Traps should be set in the general feeding places, playgrounds, and holes of the Muskrat, generally about two inches under water. Bait is not necessary except when game is scarce and its signs not fresh. In that case you may bait with apples, parsnips, carrots, artichokes, white flag-roots, or even with the flesh of the Muskrat. The musk of this animal will sometimes draw effectually at long distances. The bait should be fastened to the end of a stick, and stuck over the trap about eight inches high, and in such a position that the animal will have to pass over the trap to take the bait. Care should be taken to fasten the trap to a stake so that the chain will lead the captive into deep water and drown him. If he is allowed to entangle himself or get ashore, he will be very likely to gnaw or twist off a leg and get away.

DROWNING MUSKRATS

An old trapper strongly urges the setting of traps where the animal can drown himself in the following manner: He stakes the ring of his chain as far out in the stream from the trap as possible, then about a foot beyond that puts another stake. The trapped Muskrat makes for deep water, and when stopped by the chain swims this way and that and very soon winds himself up on the outer stake, and drowns in short order.

The Muskrat is more likely than most animals to gnaw off, or twist off, a foot, when caught in a trap, and so escape, especially if caught by the fore leg. Old trappers say he will not gnaw through sound bone; many of them say he does not gnaw at all, but twists his leg off. However this may be, in cases where the bone has been broken, either by the springing of the trap or his violent plunging afterwards, the Muskrat is very likely to sever the cords and flesh and get away. As this is particularly true when he is caught by a fore foot, it is very desirable to catch him by a hind foot. This may easily be done by placing the bait so high and so nearly over the trap that he will have to stand up on his hind legs to reach it. Then, if you have fastened the ring of your chain to a sliding pole, or to a stake driven out in the water, the rat will drown.

A good way to trap Muskrats which are wandering up or down the banks of a stream is to dig a pocket in the bank where the water is deep, making the bench two or three inches under water, and set the trap in it. Fasten a piece of sweet apple, or parsnip, or carrot on one end of a stick, pushing the other end into the bank over the trap and at the right height.

Sometimes a landing place can be made with a large sod. Set the trap on this, a little under water.

There are many such ways of proceeding, which must be used according to circumstances and the ingenuity of the trapper.

Where it is found that large numbers of Muskrats are living in some swamp, inlet or pond, they can often be caught successfully in this manner: Take a board about twelve inches wide by sixteen feet long, and nail a few cleats across it in pairs, each pair just far enough apart to allow your trap to set between them. You could set half a dozen traps on such a board or plank. Fasten the chains to the outer edge of the board and anchor the board to some tree or stake on the bank by a rope or wire. Then shove the board out from the bank to where you think the rats will be apt to climb up on it, or near their houses. Next morning you can pull the board in-shore and examine your catch.

Muskrats are not difficult to catch nor dangerous; so they furnish boys a fine field for trapping experience. They thrive in the settled farm lands of our Eastern and Middle States, when not too heavily trapped.

PRACTICAL SUGGESTIONS BY TRAPPERS

—Drop sweet corn along the edge of the water where Muskrats travel, then take part of an ear and place it on the end of a sharp stick in the bank just above the trap, which should be set a little under water.

—Take a stake about two inches thick, saw the large end off square and nail a block on it large enough for a trap bed, drive in the water about eight or ten feet from shore and deep enough so that the block is an inch or so under water. Put dry grass on the block and make a nest for the trap to set in. Put some bait on the nest and fasten trap chain to the stake. The Muskrat will swim out and climb up, only to be caught.

—Take a piece of white cloth and place above your trap. Any white object attracts the attention of a Muskrat, and where they are numerous many may be caught by this simple device.

—Select a place where the bank is steep, close to where they show signs, or to their holes, and make a shelf in the bank the width of a spade, extending back in the bank four or five inches and about three inches under water. Then make a second shelf just above the level of the water in the first shelf, about three inches wide for the bait. Set the trap on the first shelf, cover nicely, and bait with apple placed on second shelf.

—When trapping in shallow ditches use a double-jawed trap, or a larger size than single-jawed No. 1, so as to take the Muskrat high enough on the leg to hold him from twisting out if caught by the fore leg. For scent, take a stick and rub over the hind parts of a Muskrat and place near the trap.

—Muskrats are very fond of catnip and a few stems of it stuck in the ground around the trap will prove useful.

—Take a piece of hay wire about three or four feet long and fasten a stake at one end, then put the wire through the trap ring and fasten the other stake to it. Put it in deep water, having the stake under the water two or three inches, so "John Sneakem" will not take your trap and rat.

—If water is shallow with now and then a stump or stone just above water, get a sod and place it upon one of them and by running a small stick through and into the mud, the sod will stay firmly in place. The sod should be so placed that it will be easy for the rat to climb up. This may be done by having one side close to the water. No bait is needed. If your traps are set in a shallow place, a good plan is to attach to each chain three feet of wire. This will give the rat a chance to get into deeper water.

—Set your traps for rats in any place where the water is not less than ten inches deep. Clear away all the brush or roots, fasten the trap chain to a stone that weighs three or four pounds, and throw the stone the full length of the chain into the stream. Use a chain that has no swivel or wire up the swivel and you will save every rat you catch, as it will drown itself at once and the pelt will not be cut full of holes as with other methods.

JEREMIAH ZETTLE.

—I have five different kinds of sets. The best I ever tried is to find where rats travel from a creek to a pond. Go along the creek and you will find a path leading over to the pond. Place a No. 1½ trap in the water at each end, just so the water will cover it an inch or two. Cover the trap well with water-soaked leaves, for you are liable to catch a Coon or Mink

—Another way is to dig a pocket in a bank where the water is deep and put a trap in it and hang a piece of parsnip or apple six inches above. The first rat along will try to get the bait and get caught.

—Still another good way is to set a trap at the bottom of a rat's slide in about three inches of water, and you will catch them by the hind legs and they will not twist out.

—In the spring you will find places along the bank where the water is about six inches deep, where the rats come out of their holes. Gather some dry grass, put it at the place where they climb up the bank, place your trap on the grass. This will cause the grass to settle down, bringing your trap two or three inches under water. When the rat comes to your bunch of grass he will try to find out what it is. It was not there the last time when he was out. He swims up to the grass and starts climbing on it. You get him in the morning, usually by both front feet

—I find a good way to bait for Muskrat is to take a piece of apple and break it in small bits, scatter them between the jaws and around close to the trap. This makes a good set on the edge of the water, and "Johnny Sneakem," the trap thief, is not apt to notice it, because the apple soon colors.

—Muskrats should be trapped along streams or swales where you find their signs. For bait use carrots or sweet apples. Sweet apples are best. Set the trap in about two inches of water, fasten the chain at full length to a sunken limb, drive a stake on either side of the chain near where it is fastened. Set thus the rat will not "foot" himself. He will soon become entangled and drown.

—Another good set for rats is by scooping a piece out of a sod and placing it on a stone or root just under the water. Fasten the chain as before and scatter pieces of apple on the sod.

Other suggestions will appear monthly in the magazine HUNTER-TRADER-TRAPPER, noticed elsewhere.

The Muskrat

THE BEAVER

The Beaver belongs to the same family as the Muskrat, and like the latter is amphibious. Indeed, these two species are so nearly alike that a Beaver seems to be only a Muskrat much enlarged. The body of the Beaver is thick, heavy and squat; about two feet and a half long; weighing, when full grown, from sixty to eighty pounds. The tail is the most characteristic part of the animal. It measures from ten to twelve inches in length and from three to four and a half inches in breadth. It is oval in shape but flattened on the upper and under sides, and is covered with a species of hairy scales, which are set upon a thick, dusky skin. It is believed by trappers who have diligently watched the ways of this animal, that it uses its tail as a spade or trowel in working mud and sand. This member also answers the purpose of a prop, to help the animal stand erect while at work. It serves as both rudder and oar in swimming, being turned under the body at a right angle, and swung from side to side with great rapidity and power, the operation being like the sculling of a boat.

The fore-paws are small in proportion to the animal; in swimming they are not used, but are folded under the body. The Beaver uses them however, in the work of making their dams and houses, carrying limbs and even trunks of trees, stones, mud, etc. The hind feet are fully webbed and powerful.

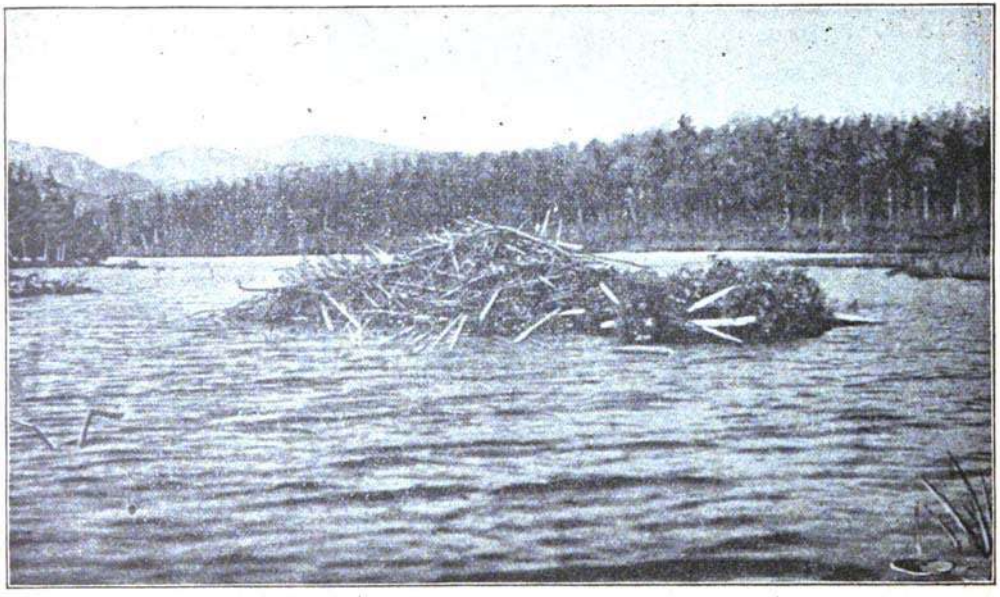
Beavers are not gregarious in summer, but become so at the approach of winter, when they build their huts and dams and gather their stores of food. Their huts are built first generally in September, and are much like those of the Muskrat, but larger and stronger. They rise out of the water and have their entrances at the bottom. They are made to hold ten or twelve animals each. Some Beavers live on the banks of large rivers and lakes, and, having of course, plenty of water, do not build dams, but have their holes in the banks, with their entrances under the water, and their huts in front of them. These are called Bank Beavers though they differ in nothing from their dam-building brethern. Those that live on small streams, where there is not water enough to surround their huts and protect their stores from freezing in winter, build dams to raise the water and create ponds suitable for their purpose. They commence by cutting down with their teeth trees of all sizes, from those of ten inches in diameter to the smallest brushwood. These are cut into

A Pet Beaver

pieces suitable for transportation by a single animal, and then are conveyed to the place chosen for a dam, the Beaver laying one paw over the timber, as he drags it along with his teeth. The smaller materials, such as mud, sticks, and stones, are carried between one of the fore-paws and chin. The dams differ in shape according to the nature of the stream where they are built. In streams where the current is rapid or powerful, the dams are built with a convex curve up stream, which strengthens them against the floods and the ordinary constant pressure of the stream. In streams where the water has but little motion, the dams are built straight across; and sometimes they have been observed with a curve down-stream. No special order or method is observed in building the dams, except that the work is carried on with a regular sweep, and all the parts are made of equal strength They are frequently six or eight feet high, and from ten to thirty rods in length. The trees, resting on the bottom, are so mixed and filled in with mud, sticks, stones, leaves and grass, that very little water escapes, except by running over the top; and the height is so uniform that the water drips evenly from one end to the other. After the dams are built, but before they are frozen over, the Beavers lay in their winter stores, which consist of the bark of the willow, aspen, poplar, birch and alder. They fell these trees with their teeth, cut them up into short sections, and sink them in the water near their huts. In the winter, when their ponds are frozen over, they enter the water by the holes at the bottom of their huts, collect these sunken trees and take them to their dwellings, as they require them for food.

The breeding season of the Beaver commences in April or May, and they have from two to four young ones at a birth. The young remain with their parents for three years. In the fourth year they start a new colony, and commence breeding, the parents assisting in building the new dam. This is probably the reason why so many dams are built one above another on the same stream. Several can frequently be seen from a single point, and they are generally so arranged that the water from one dam sets back to the next above.

The houses of the Beaver are built of the same materials as their dams. They are proportioned in size to the number of their inhabitants, which seldom exceeds four old and six or eight young ones, though more than double that number have sometimes been found. Herne, in his narrative of explorations in the Hudson's Bay country nearly a hundred years ago, relates an instance where the Indians of his party killed twelve old Beavers and twenty five young and half-grown ones out of one house; and it was found, on examination, that several others had escaped. This house, however, was a very large one, and had nearly a dozen apartments under one roof, which, with two or three exceptions, had no communication with each other, except by water, and were probably occupied by separate families. In the spring, Beavers leave their houses and roam about during the summer. On their return in the autumn, they repair their



From Book of Dr. Spiegel, Albany **Beaver Lodge Completed**

habitations for winter use. This is done by covering the outside with fresh mud. This operation is not finished until the frost becomes pretty severe, as by this means the surface soon freezes as hard as stone, and prevents their great enemy, the Wolverene, from disturbing them during the winter.

The food of the Beaver, besides the bark of the several kinds of trees I have mentioned, consists chiefly, in winter, of a large kind of root, somewhat resembling a cabbage-stalk, that grows at the bottom of lakes and rivers. In summer, they vary their diet by eating various kinds of herbage, and such berries as grow near their haunts.

Beavers are found in the northern parts of America, Europe and Asia. They are generally supposed to belong to one species. They are most abundant on this Continent. Within a recent period, Beavers were abundant in all the Northern, Middle and Western States of the Union, as the large number of their dams, and the beautiful "beaver meadows" caused by the filling up of their ponds with alluvial matter, sufficiently indicate. But they retire at the approach of man, and the gradual clearing up and the cultivation of the soil has driven them nearly all from the country. In the provinces of Canada, however, many are still found. Beavers are easily domesticated and soon become quite tame.

There are several methods of taking Beavers in steel-traps. A few of the most successful I will endeavor to describe.

A full-grown family of Beavers, as I have said before, consists of the parents (male and female), their three-year-old offspring, the two-year-olds and the yearlings—four generations of four different sizes, occupying one hut and doing business in one pond. When a trapper comes upon such a pond, or one that he has reason to believe is inhabited by a large number of Beavers, his object should be to take them all; and in order to do this he must conduct his operations so that when one Beaver is caught it will not have opportunity to alarm the rest; for otherwise the whole family may leave for parts unknown. His care should be directed therefore to two points, namely, first to the setting of his traps in such a way as to take each Beaver while alone; and secondly, to make arrangements for drowning them as speedily as possible after they are taken. To secure the first point, he should not set his traps very near the dwelling of the Beavers, but should select places at some distance up the pond on some point or neck of land projecting into the stream, where the animals will pass and repass, but where each will be most likely to go alone. The trap should be set close to the shore, about three inches under water, and should be carefully secreted by a covering of some soft substance that will not interfere with its springing. For bait, a small portion of beaver-castor (a milky secretion found in glands near the testicles of the male Beaver) may be left on the bank near the trap. If the trapper's approach was made by land, all foot-prints should be erased by drenching with water. To secure the second point, the chain of the

trap should be attached to a sliding pole, in the manner described on page 13, which will lead the captured Beaver into deep water and drown him.

Beavers are sometimes taken by breaking away their dam, two inches below the surface, in one or two places, and setting traps in the water above the dam where they are likely to go to get material to repair the break. If set in the breaches or below the dam, the mud and other materials the Beavers will send down will bury the traps. They keep sentinels who examine their dams every night, and the least break is soon detected and put under repair; so that with traps properly set, some of the Beavers will be likely to be taken while at work at this business. But as the whole family is summoned out when a breach is considered dangerous, and as in any case several Beavers are likely to be engaged in a work of repair, the capture of one is almost sure to frighten away the rest, for which reason this method of capture should be generally discarded as impolitic.

The surest way of taking the Beaver is by trapping in winter in the following manner: When their ponds are frozen over, make a hole in the ice about three feet across, near the shore and near a hut. Cut a tree of birch, poplar or alder, about six inches in diameter, press the top together and shove the whole under the ice in such a direction that the Beavers will be likely to pass and repass it in going to and from their house. The butt of the tree should be fastened at the shore under the ice. Directly under the butt, about ten or twelve inches below, a platform should be prepared by driving stakes or by any other means that is convenient, on which the trap should be set. The chain ring should be attached as before to a *dry* sliding-pole. After the trap is set and secured, the hole in the ice should be filled up with snow and allowed to freeze. The Beaver, passing the newly cut tree and discovering its freshness, will proceed toward the butt for the purpose of securing the whole for food, and in gnawing it off near the shore over the trap, will be likely to be taken. The reason why the sliding-pole should be dry is that if it is green the remaining Beavers will be likely to gnaw it off and take it home with them, trap, Beaver and all, for the sake of the bark.

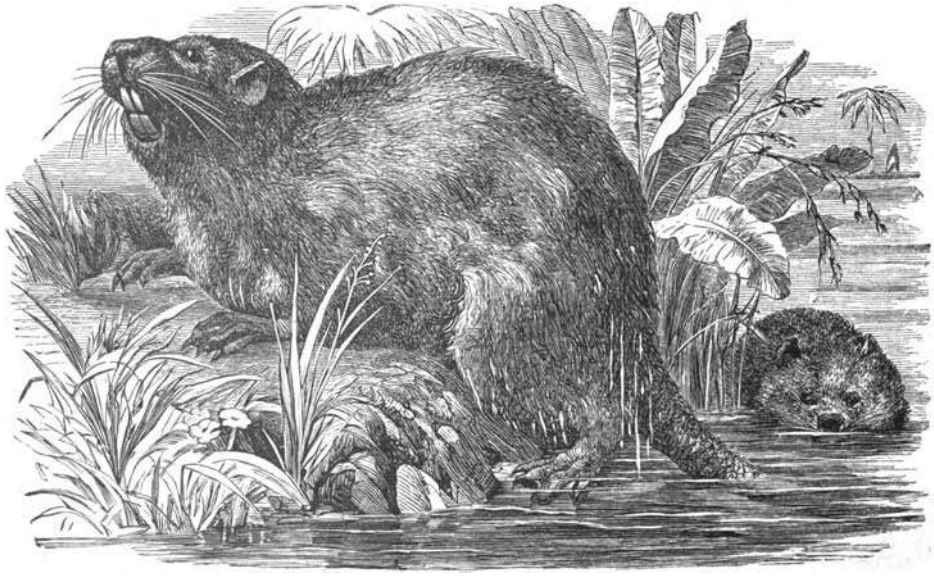
The Beaver is said to renew its breath, when traveling under the ice, in the same manner as the Muskrat, and of course might be caught at certain times in the way described on page 21.

THE COYPU RAT

Another animal apparently related to the the Muskrat and Beaver is the Coypu Rat, a native of South America. It is sometimes called the Racoonda, and it furnishes to commerce the fur known as Nutria. Only one species is known and this is found in great numbers in the La Plata region. In some seasons more than three million skins of the Coypu Rat have been exported, showing what an important item in the fur trade they have become.

In general appearance and character it resembles the Beaver. Its tail, however, instead of being flattened, is long and round and rat-like. Its favorite haunts are the lagoons of the plains or pampas, and the banks of rivers and streams. Its fur is short, fine, silky, similar to that of the Beaver, and light brown in color. Overlying the fur are long hairs of a brownish yellow color. The fur is heaviest and best on the belly. It is used for the same purposes as that of the Beaver, in the manufacture of hats and caps. The Coypu is about two feet long exclusive of tail, which is about fifteen inches in length. It is very prolific, the female producing six or seven at a birth. They feed on vegetables, are quite gentle in their character and easily tamed. They inhabit South America on both sides of the Andes; on the east, from Peru to forty-three degrees south latitude; on the west, from Central Chili to Terra del Fuego. They are also found in the small bays and channels of the archipelagos along the coast. They are burrowing animals and form their habitations in the banks of the lakes and streams. They are nocturnal in their habits and seem to be equally at home in fresh or salt water.

The Coypu is usually hunted with dogs and is easily captured. It is, however, a bold animal and fights fiercely with the dog employed in pursuing it. Of late years the South Americans have learned to catch the Coypu Rat in steel traps and this will tend to bring their fur into greater prominence in the market. Their habits resemble those of the Beaver and Muskrat and they should be trapped on the same general principles.



The Coypu Rat

THE WEASEL

The Weasel proper, (*Putorius Vulgaris*) is the smallest member of a large family which includes such animals as the Mink, Marten, Ermine and Fisher. It inhabits nearly all parts of the United States and Canada, its characteristics of size, color, etc., varying with the latitude.

In our Southern States the Weasel is of a chocolate or chestnut brown color, and this is the color of its summer coat farther north. But in cold climates its fur turns white in winter, and it is then called the American Ermine. The brown furs are of little value, while the white furs of the North, with a small pencil of black at the tip of the tail, are valuable.

The Ermine of Norway, Sweden and Russia, are somewhat larger, and owing to the cold climate their fur is thicker and longer; otherwise they are identical with our Weasel.

Of white Weasels, or American Ermine, the best furred skins come from Alaska, and the region across to Nova Scotia and Newfoundland. An unusually large breed or strain of them is found in the mountain regions of Maine. One drawback to trapping them is that a considerable proportion of the skins are stained yellow. Only the tails of such skins have a value, consequently the price is low. One fur buyer says that at least seven out of ten skins are stained so as to be almost valueless.

The Weasel is a carnivorous animal, very pugnacious, a terror to rats, mice, moles, rabbits and chickens. It will kill for the love of killing, when not hungry, and is most destructive to domestic fowls, biting them through the head or neck. A Weasel has been known to kill as many as two dozen hens in one night. It is a little animal, its head and body measuring only six or seven inches in length in mild climates, and its tail is short, measuring only about two and a half inches.

The female brings forth a litter of from four to eight young at a time, and hides them from the male until they are partly grown.

Weasels are best caught in steel traps, set in the mouths of old muskrat holes, openings under barns or hen houses, or similar places. Fresh Muskrat meat or a bit of fish or fowl can be used for bait to advantage.

THE ERMINE

The Ermine belongs to the Weasel family, has the general Weasel shape and appearance, and inhabits the northern parts of Europe and Asia. It is a small animal, measuring only fourteen inches in total length, of which the tail occupies four inches. There is, however, considerable variation in the size of individuals. The Ermine is carnivorous and a most determined hunter. It preys on hares, rabbits and all kinds of small quadrupeds, birds and reptiles. It is very fond of rabbits, of which, especially the young, it destroys great numbers. The pheasant and partridge also suffer greatly from its predacity. It pursues its game with courage and pertinacity and rarely suffers it to escape It is also a great plunderer of birds nests of all kinds Its favorite mode of attack is by fastening on the neck and sucking the blood of its victim.

The color of the Ermine in summer is a light reddish brown on the upper parts of the body, and lighter tinted or nearly white underneath In winter, in high northern latitudes, its fur changes to a delicate cream-colored white, on all parts of the body except the tip of the tail, which retains its black color and forms a fine contrast to the rest of the body. It is only in the coldest portions of Norway, Sweden, Russia and Siberia that the Ermine becomes sufficiently blanched in winter be of any commercial value. Russian Asia furnishes the greater portion of those caught. In England the Ermine, when in its summer coat, is commonly called the Stoat, and, on account of its predaceous habits, is thoroughly detested.

Ermine fur was formerly monopolized by the royal families and nobility of Europe, but now finds its way into the general markets, and among European furs is next in importance to the Sable.

The same general methods should be pursued in trapping the Ermine as in the case of the Mink and Marten.

THE MINK.

The Mink is found in the northern parts of America, Europe, and Asia. Its fur is valuable. The Mink is carnivorous, and belongs to the *mustelidæ* or Weasel family. It resembles the Ferret and Ermine. It is not amphibious like the Muskrat, yet lives on the banks of streams and gets much of its food from them. It is of a dark brown color, has short legs, a long body and neck, and a bushy tail. In this country there are two varieties, which some naturalists have supposed were distinct species; one small, dark-colored, common in the Northern and Eastern States and Canada; the other larger, with lighter-colored, coarser, and less valuable fur, common in the Western and Southern States. The dark-colored variety measures from eleven to eighteen inches in length from the nose to the root of his tail, and has

Mink with Balance Pole

a tail from six to ten inches in length. The European and Asiatic Mink is a distinct species.

Mink are ramblers in their habits, except in the breeding season. They feed on fish, frogs, snakes, birds, mice, and muskrats; and the hen-roost frequently suffers from their depredations. They are very fond of speckled trout and pretty sure to find out the streams where these fish abound. Their breeding season commences about the last of April, and the females bring forth from four to six at a litter. The young are hid by the mother till they attain nearly half their growth, as the males of this species, as well as of the Marten, Fisher, Weasel, Panther, and most carnivorous animals, destroy their young when they can find them.

Mink can be taken in steel traps, either on land or in the water. Experts generally prefer to take them on land. The trap should be set near the bank of a stream. If one of their holes cannot be found, make a hole by the side of a root or a stump, or anywhere in the ground. Three sides of the cavity should be barricaded with stones, bark, or rotten wood, and the trap set at the entrance. The bait may be fish, birds, or the flesh of the muskrat, cut in small pieces; and it should be put into the cavity beyond the trap, so that the animal will have to step on the trap in taking the bait. The trap should be concealed by a covering of leaves, rotten vegetation, or, what is better, the feathers of some bird. In very cold weather the bait should be smoked to give it a stronger smell.

Mink can be attracted long distances by a scent that is prepared from the decomposition of eels, trout, or even minnows. These fishes are cut in small pieces, and put in a loosely-corked bottle, which is allowed to hang in the sunshine for two or three weeks in summer, when a sort of oil is formed which emits a very strong odor. A few drops of this oil on the bait, or even a stick without bait, will draw Mink effectually

The chain of the trap should be fastened to a spring-pole strong enough to lift the animal, when caught, out of the reach of the Fisher, Fox, and other depredators; or, if the trap is set near deep water, it may be attached to a sliding-pole, which will secure the game by drowning it. Both of these methods are fully described on preceding pages.

One successful trapper uses codfish for bait and considers it the very best thing. Others make a strong point of preparing their traps by boiling them in ashes and water, or in water with hemlock boughs, or coating them with beeswax, or fir balsam or some animal or fish oil, to cover all odors which the animals would distrust. Canned sardines make good mink bait Skunk scent and feathers attract all bird-eating animals, and allay their suspicions. Each trapper thinks the method by which he has succeded is the best, but whatever the method, the cunning of the animal, and his suspicious nature and keen nose, have to be reckoned with.

The Mink

As we have said on previous pages, the Mink is much given to wandering along the banks of streams and ponds. On such rambles he explores all the holes in the bank, all the little brooks and ditches emptying into the larger stream, and guided by this knowledge the experienced trapper has little difficulty in catching him, either in water-set or land-set. See remarks on "General Methods," page 16

When the streams are open Mink may often be caught by putting several small live fish on a string and leaving them in shallow water inside a V shaped enclosure, setting the trap at the large or open end. Both the Mink and Raccoon like to catch and eat such little fishes and they are not suspicious of such an arrangement.

Sometimes when they are wandering up a stream and have to pass around an old dam, a very good place may be found to set a trap down near the water where they have passed before. Study the signs.

PRACTICAL SUGGESTIONS BY TRAPPERS

—When the ditches and creeks are frozen over, set one or more traps in the warm water that comes out of running drain tiles, or in the mouth of a tile which happens to be dry during the winter, as Mink sometimes make these their homes.

—Where there is a small air-hole in the ice place a trap directly under this hole. For this set the water should not be over four inches deep.

—If a Mink makes a hole through a snowdrift he will use it again, and a trap set in it will catch.

—If you catch a female Mink, reset the trap, as the chances are good to catch the male soon and perhaps several males in the running season. Find where an old Muskrat hole leads down to the edge of the water from the top of the bank. A trap set in the lower end of this hole will catch Mink, as they seldom miss a chance to explore such a hole.

—The entrails of Muskrat, Rabbit, chicken or duck make better bait than the whole animal or bird. Dig up the ground to set the trap in fresh earth, unless it is a water-set or swamp-set on some log.

—In winter notice where Mink travel, scrape away the snow, chop or dig up the ground, set a trap on the loose dirt and scatter some egg shells or feathers around.

—Mink go out on mud flats at low tides to catch crabs and other food. When they have eaten enough they will collect a supply and store in some hollow log above tide water for future use. This is a good place to set a trap.

—If you find a hollow log open at both ends close up one end after putting some bait inside that end. Set your trap about a foot inside

the log at the other end, making the entrance free and clear. The Mink will smell the bait and run into the log and trap. Trailing the bait along the ground up to the log helps.

—In setting where the bank guides a Mink into the water, thrust a dead stick into the bank horizontally about three inches above the trap, so he will crawl under it and be obliged to step in the trap.

—Where a log rests with one end in the water and the other end on the bank, fasten your bait on the under side of the bank end, about ten inches from the ground, and set your trap under the bait.

—For Mink scent, use the matrix of a female Mink preserved in the oil of the wild duck.

—If there is snow, set your trap in his well-used path, covering with a little dry snow. Damp snow will freeze into a crust so the trap will not spring.

—Find their path close to water. Follow this path to a steep place where they are forced to enter the water. Set your trap an inch and a half or two inches under water exactly where the path enters, and cover it with a few soaked leaves.

—If earth worms are put in a bottle loosely corked and hung in the sun until the oil tries out of them, you will have one of the strongest stinks known. Some use it as a trapping scent.

—Even an old and trap-shy Mink will walk into one set in a bed of dry hen manure. A peck of this will make a good bed. Proceed the same as with a bed of chaff, only place a light wad of cotton under the pan of the trap.

—Another plan which requires some labor is to find a small brook which is frozen over, cut a channel in the ice right across the brook from bank to bank, then drive down stakes not more than one inch apart, leaving one space in the stakes where the water is not more than one or two inches deep. Set a No. 1½ Newhouse trap in this space, fastened to a wire or sliding pole so that when caught the Mink can get to deep water and drown. No bait is necessary, as the Mink has to pass through the line of stakes where the trap is. Put a board on the ice over the trap and stakes, and throw snow or brush on top so the water will not freeze where the trap is.

—Bait your trap with a live duck or chicken. No Mink will pass without stopping to kill the bird.

—Punch a hole through the bank which overhangs shallow water, having it slope so the Mink can climb up or slide down. Place trap under water if possible, covering it with a few water-soaked leaves.

—Try setting traps in the holes you will find in the banks of streams, putting bait outside the hole about six feet from trap, and cover the bait

with a flat stone, so he will have a hard time to get it. The Mink will eat a little, then dive into one of the holes, and you have him.

—Good sets for Mink may often be found where steep rocks, or the stone of a bridge extend into water, where the bridges span streams, in runways back of the sleepers.

—After cold wheather sets in, when setting in shallow water for Mink, choose a place where the current runs swiftly and is not likely to freeze up.

—Lay a hollow log along a Mink path, between steep banks and the water. Use brush to block any passageway except through the log, and set a trap in each end of the log.

—Take a crab, tie a string to one paw, and put it under some stump where Mink run on dry land, not in water. Set trap so crab cannot spring it. The crab will live a week.

—Live mice make good Mink bait.

—Where there is a saw-mill on a stream use the saw dust to cover your trap. Make it look as if the saw dust had just floated down from the mill. Put a bit of loose cotton under the pan of trap.

—Find a place where Mink have a hole in a snow drift. Dig a narrow cut or ditch sideways into the drift where you will be sure to strike the hole. Set a trap in the runway, and cover up your ditch so it will be dark. Once in his hole the Mink is not so suspicious, and very likely will walk into your trap.

—Red squirrel is excellent Mink bait; Beaver musk is fairly good.

—Chaff that mice have run over and thoroughly scented, when sprinkled around a trap, is good.

—Cut your bait in several small pieces, so that the Mink has to make several trips to your set.

—Nearly always there are springs around lakes and swamps which Mink will be sure to visit when traveling that way. What is called a "bait house" may be made at such a place. Drive sticks in the mud where the water is two inches deep, so that the tops lean together to form a roof which you will afterwards cover with moss, sods or small twigs. Drive these sticks so as to make a pen about a foot wide in the form of a horse-shoe, and leave an opening three inches wide in which to set the trap. Put some good bait, like fresh Muskrat meat, in the back of this pen and fasten the trap properly.

—If you find a log lying with one end in the water and the other on the low bank with sandy beach between, stick chunks of wood or stones under the log so that the Mink will have to go around them in the water under the log. Set a No. 1 trap right under the log in an

inch of water and stake out in deeper water. Scatter a little bait by the sides of the log.

—In setting traps for Mink, the Indian would take a Muskrat and drag it around in the vicinity of the trap. He said, "When Mink strike trail he no leave till he find meat." The meat was always placed so that he got into the trap before he got to the meat. E. K. LENT.

—A good way to trap Mink in winter is to find a hole in the ice where the Mink passes and repasses. Set a No. 1½ trap in the hole and bait it with a bird or chicken's head. Fasten a pole six or eight feet long and have a long chain attached to it, so the Mink will slide into the water and drown.

—When Mink tracks are seen along the stream and the ground favors, this is a good plan: Drag some bait or scent on a short route from the water and back to it. A piece of meat or an old fowl which has been killed, split open and scented with fish oil, oyster juice or oil and assafœtida, loosely sewed up, makes a good drag. Set several traps exactly in the path of the drag. The Mink will run along the trail, there being nothing to arouse his suspicion, and get caught.

—When there is no snow on the ground Mink often follow Muskrat trails. If a piece of fowl or other good bait be placed two or three feet from the trail the Mink will follow his nose and turn aside to get it, unless he is closely pursuing a Muskrat.

—Where two brooks unite and there is a little sand-bar on the point, put a piece of Muskrat meat on a stick which leans out over your trap, which should be in two inches of water.

—An old half-breed Indian set two traps on top of a newly finished Muskrat house, put a few drops of scent on a leaf at the very top of the house, and spitted a small piece of Muskrat meat near the traps.

—For Mink I use a No. 1 or No. 1½ trap. The latter is preferable. For scent that obtained from the scent bags of the Mink or Weasel, mixed with anise oil, is the best decoy I ever used. This scent is found near the root of the tail in two round bags about the size of a pea, and is a yellow liquid smelling very strong.

—After setting the trap, I scatter feathers around and over it. The Mink seeing the feathers and scenting what he supposes to be a Weasel, will dig up the whole works looking for something a Weasel has overlooked, and he is mighty lucky if he don't get into the trap. Canned sardines make good Mink bait, and the sardine oil is good to mix with the scent in the scent bottle. Skunk scent and feathers attract and allay the suspicion of all bird eating animals.

HORACE R. LITTLE.

—A good set for Mink is to kill a Rabbit and set him in the position you are accustomed to see him in the woods, where a Mink is likely

to travel. Dig a little hole on each side of the Rabbit large enough for your trap. Set a trap in the hole, one on each side of the Rabbit, and cover with small leaves; for they are not so likely to clog the jaws of the trap as large ones. If you use care enough you will most likely get the first Mink that sees the Rabbit, even if he is not hungry, for a Mink will kill for the sake of killing.

—Another way is to dig a hole about a foot deep and six inches wide and straight into the bank, having about two inches of water in it; cut a forked stick and run it through your bait; stick it into the back end of the hole and set your trap at the entrance under water. This is also an excellent set for Coon and Muskrat, but of course must be used in open weather. T. J. FOREMAN, Ohio.

—In regard to catching Mink, I think a good way is to take the scent bag, especially in the running time, and hang it up above the traps. If a passing Mink gets the scent, he is pretty sure to go there.

—In the stream at the outlet of a small lake, an old trapper built a "mink-house" of flat stones, placing them about eight inches away from the steep rocky bank, so as to form a chamber about eight inches wide by eighteen long, and fourteen high, with a three or four inch depth of water in and about the front. Putting large pieces of fresh fish in the back end of this stone house, and setting a No. 1½ steel trap just inside the entrance, he found this to be his most profitable set, catching many dollars worth of Mink in a few weeks.

—I get the best results from water-sets when I can find the creek at the right stage, where there is a small raceway or narrow running stream between two deep holes of water. I place my traps in this stream under the water about two inches and I catch nearly every Mink that passes up or down the creek.

—A Mink will keep on the bank at the edge of the water when he strikes a deep hole, but when he comes to a shallow stream he will invariably run through the middle of it. He often makes two and three trips up and down this stream. If you can find shallow running water by cutting a hole in the ice, it is a good place to set a trap for the Mink.

—In winter a Mink will often keep a hole open in the ice and if you find such a one, look around and you will also find a hole in the bank near it and a path between the two. If you set your trap in this path and cover it with a small piece of white cloth cut to fit and sprinkle a little snow or fine dirt over it, you will have learned one more good method.

—In setting for Mink on land, I go about it in this way: I prepare my traps by boiling them in hemlock boughs. Then I dig up the ground with a trap-hook (a place two feet across) and set the trap in the middle and cover lightly with fine leaves, putting some under

the trap to keep it from freezing to the ground. Don't be afraid to dig up the ground thoroughly, as a Mink will always stop and investigate such a place. Have your hook long enough so that you will not have to walk on the new ground. Fasten your trap to a springy bush or bush drag. After the ground freezes you will have to shelter your traps. I have used the following method: Take two large sized chunks of wood and lay them about six inches apart, leaving both ends open. Set a No. 1½ trap at each end. Put your bait between the two traps and cover with small bush or grass. The entrance to a hollow log is a good place to trap. You can use these two sets all winter.

Red Squirrel, chicken, rabbit, partridge, muskrat and turtle are all good baits. Fish is good when it is fresh but it does not last long. The best bait I ever used was turtle. I find it the best that I can use in cold weather. When you get a Mink or Rat, if alive, let it bleed around your trap It is also a good plan to hitch a string around your bait and drag it from one trap to another.

—For Mink, a good set is close to a bank and near the edge of the water. The bait, if any is used, should be fresh Muskrat, Rabbit or chicken. All are good If you wish for scent, the musk from the animal you are trapping is preferable.

—In some river, brook or pond, where Mink tracks can be found in the mud or on the bank, place a flat stone in the mud at the edge of the water and about a foot away place another in the same manner, having them about an inch out of the water. Now set your trap just under water about half way between the stones and place a small piece of moss on the trap pan. This method is especially adapted to trapping Mink without bait. As the animal comes along his route, he jumps out to the first stone and, seeing the piece of moss between him and the other stone, jumps on to it to cross over, when you have him by both fore feet.

Additional methods for catching Mink are given in detail, with cuts from photographs, in that excellent trapper's magazine, "HUNTER-TRADER-TRAPPER." See advertisement in this book.

THE OTTER

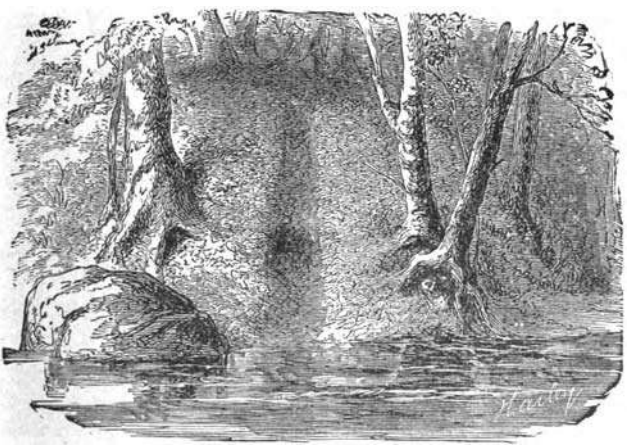
The Otter greatly resembles the Mink; but is very much larger. Eleven species, or at least varieties, have been noticed by naturalists, They inhabit the following countries; One species each in Europe, Island of Trinidad, Guiana, Brazil, Kamtschatka, Java, Madagascar, Pondicherry, Cape of Good Hope; and two species in North America. The principal species on this continent, and the most important of all in the fur-trade, is the Canada or American Otter, scientific name *Lutra Canadensis*. The range of this Otter is from the Atlantic Ocean to the Pacific, and from the Gulf of Mexico to the shores of the Arctic Sea. The other North American species are the California Otter, and the large Sea Otter of Alaska.

The Otter is aquatic in its habits, living in and near streams, and getting its living from them. Its fur and color are much like those of the Mink, and the lightening of the tints in age are the same in both. Its fur is short and thick. The under-fur is slightly waved and silky, and similar in texture to that of the Beaver, but not so long. It has a silvery white shade. The color of the overlying hairs varies from a rich and glossy brownish black to a dark chestnut. The under parts are lighter than the upper. The Otter's ears are small and far apart; head broad and flat above; body thick and long; feet hard, short and webbed; tail long, round, and toward the tip depressed and flat beneath. The fur on the tail is the same as that on the body, but shorter. Its legs are apparently set upon the sides of its body, which gives it an awakward waddling appearance when traveling on land. Otters frequently measure three feet and a half from the nose to the tip of the tail and weigh from fifteen to twenty-five pounds.

They are excellent swimmers and divers, and can remain a long time under water. Their activity in this element enables them to take fish with the greatest ease. They even destroy fish in great numbers for the mere pleasure of killing them, when they do not require them for food. The speckled trout is their favorite game, and they frequent the clear, rapid streams in search of this dainty. They are sometimes tamed and taught to drive fish into the net, and even to catch them and bring them ashore for their master. The Chinese or Indian Otter, called also the Nair-Nair, affords a good illustration

of this capability. In every part of India the trained Otters are almost as common as the trained dogs in England.

Otters burrow in the banks of streams, lining their nests with leaves and grass. The entrance to their abodes are under water Their breeding season is in April or May, and the females bring forth from two to four young at a time.



OTTER SLIDE.

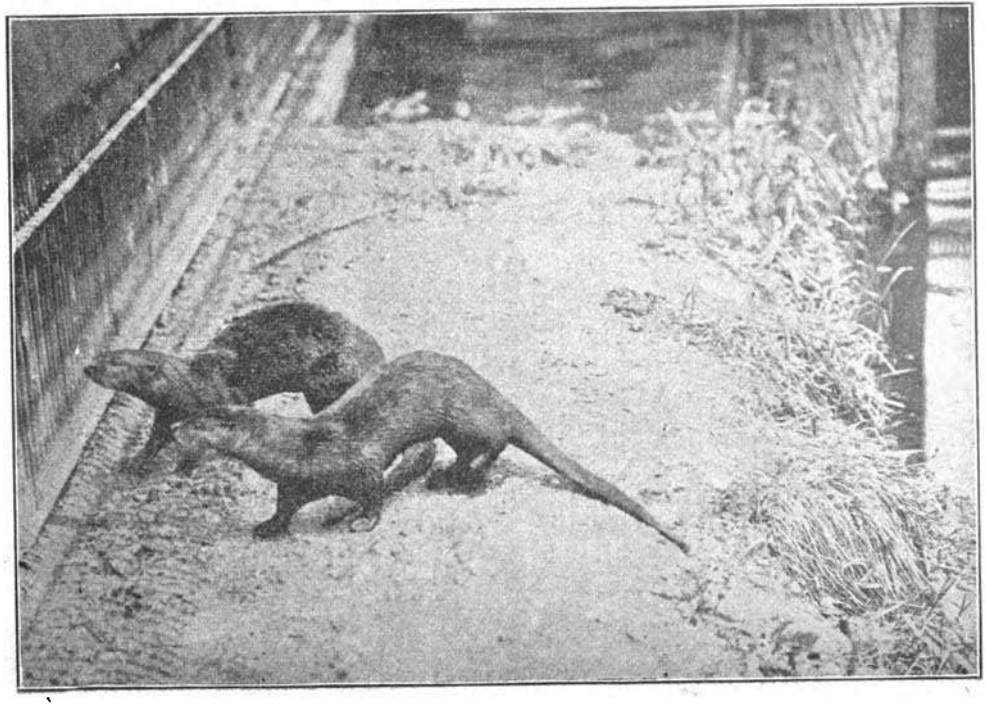
They are gregarious and rambling in their habits and have a singular practice of sliding down wet and muddy banks and icy slopes, apparently for sport. The places where they play in this manner are called "slides" and are found at intervals on all the streams and routes which they haunt. They are frequently seen in troops of four or six, wandering up or down a stream and traveling for miles over hills and through swamps, from one stream or lake to the nearest point of another In their rambles they make it a point to have a little sport at every "slide" on their route. They are gone from home on excursions of this kind generally a week or ten days, and the trapper who knows their habits, is not disappointed if he does not catch them on their home-grounds the first or second night, but waits patiently for their return from their circuit.

I have already shown that the shooting of fur-bearing animals is a wasteful practice, because it injures the fur. It is especially wasteful in the case of aquatic animals, because they sink when shot in the

water and generally are lost. Very few Otters are saved that are killed in that way.

Sometimes the Otter can best be caught as they go flying down their slides. For this purpose the Nos. 2½ and 3½ Newhouse traps are especially designed. They have a raised plate on the pan and sharp teeth in the jaws. The steel trap is undoubtedly the best means of taking the Otter, and this instrument should be placed not on the middle of the "slide" but at the highest point of it, where the animal starts for his descent The reason is that at that point he is likely to be in a walking position, so as to be caught by his legs; whereas when he is sliding and rolling with his fore legs under his body, he is very apt to spring the trap with his breast or belly so as not to be seized by the jaws Also the trap should be placed a little on one side of the central path of the "slide," because the legs of the Otter stand out on the sides of his body and so far apart that he is likely to put down his feet on each side of the trap and not in it, if it is set in the middle of the path. A small cavity should be made in the earth with a knife or hatchet and the trap inserted so as to be nearly level with the path. Under the pan and around the jaws and springs there should be a little packing of leaves and moss. The top covering should be dry leaves of some evergreen or some rotten wood broken very fine and brushed off smooth so to appear natural. The trap should be fastened in the following manner: Cut a small tree of the size of the chain-ring and set it upright, near enough to the path to assist in guiding the animal into the trap, supporting it in that position and securing the trap and game by wything or tying the top to another tree. The ring should be slipped on the butt and fastened by a wedge. After the trap is thus properly set, covered and fastened, a dry bush may be carelessly dropped in such a position as to turn the Otter in the right direction toward the trap. The whole apparatus should then be thoroughly drenched with water, which can be done by dipping an evergreen bough in the stream and sprinkling. Finally, perfume the place of the trap with a few drops of the fish oil already described. The musk of the Otter (which is an oil taken from two small glands, called oil-stones, lying next the skin on the belly of both sexes) may be added to complete the charm. The trapper, in his rounds of inspection, should be careful to keep at a proper distance from the trap while it is unspring, so as not to leave any disturbing scent on the field of operations; for the Otter's sense of smell is incredibly delicate.

The art of taking Otter in the winter under the ice is not generally understood by trappers and deserves an explanation. These animals do not hibernate, but travel about in winter as well as in summer. In the coldest weather they keep their feeding holes in the ice open and are frequently seen near the edges playing, sliding and catching fish. They can be taken by the following method: Ascertain the depth of water at one of these holes, and cut a pole suitable to the ring of the chain and long enough to rise some distance above the ice when the



The Otter

butt is driven into the bottom. The ring of the chain should be slipped on the butt before it is driven and should be free to traverse the length of the pole, except that a twig should be left near the lower end to prevent it from slipping off when you come to raise the trap. Two branches should emerge from one place toward the upper end and should be left three or four inches long. Drive the pole so that these branches will be about eight inches below the ice and fill in the fork of the branches with evergreens so as to give the appearance of a bird's nest. Set your trap on this nest, and the Otter, climbing over it to assist him in emerging from the water, will spring it and be taken. Then he will make a desperate plunge to the bottom of the stream and the ring of the chain sliding down on the pole, he will be unable to rise again and will drown. In this way many can be taken successively in a single trap. They travel mostly under the ice in winter and in their rounds visit all the feeding holes on their way; and are often taken in traps set as above directed, when the holes are entirely frozen over.

During the winter the migrations of the Otter on land are toilsome, and it leaves a deep furrow or path in the snow. If a trap be set on this path the Otter is nearly certain to be caught, as it has strong objections to opening new paths.

Other methods of trapping the Otter than those I have described are pursued by different trappers. Some trappers prefer to take them as they come out of the water near their "slides." It should be understood that Otters do not come ashore directly on to the "slide." They choose for their "slides" that part of the bank of the stream or lake, which descends at a steep angle into deep water, so that when descending the "slide" they may plunge swiftly into the water without obstruction. In coming out of the water to go on the "slide," they choose a place where the water is shallow at the shore, and where they can walk up the bank easily. Hence their place of exit is generally at a little distance from the "slide." The Canadian trappers, Holland and Gunter, describe their mode of trapping the Otter, as follows:

"We set the trap close to the land, where the Otter comes out of the water to go on the 'slide.' We place the trap about three inches under water, and a little on one side of the path of the animal, so that the pan of the trap is about three inches from the center of the path. The chain ring of the trap we fasten to a pole fifteen feet long and one and a half inches in diameter. Then to the chain, close to the pole we fasten a stone of about eight pounds' weight, to serve as an anchor, so that when the Otter is caught and makes for deep water, the stone sinks him to the bottom and he drowns. In cases where the water is too shallow to admit of setting the trap appropriately, an excavation should be made. If the water is too deep, place a flat stone or a piece of sunken wood under the trap. In all cases the trap should be set level; the anchor stone and chain should be

A Louisiana Trapper

sunk under water; and the pole should be placed on one side of the path, in such a manner as to let the Otter get into deep water. We use the Newhouse Fox-Trap altogether for Otter."

Spencer J. Clarke, of Oneida County, New York, who formerly trapped in Wisconsin, recommends setting the trap where the Otter comes out of the water, in the following position: The Otter swims to the shore, and as soon as his fore feet strike the ground his hind feet sink to the bottom, and he walks out erect. Find the point where the Otter's hind feet strike the bottom, and set the trap there. The advantages of this method are: First, the trap is in a position where it is not likely to be sprung, except by the Otter's feet; second, the trap can generally be set and visited in a boat without disturbing the shore, or leaving foot-prints and scent about the "slide." A sliding pole should be used.

Other trappers prefer to set the trap several feet from the shore, on the path which the Otter takes in ascending to the top of the "slide." It should be set in the same manner as I have described on a preceding page.

All agree that the Otter is a very cunning animal, with as keen a nose as any. For this reason many successful trappers do not try to bait them in any way, but clean and smoke their traps carefully, then set them in a run or spring that stays open all winter, choosing a muddy bottom and letting the trap sink in the mud till they are concealed. Roil up the water to cover everything, and go back the way you went in. The traps must be well fastened, for the Otter is powerful and jumps like "chain lightning" when caught.

In general it may be said that one of the surest ways of catching either Mink or Otter is to set the traps in the mouths of little rivulets or ditches which empty into larger streams. These animals are certain to explore such places as they wander along, and if the trap is set skillfully they are yours. In some situations you can make little islands of sods, separated by narrow water. Set your trap on one of these and put bait on the one just beyond. Conceal the trap of course.

Practical Suggestions by Trappers.

—Two traps placed a foot apart, and a few feet from the water's edge, on a sand bar frequented by Otters, make a good set. Use clean wool or cotton under the pan, and cover traps carefully, staking chain in opposite directions from each other. Sprinkle a few drops of strong scent a foot or two away, not so close that when he rolls in it he will roll on the traps. As he moves about he is likely to get one of his feet into a trap.

—To set a trap at the Otter's slides you must find the top of his slide, where he starts, for there he is more likely to be in a walking position. In making his slides he doubles his forefeet under his body,

and if you had your trap set at the foot of his slide he would trip it with his belly and would not be caught. Cut the ground so that your trap will set in a hole and be level with the surrounding ground, and cover your trap so as to make the surface look all alike. When you have completed your work cut an evergreen bush and sprinkle the branches around the trap.

—The Otter is a great lover of snow. When snow is upon the ground you can see where he has been rolling around and making slides in the water. It seems to be great sport to him. He will make a deep furrow through the snow. Place your trap in the snow and in the path he makes and cover it with loose snow. This makes a very good set to catch him. To set your trap along the stream where he comes out and rolls set your trap about two inches from the water and let your stake lead to deep water, for they will often drown themselves. Never put the trap more than three inches under water, for the Otter's legs are short and he will trip the trap with his belly.

—Otters live on fish, and speckled trout are their favorite game, but they eat various kinds. They are such excellent swimmers that they can catch fish with the greatest ease, and they destroy large numbers merely for sport when they do not require them for food.

—The trapping of the Otter depends on what kind of traps you use. I recommend Nos. 3 and 4, but it is advisable to have some of both kinds. The best place to capture the Otter is where he leaves the main stream and goes up a small stream or ditch. He will probably go up this to where the bank becomes steeper, and then he will go out and roll in the sand and leaves. Get in the ditch and wade up it a few paces, say twenty, and place your trap in the center of the ditch. Have a stake with a good prong on it about two inches from the end and about three and a half or four feet long, and drive it down out of sight. When the trap is set, back way down the ditch to where you came in and go out. The object of this is so there will be no odor where you set your traps. If you went in and out at the point where you set the trap the Otter would stop when he came to it and be very likely to go out of the ditch instead of going to your trap. A. J. HOPKINS.

—If there is not any low bank near, it is likely that this place is only used by the Otter for entering the stream and is not his regular slide. Go upon the bank and you will find his droppings. About four inches from the droppings and on the side away from the river is the place to set the trap. Don't smoke the trap but wash it clean with wood ashes, also wash your hands clean and don't use scent of any kind. Don't get discouraged if he don't come for a week or ten days. Leave everything natural about your set.

Skin of Sea Otter
From a Photograph by Courtesy of McMillan Fur and Wool Co. Minneapolis, Minn.

THE SEA OTTER

Along the northern shores of the Pacific Ocean, especially in Kamtschatka and Alaska, another species of Otter exists, called the Sea Otter or Kalan. It is much larger than the fresh water Otter, weighing from sixty to eighty pounds. During the colder months of the year this Otter dwells by the sea shores, where it is very active in the capture of marine fish. When warm weather approaches, the Kalan leaves the coasts and with its mate proceeds up the rivers till it reaches the fresh-water lakes of the interior, where it remains till cold weather again approaches. The head and body measure from three to four feet in length. The tail is about seven inches long. Their food consists of fish, crustacea, mollusks, etc. This Otter haunts sea-washed rocks, around bays and estuaries, lives mostly in the water, and resembles the Seals more than the Otters in its habits. It is very timid, and prefers the neighborhood of islands, where it can find both food and shelter.

The fur of the Sea Otter is very beautiful and of great value. Its color is variable, but the general hue is a rich black, slightly tinged with brown on the upper parts of the body, while the under portions and legs are of a lighter hue. About the head there is occasionally more or less white.

These animals have been so keenly pursued on account of the great value of their fur, that they are now greatly reduced in numbers and are almost exterminated in some sections, like the Pribylov and Aleutian Islands, where they were once very numerous. The Russian American Company took from Alaska in the year 1804, fifteen thousand Sea Otter skins, valued at fully $1,000,000. Their numbers were reduced so rapidly that at the time Alaska came into the possession of the United States, only six or seven hundred skins were obtained annually from the whole country. Now but few remain and the species is likely to disappear.

THE MARTEN

The Marten is found on this Continent from about north latitude forty degrees to the northern limits of the woods, or about sixty-eight degrees. On the Eastern Continent they inhabit all the north of Europe and Asia, except the treeless districts of the cold regions. The principal species are, the Pine Marten, which inhabits both continents, the Beech or Stone Marten of Europe, the Sable of Russia and Northern Asia, and the Japanese Sable. Naturalists class the Fisher also with the Martens. The Russian Sable is the finest and most valuable of all Martens. The Hudson's Bay and Lake Superior Martens are next in value. Those from Hudson's Bay, though really a variety of the American Pine Marten, are commonly called Hudson's Bay Sables, and their fur is known by that name in the markets of Europe.

The Marten belongs to the Weasel family and is carnivorous. It is about as large as the Mink and differs but little from the latter in form, save that its feet are larger and hairy to the toes, and its tail is somewhat larger and of a dark brown or black color. The fur of the American Pine Marten is generally of a yellowish brown but varies greatly in color, according to season, latitude and locality. The Hudson's Bay and Lake Superior Martens are very dark colored. The favorite haunts of these animals are the thick, dark woods of the cold, snowy regions. They are strictly arboreal in their *habitat*. They generally live in hollow trees but occasionally they excavate dens in the ground. They feed on rabbits, birds, squirrels, mice and other small animals; are fond of beech-nuts and it is said resemble the Bear in their fondness for honey. They are active climbers and their small size enables them to pursue the gray squirrel and capture him in his hiding places. They are, however, unable to cope in speed with the red squirrel or chickaree. They are not strictly nocturnal in their habits, as some have asserted, being frequently seen and killed in the daytime. Their breeding season begins in March or April and they have from three to five young at a time, which are hidden from the males during infancy.

Sir John Richardson, the arctic explorer, says that "particular races of Martens, distinguished by the fineness and dark color of their fur, appear to inhabit certain rocky districts."

Throughout the Hudson's Bay Territory there is a periodical disappearance of the Martens which is very remarkable. It occurs, according

The Pine Martin

to Bernard Rogan Ross, in decades or thereabouts, with wonderful regularity and it is not known what becomes of them. They are not found dead and there is no evidence of their migration. The failure extends through the whole territory at the same time. In the seasons of their disappearance the few that remain will scarcely touch bait. There seems to be a providential instinct in this, by which the total destruction of the race is prevented.

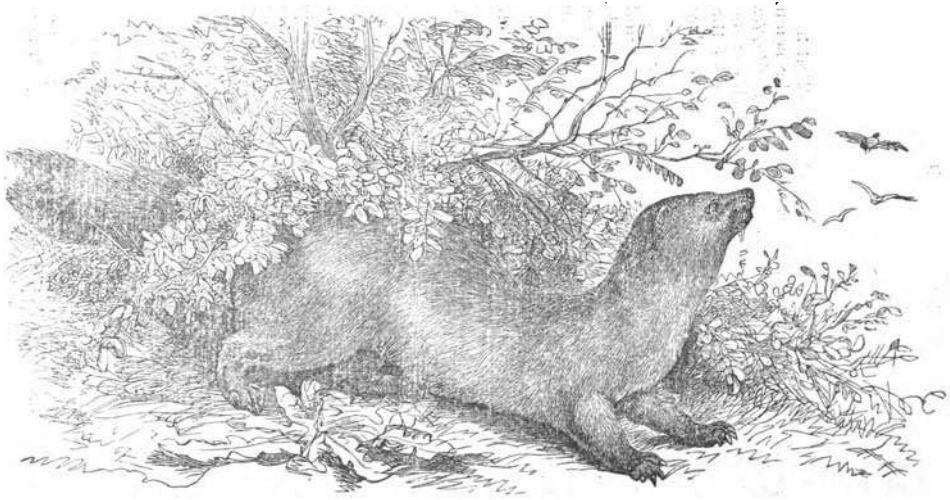
Martens are taken in steel traps by the same methods as the Mink. In winter, however, the traps should be set in hollow logs or trees, secured from the covering of snow and concealed by the feathers of a bird. The Marten trappers of the Hudson's Bay Company commonly bait with fish heads, pieces of fresh meat, or what they consider still better, the heads of wild fowl, which the natives gather for this purpose in autumn.

Martens are not shy of traps, nor suspicious. The important thing is to get them to find the bait. They will follow a trail made by dragging a piece of fresh meat and it is said will always follow the meat, never going backwards on the trail. One trapper says he once caught a Marten in a trap set at the foot of a tree, the Marten being up the tree at the time and watching the operation. The trapper had left his gun at the shanty, unfortunately, as he could easily have shot the animal.

THE SABLE

As I have already remarked, the Sable is closely allied to the Marten. It is classed with them in Natural History under the scientific name of *Martes Zibellina.* Two species are known: the *Martes Zibellina* or Russian Sable and the Japanese Sable The latter is marked with black on its legs and feet. It is thought by some of the Hudson's Bay Company's agents that a Marten exists in the northwestern part of British America and in the late Russian Possessions, which, if not the same, is very closely allied to the Russian Sable The Russian Sable is spread over a vast extent of territory, being found from the northern parts of European Russia eastward to Kamtschatka. Its size is about equal to that of the Marten, being about eighteen inches in length exclusive of the tail It is not very prolific, seldom bringing forth more than five at a birth and generally only three. This takes place in March or April. They make their homes chiefly near the banks of rivers and in the thickest parts of the woods. They usually live in holes which they burrow in the earth. These burrows are commonly made more secure by being dug among the roots of trees. Occasionally they make their nests in the hollows of trees and there rear their young. Their nests are composed of moss, leaves and dry grass, and are soft and warm. Their food varies with the season and is partly animal and partly vegetable. In the summer, when hares and other small animals are wandering about, the Sable devours great numbers of them. But in winter, when these animals are confined to their retreats by the frost and snow, the Sable is said to feed on wild berries. It also hunts and devours the Ermine and small Weasels, and such birds as its agility enables it to seize. Sometimes, when other sources of food fail, it will follow the track of Wolves and Bears and feed on the remnants of prey these animals may have left.

The fur of the Sable is in great request and is the most beautiful and richly tinted of all the Martens. The color is a rich brown, slightly mottled with white about the head, and having a gray tinge on the neck; it varies somewhat according to locality, and in some regions is very dark. The best skins are said to be obtained in Yakootsk, Kamtsckatka and Russian Lapland. Atkinson, in "Travels in Asiatic Russia," says that Bagouzin, on Lake Baikal, is famed for its Sables. No skins have been found in any part of the world equal to them. The fur is of a deep jet black, with points of hair



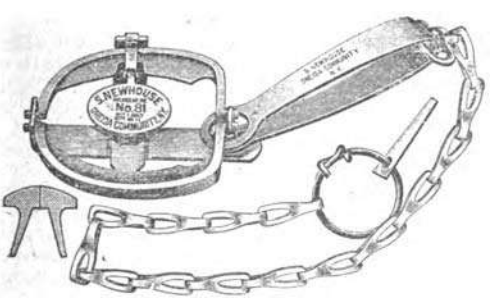
The Russian Sable

tipped with white. This constitutes their peculiar beauty. From eighty to ninety dollars are sometimes demanded by the hunters for a single skin.

The Russian Sable is monopolized by the imperial family and nobility of that country. Only a few skins find their way into other countries. Some, however, are obtained privately in Siberia, by Jewish traders, and brought annually to the Leipsic fair. The fur of the Sable has the peculiarity of being fixed in the skin in such a manner that it will turn with equal freedom in all directions, and lies smoothly in whatever direction it may be pressed. The fur is rather long in proportion to the size of the animal, and extends down the limbs to the claws.

The best method of capturing the Sable is by the steel trap, the same as I have already described for taking the Mink and Marten.

The Sable can be domesticated with success.



THE FISHER

This animal is called Pennant's Marten by certain naturalists. From some hunters it also receives the name Pekan. But in the fur-trade is generally known as the Fisher. It is strictly a North American animal, ranging from the Atlantic to the Pacific, and from the mountains of North Carolina and Tennessee to the Great Slave Lake, and perhaps still further north.

The Fisher belongs to the Weasel family and resembles both the Marten and Wolverene in its habits and appearance, though much larger than the former and smaller than the latter. Its general shape is like that of the Marten, but its head is more pointed, its ears are more rounded, its neck, legs and feet are stouter in proportion and its claws much stronger. An average, full-sized Fisher will measure about two feet from the nose to the root of the tail. Its tail is about fifteen inches in length. Its feet are large, short and stout, and thickly covered with fur and hair. The color of its fur is dark brown or black, and its tail is black and bushy.

Fishers are found chiefly in the cold, snowy regions of the north, where they travel along the ridges, choosing low and hidden paths where the timber is thick and are generally nocturnal in their habits, though less so than the Fox. They do not live so exclusively in the woods as the Marten, but their food is much the same. They prey on Hares, Raccoons, Squirrels, Grouse, Mice and small birds and have been seen watching for fish, lying on a log that crossed the stream, with head inclined downward ready for a plunge. They, however, prefer the flesh of some animal to fish, Rabbits being a favorite food. The bait must be kept fresh. Their breeding season begins in March or April, and from two to four young are brought forth at a time. The young are hidden from the males in hollow trees at a considerable distance from the ground until they are large enough to take care of themselves.

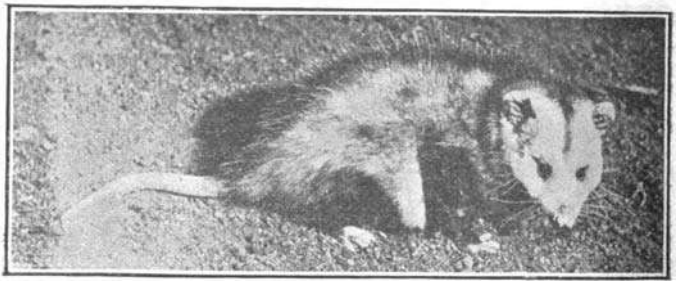
Fishers are taken in steel traps by the same methods as the Mink and Marten. The barricade around the trap, however, should be stronger, and the entrance larger. The trap in all cases should be fastened to a spring-pole of sufficient strength to lift the animal clear from the ground, as he is pretty sure to gnaw off a leg, or the pole, if left where he can touch the ground. The Hudson's Bay Company's trappers sometimes used the same methods in trapping the Fisher as those employed in Fox trapping. Messrs. Holland and

The Fisher

Gunter, trappers of many years experience in the Laurentian Hills of Ontario, describe their mode of trapping the Fisher as follows:

"For capturing the Fisher we always draw a trail composed of the oil of anise, assafœtida and the musk of the Muskrat, mixed with fish oil and placed in a deerskin bag about the size of a mitten, pierced full of holes with a small awl. If drawn along the line of traps the scent is sure to attract the Fisher's attention and when an animal once finds it, he will follow the trail till he comes to a trap. Mink are sometimes caught along trails of this kind and it is a good plan to set a trap for Wolves on the line, as they are likely to be attracted to and follow it. In setting the trap we either place it in a hollow log or build a strong house and place the trap at the entrance. In the latter case the bait should be placed in the back part of the house, about two feet from the door. The trap should be covered with finely powdered rotten wood. A spring-pole should be used, as all animals of the canine family will follow the trail and rob the traps. Deer-meat, Muskrat-meat, or fish, make good bait for Fisher, Marten, Mink or Wolf."

The Fisher is an exceedingly powerful animal for its size and will tear down wooden traps or "dead-falls" with ease. It frequently annoys the trapper by robbing his Marten traps of their bait, or the animals they have caught. Indeed, the Marten trappers of the Hudson's Bay Territory consider an old Fisher as great an affliction as a Wolverene. It will follow a "line" of traps for miles and visit them with exemplary regularity. Some trappers prefer to catch Fisher by a fore foot.



The Opossum

THE FOX

The members of the Fox or Vulpine genus are numerous. Foxes are distributed through all latitudes but they are most abundant in the North. Naturalists recognize fourteen different species. On this continent we have the Red, the Cross, the Silver or Black, the Prairie, the Swift or Kit, the Gray, the Coast, and the Arctic species. Northern Asia is represented by the Black and Gray, the Red and the Kit; European Russia, Sweden and Norway by the Black and Gray, the Cross, the Blue, the White and the Red; Middle Europe by the Red and Greenland by the Blue and the White. In Southern Africa the Asse or Caama, and in Northern Africa the Fennec or Zerda belong to the Fox genus. Fur dealers say that there are thirteen different varieties or species of the Fox in Russia.

The Fox is one of the most important of the fur-bearing animals. The most valuable, most beautiful, most rare and most sought for of all the Foxes, is the Silver Gray or Black. It is found in the high northern latitudes of both continents, but only about two thousand skins in all are annually obtained. The best ones bring at the London sales as much as two hundred dollars each. The Cross Fox is the next in value. On this continent, the Black, Cross and Red Foxes vary greatly in color and marking and in quality of fur. This is probably due to the hybridizing of the different species with each other. It is thought by some authorities that the Cross Fox is a hybrid between the Red and the Black or the Red and the Gray, and not a distinct variety. It is said that one Cross Fox has appeared in a litter of Red or Silver Foxes, and the weight of evidence seems to show that it is a hybrid, although the matter is not fully settled.

The Fox belongs to the Dog or Wolf family and is carniverous in its habits. The different species closely resemble each other in size, form, habits and mode of capture They differ mainly in the color and quality of their fur, which varies in consequence of difference in species and in climate, from the coarsest dog to the finest Sable. The American Red Fox is the most common in this country and in many parts of the United States is considered one of the worst robbers of the farmers' sheep fold and hen roost. The Red Fox of Europe, though closely resembling the American, is a different species.

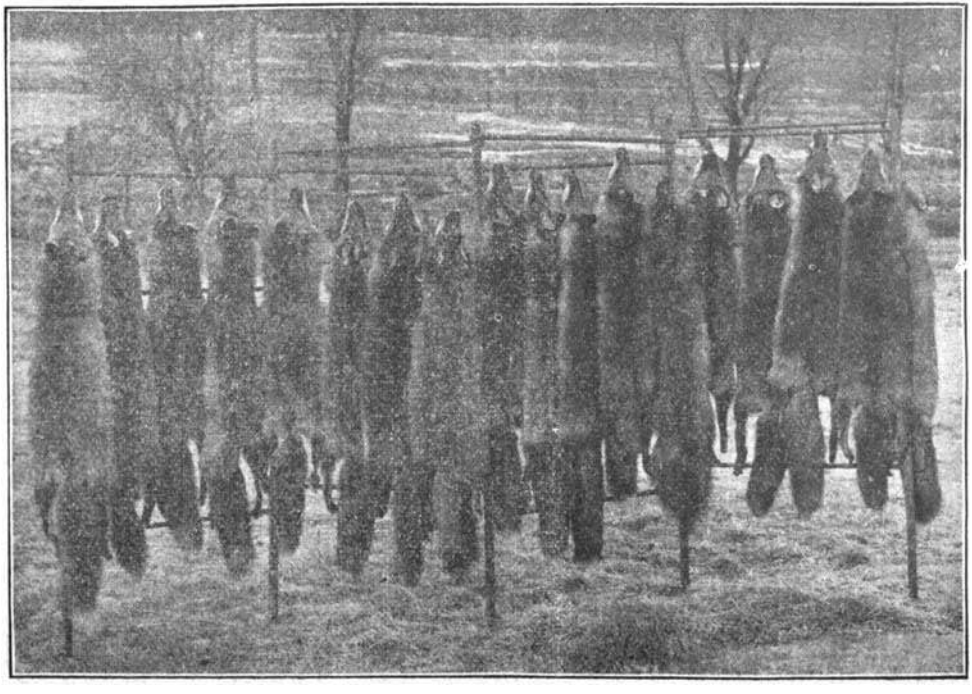
Foxes feed on grouse, small birds, hares, rabbits, squirrels muskrats, mice, fish, eggs; and some of them are remarkably fond of

grapes, strawberries and other ripe fruits. When pressed with hunger, they accept reptiles and carrion. Their modes of securing their prey are various. They generally seize their victim by creeping stealthily within springing distance and pouncing on it like a cat; but they frequently pursue the rabbit and other game with the "long chase." Their senses of sight, smell and hearing are very acute and their speed is great. They are cunning and their tricks to escape their enemies and secure their prey are very remarkable. The length of the Fox from nose to tip of the tail is about three feet and its weight from fifteen to twenty-five pounds. The tail is large and bushy and when wet retards their speed in running. Their breeding season is in February or March and they bring forth from four to nine at a birth. They generally burrow and rear their young in the earth but sometimes take up their abode in a hollow tree or log, or in a ledge of rocks.

Some of the most successful methods of catching the Fox are the following:

To prevent the smell of iron from alarming the game the trap should be thoroughly smeared with blood, which can be done by holding it under the neck of some bleeding animal and allowing it to dry. Or for the same purpose, it may be heated and covered with beeswax, which at the proper temperature will readily run all over the trap and chain. It should be set near the haunts of the Fox. A bed of ashes, chaff or light earth should conceal the trap, and it should be fastened to a movable clog or bush of six or eight pounds weight, as heretofore directed. Wool, moss, leaves or some other soft substance should be packed lightly under the pan and around the jaws. The surface of the earth in the neighborhood should be brushed with a feather or bush, so that all will seem natural. Scraps or small pieces of fried meat, rolled in honey, should be scattered over the bed of the trap, except where the pan is. Care should be taken to erase all foot-prints. To make the allurement doubly sure, obtain from the female of the dog, fox or wolf the matrix in the season of coition, and preserve it in a quart of alcohol tightly corked. Leave a small portion of this preparation on something near the trap; and then, putting some of it on the bottom of your boots from time to time, strike large circles in two different directions, leading round to the trap. A piece of bloody meat may be drawn on these circles at the same time. The Fox on striking this trail, will be sure to follow it round to the trap and be caught.

Another method practiced by woodsmen is to set the trap in a spring or a small stream that does not freeze over in winter, placing it about half an inch under water, and covering the space within the jaws with a piece of moss that rises above the water. A bait of meat should be placed in such a position that the Fox, in taking it, will be likely to put his foot on the moss, to prevent wetting it. The essence of the skunk is sometimes used in this case, in connection with the



Fox Skins

bait, with good effect; but most trappers prefer the preparation in alcohol, above mentioned.

Another good way is to obtain from the kennel of some tame Fox (if such can be found) a few quarts of loose earth taken from the place where animal is accustomed to urinate. Set your trap in this material, and bait and smooth the bed as before. The Fox, cunning as he is, is not proof against such attractions.

There seems to be quite a rivalry amongst old trappers as to the best methods of taking Foxes. Most trappers have thought that they were suspicious of the smell of iron and steel, and that the trap must be smoked, or covered with blood or beeswax; but another tells of a Fox going through a field, under a harvesting machine, under a wire fence, and following the tracks of a steel-tired wagon. So it is probably the human scent on the traps or paths that warn the Fox. If every care is taken to remove all human scents or odors this animal can be taken with almost or quite the certainty experienced with others.

It is good practice to make a trap-bed and get the Foxes baited to it before setting the traps. When it is found that they are coming and eating the meat left on the bed, set the trap in the center of a cleared and smoothed space, eight or ten feet square covering it with wood ashes if practicable, and scatter more bait skillfully around but not on the trap. Fasten the trap to a bush, clog or light piece of pole, so that the Fox can run a little way with it. Then he will not disturb the bed, which can be used over and over again.

A Massachussetts trapper says in a letter to us: "In my 51 years of trapping I have always used skunk meat and never closed a season with less than 200 to 300 Foxes. I use 400 traps, but I never go to my traps without first putting on wooden shoes or a new pair of rubber boots. I also bury my bait in the earth for five or six days before using. Then instead of handling it with my hands I have a hook with which I take it out of the ground, using the same means to place it near the trap."

Practical Suggestions by Trappers.

—Honey mixed with your scent will prevent its evaporating rapidly.

—Where Foxes are eating carcasses of dead cattle or other animals, set your trap carefully, covering it with feathers, wool, hair or chaff.

—Set two traps a few feet apart in a furrow plowed for the purpose through a buckwheat field. Place some bait or scent in the furrow between the traps.

—Musk glands from several muskrats put in a bottle with a lot of angleworms and hung in the sun through the summer will make a good scent for Foxes.

—During the summer lay tree limbs across cow paths in the woods and pastures. On either side of these obstructions will be good places to set traps without bait in the Fall.

—Find a carcass or put one in some spot in the woods or field within a few yards of a stump and set your trap on top of the stump. The Fox will get up on the stump to look the situation over.

—Half a pint of skunk's oil, the musk glands of a muskrat and the scent bag of a skunk, make a good Fox scent.

—The brine off a mackerel kit, scattered where you intend to set a trap makes a good scent

—Foxes like to walk and play on fine sand, and if you can find a bed of it which has been washed down, follow this plan: Take an old beef's head, or a hind leg, or a dead chicken or turkey, for bait, and partly bury it in the sand, letting some part stick out. Drive a stake close to the bait and set three or four traps spread out as far as the chains will permit when fastened to the stake, digging a little bed in the sand for each trap. Cover the traps and chains lightly with sand. Better put a little bunch of cotton batting under the pans of the traps. Then take a small bush and brush out all your tracks, and smooth sand over traps.

—Foxes are quite likely to use old cow and sheep paths, especially those leading around swamps or water. By scattering a little scent at points where you set your traps in or beside such paths the chances of a catch are good. Foxes, like dogs, are very apt to stop and urinate on any little mound or rise of ground when following such a path, and by setting a trap or two on the mound you may catch one. Cover the trap with a few dead leaves, or with dry grass, or rotten wood.

—If you wish to be real cunning and foxy yourself, try setting three traps, one in such an old path without any covering, and one on each side of it skillfully covered. The Fox will give all his attention to the uncovered trap and by going around it may step into one of those on the side.

—We have previously described a "water-set" for Foxes, where a bit of moss or turf is placed on the trap pan to tempt the Fox to step on it as he crosses the water. In this case see that the pan does not trip too easily. Better have it go hard enough so that if the fox tests it first by putting his foot on lightly it will not spring. Then, feeling that it is safe for him, he will trust his weight on it and get caught.

An Elaborate Set.

First, I find a level spot of ground, at least twelve feet square; then I cut four green poles about seven feet long, the thickness of which must be three inches for the fox, four for the coyote, and five

for the wolf. I take soil and bed these down level with the surface, in as nearly a perfect square as my eye can measure. I then cut the sod back beside the poles as neatly as possible, and put all the dirt not used in the center of the square. If I have any long grass (leaves will do), I make a hive-shaped heap in the center of the square, with base about eighteen inches from poles at all points. This done, I take four-one inch boards, about one foot wide and three feet long, and place a trap on each board, set, with a spring adjusted so as to let the pan be level. Now mark around bed-plate and spring, with pencil and cut out to fit the trap, leaving the jaws, to rest solid on the surface of the board, while the bed-plate and springs are let into their respective notches, so as not to hamper the springs in any way, but to hold the trap firmly in position.

Use one board for each trap and place at center of each pole so as to bring the trap, when in its notch, about half way between the pole and the grass or leaves. The surface of the board should be low enough to allow the covering on the trap to come level with the surface of the surroundings.

These boards are used to prevent the animals from turning the traps, which the wolf and the fox are both good at. They can be put into place easier, if done before the grass is put into the square. I always cut my boards so as to leave the chain end of the spring about an inch out beyond the edge of the boards. If one has no boards, use a forked branch, adjusting the trap so it will be guarded on both sides by a limb about two inches in diameter and two or three feet long.

After you have done this, let the place rest at least three days. Then get your jack-rabbits, if you can, partly peel them and put a skin on each one of your feet when you go in the vicinity of the setting. Put your gloves on before handling either bait or traps.

Have traps clean as a pin, walk right up to the side of the square and place a trap in each form and wire fast to each pole. This done cover traps and chain with fine grass. Lift off grass-pile to a height of about eighteen inches and lay a jack, or some other fresh meat on the edge of the heap next to each trap. Drive a stout stake in the center of the heap, and wire bait fast to a stake, covering up well with part of the heap you lifted off. W. EARLY.

—Use a Newhouse regular fox trap No. 2. Use no bait or scent, but just carefully set the trap. First examine the stock paths in these pastures some morning; or if there is an old road on the farm look for the tracks there, also look in places under the gates and fences and in the gullies. If you see a fox track, that is evidence that he is traveling. Select a narrow place in the road, path or gully, and commence your work with a ready-sharpened, hardwood stick, using it to dig a hole the size of your trap and deep enough so that the pan and jaws will be a little below the surface. Cover the springs and all around the outside of the jaws, with some of the dirt you have dug up. That conceals the trap except the pan and inside of jaws. Cover

these up with some good flat leaves or some paper. Then pulverize some of the remaining dirt and sprinkle over the leaves or paper until none of these can be seen. Take a small weed and smooth over your trap which completes the set. Lay a dead weed or a stick the size of your thumb on each side of the trap say, four or six inches away, and my word for it you will get the first Fox that comes along. Cut a bush and wire your trap to it securely. B. P. PICKENS.

—I harnessed up the old nag and drove over to Plymouth to the house of a friend who kept a tame Fox.

There I got a box full of dirt out of the cage where he kept him. That afternoon taking my 2½ instead of Jim's 1½, I went down to the pasture and chopped a hole in the sod and set the trap in it and then covered it with the earth I had brought and set the No. 2 traps as before, all around it; then I placed the bait and went away.

The next morning Jim and I went to look at the traps. We found them all sprung and the bait gone as usual but the trap set in the earth was gone.

We skirted the field and finally found the wise old Fox tangled in a bunch of briers with my No. 2½ firmly snapped on his hind leg.

—A good winter-set can be made in a spring that does not freeze up. The first thing is to hoe it out well, observing carefully the surroundings. Leave a piece of moss or grass, whichever grows in the spring, to put your bait on and get some of the same to place on and cover the pan of your trap, letting it come just above the water. The trap should be set a few inches from the shore with the bait just beyond. Put some moss or leaves under the pan of the trap to prevent any obstruction from getting there, and use a light clog of maple or iron wood and take great pains to cover it, as well as the trap and chain with loose dirt. In making this set always wade up the stream to the spring, being careful to keep in the water all the time and avoid spitting anywhere around, even in the water, especially if you use tobacco. Take great care in all your operations to have everything as natural as possible. Use a piece of Skunk, Muskrat or Rabbit for bait, and if you wish to use a scent, a good one can be made as follows: To the musk-bag of the male of one Skunk, Muskrat, Beaver and Fox, add four drops of anise oil and one pint of alcohol. Cork tight and let stand two months in a cool place. A couple of drops of this on a stone or stick will last two weeks if there is not too much rain.

For Mink I mix it with fish oil, eel oil, the musk bag of one Muskrat, and two ounces of alcohol. Apply the same as fox scent.

—Skunk, muskrat, partridge and meadow mice are all good bait for foxes. Muskrat, meadow mice, partridge, red squirrel, beef's liver, fresh speckled trout are good mink baits. Take the musk bag of of Skunk and lay it on the ground, scuff your boot bottoms in it and start right off in the woods or anywhere you wish to travel. and Foxes

are quite apt to follow your tracks. A male Fox will follow your tracks if you put the matrix scent on your boot bottoms. If, however, you desire both male and female to follow you, use the following on your boot bottoms: Take several trout or fish, put them in a glass or stone jar, add one-quarter pound salt, and one and one-half teacups of clear fresh water; let stand loosely covered in the sun four weeks, then strain off the brine (throw away the thick stuff), put the brine into another quart jar, add the matrix of the female Fox and the musk of one Skunk and add one-half pint of alcohol, then cover jar air tight. Let stand in a cool dark place from two to ten months—the longer the better.

—To allure the Fox to this bed some trappers draw a piece of meat over the ground in a circle; others leave an enticing trail by rubbing the bottoms of their boots with a preparation made by preserving the matrix of the female Fox or Wolf in alcohol; this preparation may be kept indefinitely, but only interests the dog Fox. Another way sometimes practiced is to make an excavation under an old stump or log, setting the trap at the entrance with bait at the back side. A favorite winter method is to set the trap in a spring hole where the water does not freeze, placing it just under water and a few inches from shore. A bit of moss is placed on the pan, and the Fox is attracted and led to put his foot on the moss by a piece of tempting bait hung just out of reach above and beyond the trap. O. D. WRIGHT.

—I used a house rat. I killed him and put him in my bait box, being very careful not to get the rat bloody or the fur ruffled up. I went to a place where a Fox had been coming every night but didn't want my bait, so I got out my rat and set the trap about six inches away.

The Fox came the very first night and made a jump for the rat, and I got him by the hind foot. I then set the trap again, and the next night I got his mate in the same way. By this time the rat had got all ruffled up, and I could catch no more in this place until I got a new rat for bait. Quite often I get the Fox by the hind foot when he makes a spring for the bait, but generally he gets caught by the fore foot.
C. E. HOLLEY.

—In the fall place bait, the carcass of some animal or any meat you can get, in a clump of bushes, or under evergreen trees, in the pastures or woods where Foxes are likely to run. Trim out the branches so as to leave an easy opening on one side, and the Foxes will get to visiting the spot, even after the bait is gone. Then, at the proper season, set two traps where two evergreens grow near together, one on each side of the passage, and you will be almost certain of a catch. In trapping for Foxes and Wolves, do not set the trap too near the bait, but back a few feet. Tainted meat is a good bait. For winter use salt fish, smoked is excellent, as it will not freeze like fresh meat, and so gives off the scent longer.

—In winter, hang the hind part of a Skunk, Muskrat, or Rabbit about three feet high on a bush growing by itself, and set under it two traps, one on each side of the bush, fastening to a drag. Put a wad of cotton or a few leaves under the pan of the trap, and carefully cover the trap with light snow. Brush out all your tracks, and leave everything looking as natural as possible. If you think best to use some scent, in addition to the bait, take one-half pound of honey, the musk from one rat, four drops of anise oil, one drop skunk's oil, one ounce alcohol. Let stand one month before using. A few drops of this in a place will be sufficient. Some trappers cut a clean sponge into small pieces on which the scent is placed, then a piece of the sponge is hung up over the trap.

—When trapping for Fox in woods, nail two pieces of bait to a tree, a foot or fifteen inches from the ground, and wire the bait under the head of the nail so that it will be difficult to remove. Nail one of the pieces a little higher up than the other, and set the trap between the roots of the tree when they are above ground.

—"Now brother trappers I am going to give you a fox method on snow. We find lots of land-sets but very few snow-sets. This one I have tested. Take a fork and throw some chaff in the sleigh box then put in your fox trap well cleaned, with a stone tied to the chain. Drive out into an old field and throw out two or three small forkfulls of chaff as you drive along. When you get to where the Fox has his trail across the field, stop and fork out some chaff. Set the trap and place it on the chaff, then cover about two inches with chaff. Place a mouse over the trap-pan and cover it all up except the head. Be sure to stay in the sleigh as the Fox is not afraid of a horse or sleigh tracks." E. CLYNGENPEEL.

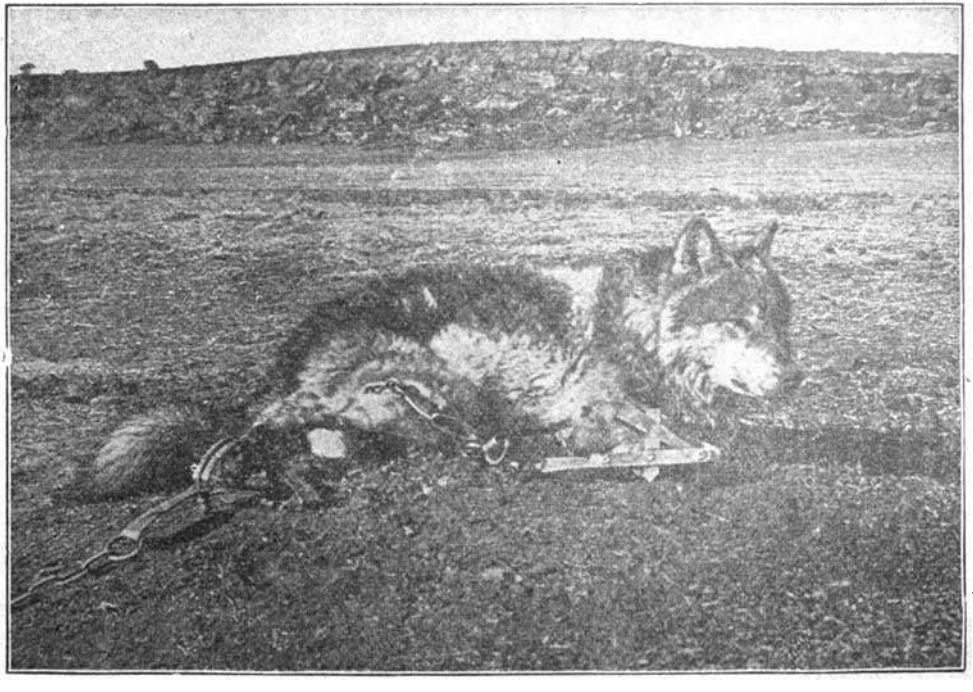
—It used to be the case that a man had to learn how to trap almost wholly by his own experience. Sometimes his father would hand down a few good ideas, but that was all. Now, with such sources of wide information as the "Newhouse Trapper's Guide," and the smart little magazine, "HUNTER-TRADER-TRAPPER," one can save himself years of trouble in learning, and gain many dollars worth of fine furs.

THE WOLF

There are many varieties of the Wolf, and they are found throughout North America, Europe and Asia. They are substantially the same in form everywhere, but vary in color from black through shades of brown, fulvous, yellow and gray to white. The most common color is gray. They vary in size from the great White and Gray Wolves of the northern regions of America to the Coyote of the western plains. They inhabit chiefly unsettled and mountainous regions. They belong to the same family with the dog and Fox. They are carnivorous, and combine both ferocity and cowardice in their character. Though lean and gaunt in appearance, they are fleet and powerful animals. They hunt mostly in packs and destroy great numbers of deer in the stiff snows of winter, sometimes slaughtering whole herds in a single night. The sheepfold of the frontier farmer also suffers from their depredations. They feed on almost all the smaller animals they can overpower. Troops of them have been known to pursue and attack men. When hunting in packs and pressed with hunger, they are bold and exceedingly ferocious. At other times, when roaming singly, they are sneaking and cowardly. The Gray Wolf of this country, which may be taken as the standard of size, is about four feet long from the point of the nose to the root of the tail; the length of the tail being about seventeen inches. In the far north they are very large, sometimes measuring six and one-half feet in total length, and weighing one hundred and fifty pounds. In trapping them it is well to know that they will almost risk their lives for lard cracklings, scraps of which, scattered about, are a tempting bait. Also a Wolf will go a mile to roll in the carcass of a Skunk.

In North America the leading varieties are the Gray Wolf, the White Wolf, the Black Wolf, the Red Texan Wolf, and the Prairie Wolf or Coyote. In South America a Red Wolf is found in the marshy districts of the Rio de la Plata. In Europe there are Gray, Black, Brown, Red and White Wolves. The latter are mostly confined to the Northern and Alpine regions. In Asia there are several varieties peculiar to that continent.

It has been supposed by some that there is a variety on this Continent which should properly be called the Giant Wolf. Old hunters say that occasionally there is seen in a pack of Wolves one that is



The Lobo, King of Currumpaw
Captured by Ernest Thompson-Seton in New Mexico. Height at Shoulder, 3 feet; Fore Paw

larger and fleeter than its fellows. They will run down a deer with ease. Whether such Wolves form a distinct variety, or are only overgrown individuals of the common varieties, has never been determined.

The breeding season of Wolves is in April or May, and they have from six to ten young at a time. They burrow in the ground and inhabit hollow logs or caves.

For capturing the Wolf by the steel trap, the directions given in first method of taking the Fox should be followed, except that the honey should be left out, and the clog of the trap should be of fifteen or twenty pounds' weight. The small Prairie Wolf that is so troublesome to the western farmer can be captured in the same way. Care should always be taken to keep at a proper distance when looking after the trap, as the Wolf's sense of smell is very acute, and enables him to detect the foot-prints of the hunter with great sagacity.

The following plan for taking the Wolf is given by Peter M. Gunter, of Ontario: "Find two trees standing eighteen inches or two feet apart. Place the bait between the trees, and set a trap on each side of it. The traps should be smoked over hemlock or cedar boughs, to destroy any odor of iron. After being carefully set, the traps should be covered with finely powdered rotten wood. A clog of hard-wood of about twenty pounds' weight should be fastened to the chain of each trap. When all is arranged, rub some asafœtida on the trees to attract the attention of the Wolves. If two trees cannot be found a suitable distance apart, lean two large logs against a tree where you wish to set your traps. It is better to use old logs, if lying about than to make any fresh chopping."

VASMA BROWN, a Texas trapper, writes us:

I have lived in Texas nineteen years and I have had some years experience with the Coyotes, Coons and Cats. Some Coyotes are of a silver-gray color, others are dark brown. The ends of their hair are a jet black and it makes them look brown. Some have black tips on their tails and some white. The dark variety are the most vicious of the two.

In the season of 1903-04, I commenced trapping about November 25th, and stopped about March 1st. I used seven No. 2 traps, but consider No. 4 a better size. In the ninety-six nights that I trapped, I caught 182 Coyotes, 4 Skunks, 12 Opossum, 3 Coons and 12 Cats. I only trapped for Coyotes but these other animals came along and got caught. Had I been trapping for Skunk, Opossum and Wild-Cat, I could have caught about two hundred of each but their pelts were not worth more than ten cents each.

I took a piece of fresh meat and dragged it along a trail for about a mile. About every two hundred yards I set a trap. I scratched a hole in the ground just the size of the trap, put it in the hole and covered it up with a piece of paper and sprinkled dirt or sand upon it

entirely concealing it. For bait I cut some little pieces of meat and put about six or eight around the trap and then went on and set my other traps. I never failed to find two or three Coyotes in my traps. My biggest catch in one night was six Coyotes and one Coon.

I never use any scent. Fresh pork is the best scent that a person can use. I tie my traps to a log or a piece of brush."

By ERNEST THOMPSON-SETON:

The common Wolf (*Canis lupus*) is a native of the whole northern hemisphere and although in various climates it exhibits many variations and has a number of corresponding names, such as Gray Wolf, White Wolf, Red Wolf, Black Wolf, Russian Wolf, Buffalo Wolf, Cattle Wolf, Timber Wolf, Loup, Lobo and Loafer, it is everywhere the same in character and is everywhere hated and feared as a devastator of the flocks and herds.

In the ranching districts of North America to-day it is variously estimated that each Gray Wolf costs the cattle men from fifty to five hundred dollars annually.

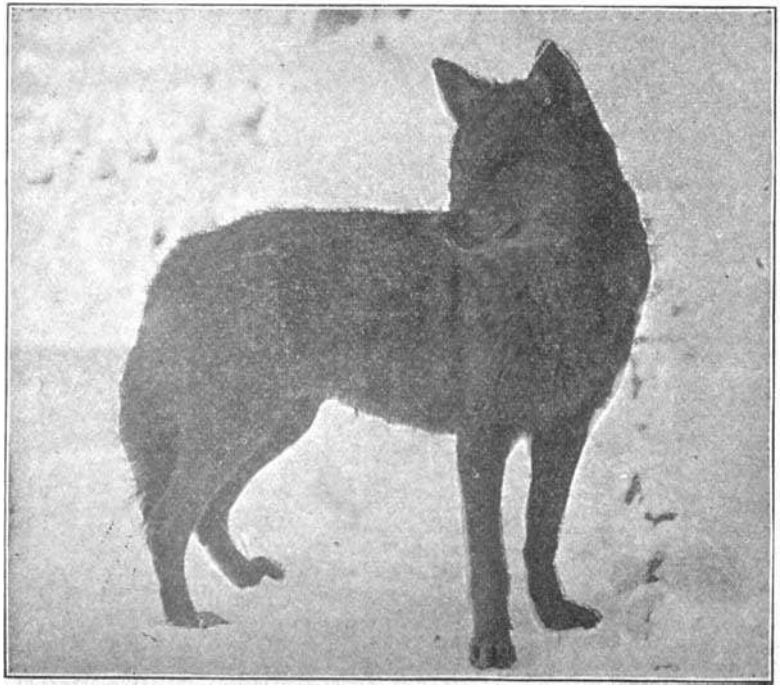
The Wolf hunter has to cope with an animal of almost human intelligence, an animal without superior in sagacity among all the wild beasts of the chase, and one which will tax his utmost ability to circumvent.

Twenty-five years ago it was comparatively easy to poison Wolves. Strychnine was then new in the West, and Wolves fell victims to it in hundreds, but the reasoning power that they have so highly developed, combined with their faculty of communicating to each other their experiences, have practically placed these cattle-killers beyond the reach of poison, and it is little more than an accident, now, when a Wolf is so killed.

Hunting with hounds, besides being extremely costly, is not practicable in a rough country, and good steel traps are the only device that has proved effectual at all times and in all places. A hunter should have at least one hundred traps, and the catch of these, in an ordinary country, will keep him busy skinning, when not actually engaged in setting the traps themselves.

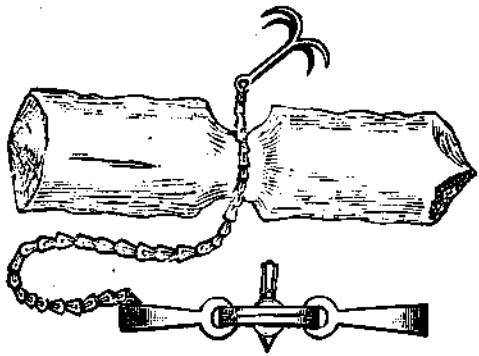
Having his traps with their chains and grab-hooks, complete, the hunter's first care is to kill the odor of the iron. This may be done by smoking the traps with cedar, by rubbing them with beeswax, or by dipping them in fresh blood. I prefer this last method as being the most effectual, as well as the most easily done. A log for each trap must then be cut, and notched in the middle to receive the chain. The log should be about forty or fifty pounds in weight; the most convenient form is a half-round log four feet long.

In handling these it is well to wear gloves that have been dipped in blood, and the traps, especially, must not be handled with the naked hands. About thirty of the prepared traps and logs will be as many as two men can set in a day; put these in a wagon, and add



The Gray Wolf
By Courtesy of N. Y. Zoological Society

two shovels, a pickaxe, a couple of large blankets or sheets, a bucket of fresh blood, two or three rabbits, a beef liver, a pound of cotton wool, the paw of a Wolf or Coyote, and a large piece of either beef,



The Clog

venison or antelope—this last to be used as a drag, tie it to a rope behind the wagon letting it trail on the ground, and, assuming a thorough knowledge of the country, all is now ready for work.

Wolves are very fond of running on the buffalo or cow trails, and any trail that is formed by the junction of several others is a good place in which to set traps. In particular, a main trail which leads down a canon, or to the crossing of a canon, is a likely place, and the wagon should be driven so that the drag strikes as many of these main paths as possible

There are several common methods of setting the trap; one is to set them right in the trail, trusting to the Wolves walking into them; another is to set them by a bait. I have been most successful with a combination of these. I have set from two to four traps in the trail, and afterwards scatter small pieces of meat over and about the place.

In selecting the trail in which to set your traps, be very careful to avoid the very deeply worn parts of the path, as the Wolves do not care to run in these. The trail should be well defined, but not at all hollowed out. As soon as the wagon has been driven beyond the selected place, and the drag has passed over the chosen spot, the first thing the trappers must do is to dip their boots and implements in the blood, then spread the blankets on the ground, and proceed to put on these, first the sod, which is to be carefully removed, and, afterwards, the loose earth as it is being dug out of the holes that are to hide the logs, etc. When the holes are ready, bury the logs and chains with great care, replacing the sod, and leaving no loose soil visible, and

no trace whatever of any disturbance of the earth. Then in the trail dig the shallow holes that are to receive the traps, and be sure they

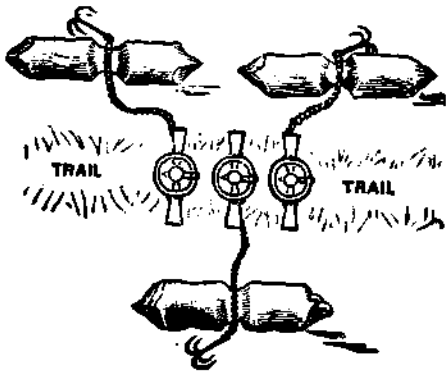


Diagram of a Trail Setting

are just deep enough to be level with the trail when there is a quarter of an inch of earth put over the pan. As soon as each trap is set and in place, lift the loose jaw until it is perpendicular and insert under the pan a piece of cotton wool large enough to prevent any dust or sand falling beneath it, as this would entirely hinder the springing of the trap. In handling the trap and the earth that covers it, wear a pair of leather gloves dipped in blood. When all the traps are buried and properly concealed, and the surplus earth on the blanket has been carried some twenty or thirty yards away, take one of the rabbits and use it as a brush to remove all traces of your feet or tools. Then scatter pieces of meat or rabbit over the traps. It is a good plan, also, to use the foot of a Wolf or Coyote and make a series of tracks over the traps, and finally, when all this is done dip the tail of a beef in the blood and sprinkle the place, and then drive on to the next location. A setting of traps every two miles is usually considered enough, but if you have plenty of traps, the thicker they are the better. It is not desirable to have the line more than twenty miles around, for it should be gone over every day, or, at least, every other day.

The foregoing describes a "trail-setting." Another good method is the "square-setting" This is made in the same manner as the first, except that it is not put in a trail, and the traps are arranged as shown on next page.

In addition to the scraps of meat that should be thrown about, a large bone or meat bait should be buried in the center of the setting.

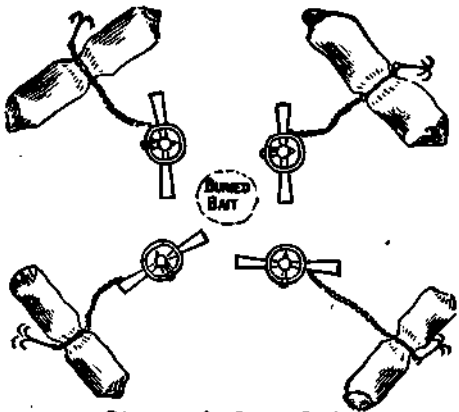


Diagram of a Square Setting

Wolves have a habit of burying surplus provender, and also a habit of digging up what others have buried, when they chance to find the place. If a smaller number of traps than four be used in the setting, the place chosen should be where there are stones, logs or tussocks of weeds that will act as guides and compel the Wolves to step in the right spot. Care should be exercised to avoid touching any of these objects, as they carry the taint a long time afterwards. If, however, there be no weeds, etc., do not try to place any to suit. The Wolves never fail to detect and shun any artificial arrangement.

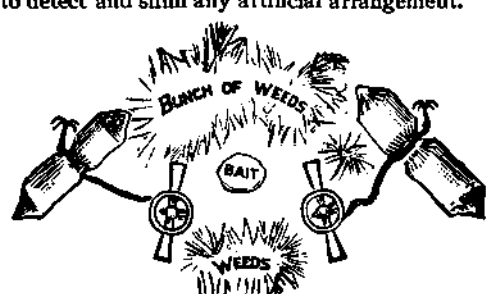


Diagram of a Setting among Weeds, Rocks, Bushes, Etc.

A living sheep or calf has been used with great success as a bait. The animal must be staked out over night, and must be tied up very

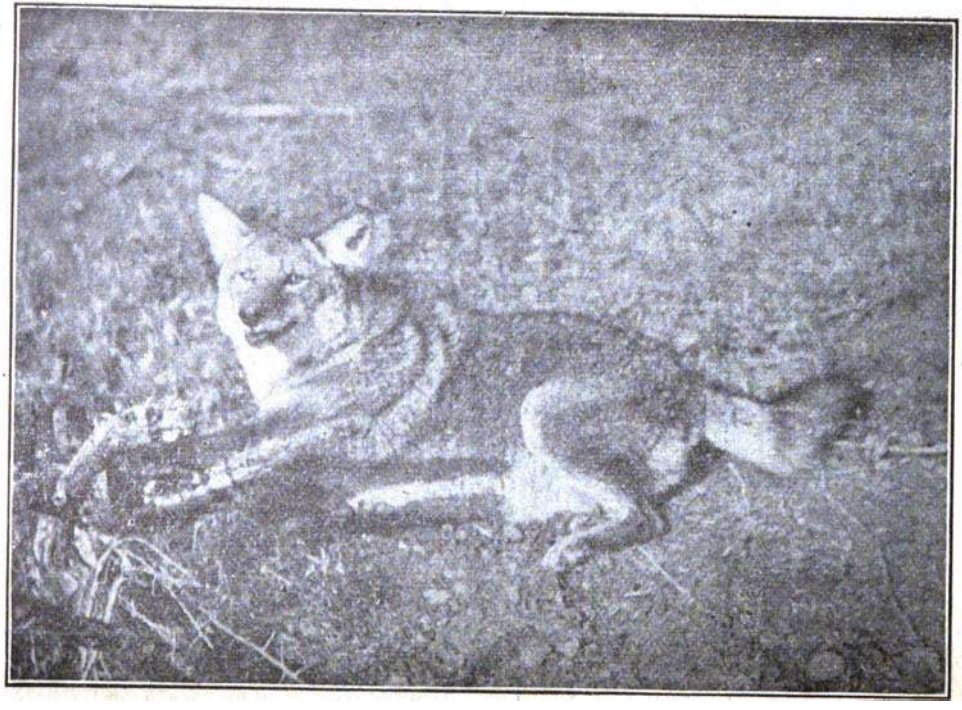


Photo by Vasma Brown *The Coyote*

short, for otherwise, it will either get into the trap itself or large numbers will be required to surround it. In selecting a spot for the bait, due regard must be had for tussocks of sage, soapweed or rocks, as by choosing a place which has but few natural pathways to it, fewer traps will cover the ground and guard the bait. A calf or sheep that will bleat is to be preferred, and it is more likely to attract if its ears be cut so as to bleed.

The head of a beef makes a good bait, for, although the Wolves do not eat of it, they usually approach it, walk around, and water on it. One of the traps may be attached to the head itself, as it makes a good clog, and needs no burying.

A Few General Hints.

—At night, on retiring, put on a large bone or a lump of meat in the fire; this will smoulder and roast all night, making a scent that the Wolves will detect twenty miles away, and come to, if they are very hungry.

—Never use asafœtida, aniseed oil, or oil of rhodium, as Wolf-lures. According to my experience the only effect of these odors is to render the animal suspicious.

—The most attractive of all odors is that of a female Wolf or dog at the mating season. After this the odor of blood is the most pleasing, and in the following list the various baits, exclusive of the two just named, are given in their order of preference: Antelope, Donkey (*Burro*,) Jack Rabbit, inner parts of a young Beef, Colt, Mutton, Veal and Horse. Wolves will not eat diseased meat, and have but little liking for old or strong beef. For example, it is little more than a waste of time to bait or drag with a "big-jawed" steer.

—Never stake your traps immovably, but always fasten them to some sort of clog which they can drag away, and never put two logs in one hole, or two traps to one log.

—The cattle themselves are the great plague of the Wolf-hunter; they are attracted by the scent of blood, and come pawing about the traps, usually springing all that they discover. It is mostly the steers and bulls that do this, and fortunately, their hoofs are too large to be caught by the trap, so the only harm done is the spoiling of the setting. The only remedy for this difficulty is setting in the afternoon after the cattle have gone out from water, and are again scattered over the pastures.

—Never put your hands or fingers between the trap jaws; always work from the under side of the loose jaw, or else use your trap wrench or a stick.

—The original drag made by the meat that was trailed after the wagon will be good for about two days. The Wolves are able to follow it even on the third day, but it is better to put out a fresh drag, at least every other day. This I usually do on horseback when going the rounds.

—If the jaws of the trap do not lie perfectly flat, bend the springs towards the jaw which is held down by the "dog."

—If there is any difference, the dust over the "pan" should be a little more even than elsewhere, for the Wolves like to tread on a smooth place.

—A piece of white cotton, or a tuft of white feathers, properly placed, often adds a good finish to the setting, as the Wolf, attracted by the general scent of blood, will at once see and examine minutely the white object.

—If a whole carcass is the bait, set the trap opposite the belly, between the legs and by the throat and tail, unless you have enough to go all around; keeping them about two feet from the bait.

—When a bait of less than fifty or sixty pounds weight is used, it is well to fix it by driving a stout stake through it.

—It is worth while spending a great deal of time in killing Antelope for bait.

—Never fail to set traps at once about the carcass of any animal that the Wolves themselves have killed.

—A she Wolf or dog staked out in the mating season is an infallible lure, and a captive Wolf that will howl, is good at any time.

—Dark, cold, stormy nights are the best for the Wolf-trapper.

—When there is snow on the ground, use more cotton wool, and place over the trap a large soft sheet of white paper, the edges of which are everywhere buried in snow. This is especially necessary when in a region that is subject to sudden thaws, for a thaw followed by a frost will freeze in the traps and render them useless. If you are quite sure the snow will continue powdery, you may dispense with the paper, but do not neglect the cotton wool. There is nothing as good as cotton wool, but Coyote and sheep's wool will do on a pinch.

—In going the rounds, never approach the traps unnecessarily; if possible, avoid dismounting at all.

—For small bait, scraps of rabbit with the skin on are better than simple meat, for the skin keeps the bait from drying out.

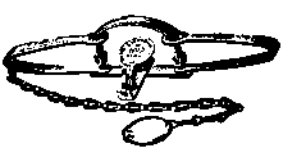
—A Wolf's track is not distinguishable with certainty from that of a large dog; it averages perhaps a little narrower in proportion. The

forefoot of course makes the largest print; a forefoot track that measures 4½ inches from the point of the claw to the straight line behind the heel pad indicates a good sized Wolf. 4¾ inches means a large Wolf. The largest I ever measured was 5½ inches long. With fair accuracy I used to reckon that a Wolf had 20 pounds of weight for every inch that his forefoot was long.

—Remember that the chief purpose of the "Grab-hook" is to make a trail that can be easily followed. See therefore that it has free play.

—When a Wolf goes off with one of the traps and clogs, it is useless to seek for his trail within a hundred yards of the spot whence the trap has been dragged, for in the frantic struggle that ensues as soon as he is caught, he rushes and leaps about in every direction; and when at length he finds he cannot shake off the trap, he generally goes in a tolerably straight course towards the nearest cover It will usually then be quite easy to follow his track and kill your Wolf.

It may be said in conclusion that our Newhouse No. 4 is often used as a Wolf trap, and for small Wolves even a Newhouse No. 3 will answer. In all cases, however, when these smaller traps are used, they should be provided with a special chain and "grab hook".



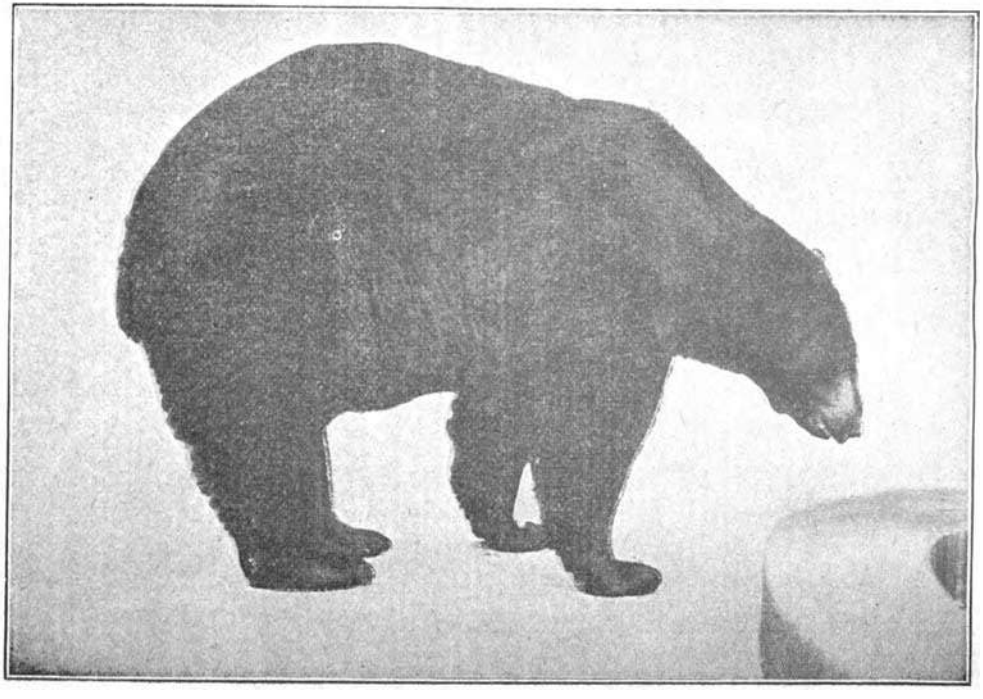
THE BEAR

The Bear family is very large. Its members inhabit nearly all parts of the globe, except Australia, and the greater part, if not all, of Africa. They range through all latitudes from the equator to the poles. The following varieties and species have been described by naturalists: Polar Bear, Grizzly Bear, European Brown Bear, American Black Bear, Cinnamon Bear, Asiatic Bear, Siberian Bear, Spectacled Bear of South America, Thibetan Bear, Bornean Bear and Malay Bear. The three latter are called Sun-Bears, from their habit of basking in the midday rays of the sun. They are the smallest members of the family, and live exclusively on vegetables.

Bears differ from each other, in consequence of differences of climate, more than almost any other animals. Those that inhabit the frozen wastes near the North Pole, or such high cold regions as the Rocky Mountains, are monsters of strength and ferocity; while those that inhabit warm countries are small, feeble and inoffensive. The extremes of the scale are the Bornean Bear, which weighs less than one hundred pounds, and the great Polar Bear, which is thirteen feet in length, and weighs twenty-four hundred pounds. The American Black Bear is the species with which the trappers have most to do. It is found in the western and northern parts of the United States and in the two provinces of Canada. Its weight when full grown is from three hundred to six hundred pounds. The Cinnamon Bear of the Pacific coast is probably only a variety of this species.

Bears (except the Sun-Bears) are omnivorous, feeding indiscriminately on roots, berries, nuts, corn, oats, flesh, fish and turtles. The farmer's calf-pasture, sheepfold, and hog pen are frequently subject to their depredations. They are particularly fond of honey, fresh or salt pork, mutton, cheese, Dutch or pot cheese and codfish. They generally sleep through the coldest part of the winter. They bring forth their young in the months of May and June, and generally two at a time. The cubs are laid in caves and hollow trees till they are large enough to follow the dam, then ramble about with her until the following spring.

The hunting of Bears with fire-arms, besides being objectionable on account of injury to the fur, is often dangerous business. They are very tenacious of life, and very bold and ferocious when wounded.



The Black Bear

A Grizzly Bear, shot by Captain Clark's party in the Rocky Mountain region, survived twenty minutes and swam half a mile after receiving ten balls in his body, four of which passed through his lungs and two through his heart! Records of Bear-hunting are full of perilous adventures, and those who engage in open battle with the great Grizzly Bear of the Rocky Mountains, rarely escape without loss of life or limb. But steel traps of the right size, and properly managed, subdue these monsters with greater certainty than fire-arms, and without danger to the hunter.

In trapping for Bears, a place should be selected where three sides of an inclosure can be secured against the entrance of the animal, and one side left open. The experienced hunter usually chooses a spot where one log has fallen across another, making a pen in this shape >. The bait is placed at the inner angle, and the trap at the entrance in such a position that the Bear has to pass over it to get at the bait. The trap should be covered with moss or leaves. Some think it best to put a small stick under the pan, strong enough to prevent the smaller animals, such as the Raccoon and Skunk, from springing the trap, but not so stiff as to support the heavy foot of the Bear. The chain of the trap should be fastened to a clog.* (See page 13.)

The weight of the clog for a Black Bear should be thirty pounds; for a Grizzly Bear, eighty pounds. The chain should not be more than eighteen inches in length, as the habit of the Bear, when caught, is to attempt to dash the trap to pieces against the trees, logs, or rocks; and with a short chain, fastened to a heavy clog, he is unable to do this. The bait should be meat, and the Bear should be invited to feast by the smell of honey or honeycomb, burnt on heated stones, near the trap. Bears seem to entertain no suspicion of a trap, and enter it as readily as a hog or an ox would do.

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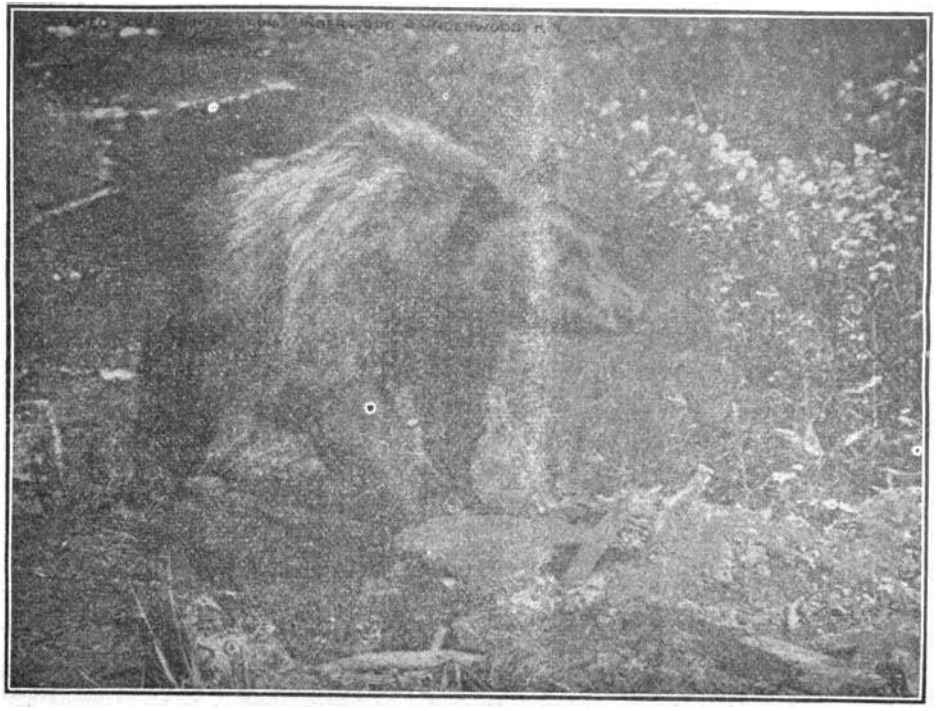
*We here wish to call attention to the danger of setting Bear traps by levers; and the still more dangerous practice of trying to set these traps by standing on the springs. We have known of a case where the unfortunate trapper caught both hands in a Bear-trap while setting it in this way. He had first fastened or clogged the trap, and in setting it unaided caught both hands. There was no escape, and he miserably perished by starvation or was destroyed by wolves. His skeleton alone remained to tell the tale. The only safe way to set a Bear-trap is by using the Newhouse clamp described in the Appendix.



The Grizzly Bear

From a Stereograph. Copyright 1904, by Underwood & Underwood, N. Y.

THE RACCOON

The Raccoon is allied to the Bear family. It is found only on the Western Continent, where it is represented by two species: the Common Raccoon of the United States, and the Crab-eating Raccoon of the tropics. The former is spread over the greater part of North America from Texas to Hudson's Bay. On the Pacific coast it has been seen as far north as sixty degrees. The Crab-eating species is found from California and Texas to the 26th degree of south latitude.

The common Raccoon is the one of principal interest to the trapper and fur-dealer. Its body is about two feet long, and is thick and stout like a Badger's. Its head resembles that of the Fox. Its tail is about a foot long, large and bushy. The color of the whole is grayish white, streaked and barred with darker colors. In some of the Western States the Raccoon is of altogether a darker color, sometimes approaching to black. The Raccoon is nocturnal and omnivorous in its habits, and hibernates like the Bear. It feeds on nuts, green corn, eggs, mice, frogs, turtles, fish, shell-fish, birds, etc., and frequently makes havoc in the poultry yard. It is an excellent swimmer, and is fond of rambling about small streams and marshes in search of frogs, shell-fish and turtles. It is a good climber, and generally lives and rears its young in the hollow of a tree, with the entrance at a considerable height from the ground. Its breeding season is in April or May, and from four to six are brought forth at a time.

Raccoons are sometimes taken by secreting traps in the paths which they make into corn-fields, or traps may be set by the side of streams where they resort. In this case they should be baited with fresh fish; or, as some prefer, with salt codfish, roasted to give it a strong smell. They are not very cunning; and with their acute sense of smell, and their keen appetite for such provender, they rarely pass a trap thus baited without being taken.

A trick that is often successful in trapping Coons is to cut a piece of bright tin into the shape of a fish about three inches long and an inch wide. This being tied to the pan of the trap, and the trap set in a running stream, about two inches under water, a little scent should be dropped near, (oil of rosemary, or rhodium, is good.) The Coon, being attracted that way, and seeing the tin fish, is very likely to slap

The Raccoon

his foot onto it and get caught. Do not make the mistake of setting too small a trap for Coon. The No. 2 Newhouse is all right for them.

Or, a string of live little fishes may be fastened in shallow water, in a > shaped encloure and a trap set in the open end. The Coon is pretty sure to try to get the fishes if he comes that way.

Practical Suggestions by Trappers

—Raccoons travel about near their homes, and will make a well-beaten path to where they go to water, especially if they cross a strip of wild meadow lying between wooded ground and a creek or marsh. A trap placed in this path is a good set. Muddy flats along the streams are much frequented by the Raccoon. A low fence of brush between two adjoining flats, with a convenient opening in which a trap may be placed, is a good set.

—Take a log a foot or so in diameter, which has a hole in one end, and place it in shallow water near the land. Put some bait in the hole in the log, and set your trap in the mud near the bank, under an inch of water, just where the Coon will step in to go to the bait. For bait use an old salt fish skin smoked over a small fire near your trap.

—An ear of corn stuck in the mud near your trap is good bait. So is a piece of fish.

—If you find a log fallen across a stream and see any signs of Coon, chop out of the log a seat for your trap, set the trap in it and cover it lightly with fine rotten wood, then place a stick about two feet long and two or three inches in diameter across the log about two inches away from the trap. Do not have it more than four or five inches from the pan of trap. The Coon will step over the stick and into the trap.

—Use fish-oil scent for Coons, and for bait us ears of corn. Tie a piece of an ear to the pan of the trap, set trap on the ground, but don't cover the corn.

—Where you find Coon tracks in the mud on bank, lay an old log in the edge of the water. The Coon will not climb over the log, but will go around the end of it in the water. Set traps about two inches deep on both sides of log.

—Make a pen, > shape, at the edge of water, using dead sticks and brush. Place the bait inside and set your trap just inside the entrance, under water, covering it with soaked leaves. Fasten trap to a brush drag. The best bait is fresh fish, but muskrat meat, frogs' legs or chicken will attract the Coon.

—Find where they travel along a stream, and where the bank is steep dig a six-inch hole straight in at the level of the water. Faster

the bait back in the hole by a stick thrust through it, and set the trap at the entrance. Or, find a place where the water is too deep except close to the bank, where it should be two or three inches deep, and the bank high and steep. Set the trap in the edge of the water and fasten to a sunken brush. Set in this way on both sides of the stream.

—Find where Coons have been working in a cornfield. Look along the fence to see where they go through it. Sometimes you can find a regularly traveled path. Set carefully in the center of the path and fasten to a brush drag. Use no bait.

—If you come across a den tree in the woods, cut a pole about five inches thick and six feet long, and lean it up against the tree. Set your trap on top of this pole, concealing it with moss or dead leaves.

—This is often a successful method: Put a slice of parsnip on the pan of your trap, whether you set in water or on land. In water no covering is needed, but on land hide the trap, leaving only the parsnip in sight.

—A minnow floated on a small piece of wood or cork and fastened to it, placed just beyond a trap set under water, makes a good bait.

—Sometimes you can do well in trapping either Coon or Skunk by tacking a piece of coarse cloth to a tree or stump about a foot from the ground and pouring a little fish oil on it, setting your trap directly underneath.

—Take a limber stick and stick it into the ground, catch a reed bird, tie him to the end of the stick and put the traps at the side of it. When the Coon tries to get the reed bird he climbs up on the pole a piece and the pole will bend and come down right on the trap, and the Coon will be in the trap with his hind foot.

—This animal is very much easier to trap than some. Curiosity is a weak point with it, and in hunting for its food it is sure to examine, and probably handle, anything that presents an unusual appearance. As it seizes its food with its paw, it is often caught by putting bait on the pan of the trap. Experienced trappers are able to discover places that a Coon is in the habit of frequenting, when they stand on the bank of some stream watching for frogs and crabs. Such a place as this is a very favorable one for setting a trap. Their paths also are sometimes found leading from the higher ground down towards the water: here also the trapper will many times meet with success. A hollow log, tree, or even an artificial brush-den, is a favorite place with the trapper, especially when using bait. Almost any meat will answer for bait. Even a piece of salt fish, well smoked, may be used. Some trappers are very ingenious in building little stake-houses along the stream, placing the bait (which, in this case, should consist of fresh fish) beyond the trap. This set, if properly made, answers equally well for a prowling Mink or Coon.

—We trap in their paths in this way: Set a trap within about fifteen feet of the ground den; stake the trap the full length of the chain; cover well the chain and trap. Put about three in one path, a good distance apart, and at the end of a log, or roots of a tree. You will be almost sure to get a Raccoon if he travels this road. Do not disturb the path.

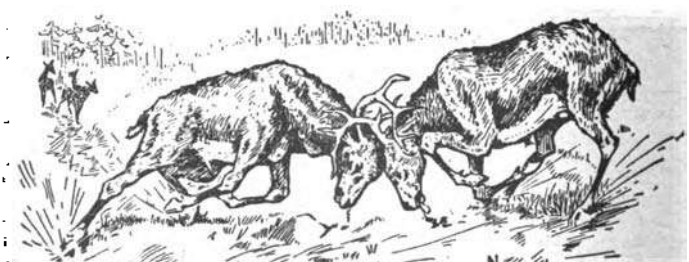
—The best way that I ever found to trap Coons, was to put a piece of bright tin on the pan of the trap and fasten it there by bending it under the pan. Then set the trap about two inches deep in water where Coons are in the habit of traveling. When he comes and sees this, he thinks that it is a clam or an oyster, I suppose, and will jump at it, and is often caught by both front feet.

—In trapping for Raccoons by the side of a stream along which they run, choose a place where a tree overhangs the bank, dig out a place the size of the trap close to the water, but not in it, so that the trap when set will be level with the surface. Take a piece of cloth and lay over the trap, and cover it very lightly with dirt. Place an old chunk or a stone at the edge of the water, so that when the Coon goes around it he will step in the trap.

—Another set would be to put the carcass of some dead fowl back in between two logs, and set a No. 2 trap in front, at the entrance, fastening it to a bush clog. Scatter a few feathers around.

—If a hollow log offers, pursue the same plan by shoving the bait into it and setting the trap in the opening.

—Other new trapping tricks will be found in the little magazine, "HUNTER-TRADER-TRAPPER." It is full of correspondence for trappers.

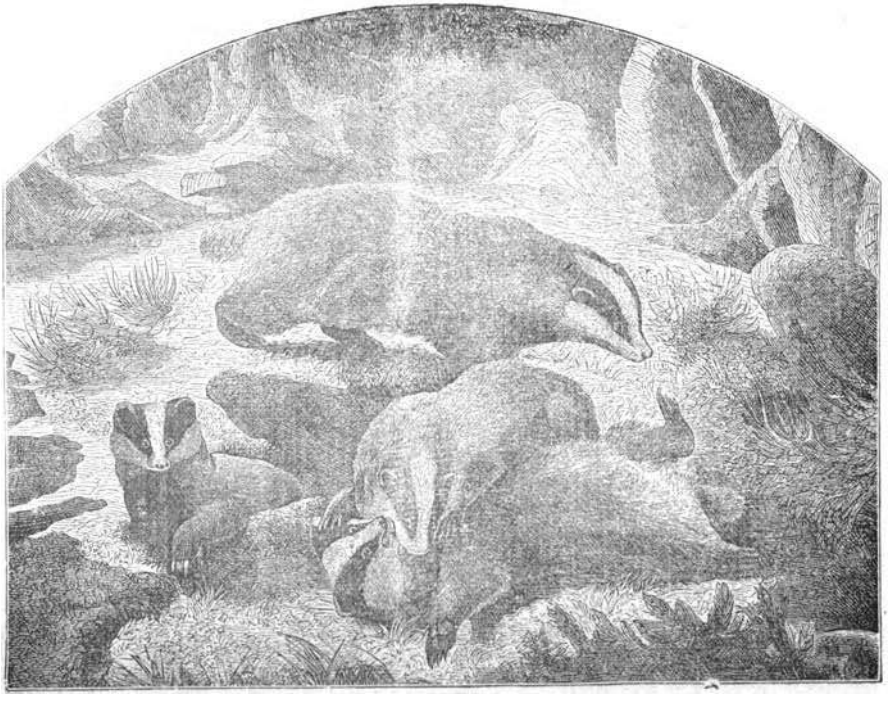


THE BADGER

This animal is plantigrade and also belongs to the Bear family. It is found in America, Europe and Asia. Four species are recognized: the American Badger, the common Badger of Europe, the Indian Badger and the Anakuma Badger of Japan. The European species is the most important in the fur trade, furnishing 53,000 out of the 55,000 skins which annually find their way into the fur markets.

Though spread over a large portion of the globe, the Badger is nowhere numerous, except in a few localities on this continent. It is omnivorous, feeding chiefly on roots, fruits, insects and frogs. It also destroys the eggs and young of partridges, and other birds which build their nests on the ground. It is fond of the nest of wild bees, which it seeks out and robs with impunity, its tough hide being comparatively impervious to the stings of these insects. The Badger is a quiet, inoffensive animal, except when attacked, when it is a terrible antagonist to the dog or man who comes in contact with its sharp teeth and formidable jaws. Its length is about two feet six inches from the nose to the root of the tail. The tail is short. The head is small, flat, and has a long snout. The height at the shoulder is about eleven inches. The body is broad and flat as though compressed. The legs are sturdy and powerful. The feet, before and behind, have each five toes strongly set in the flesh, and armed with powerful compressed claws, adapted to burrowing in the ground, digging for roots, and unearthing the marmot, ground-squirrel, and other small burrowing animals.

The Badger chooses the most solitary woods for his residence. It lives in burrows, where it makes its nest and rears its young. When pursued, it commences digging in the earth, and, if pressed too closely to be able to hide by burrowing, it makes a hole large enough to cover its body, backs into it, and faces its pursuers with claws drawn in an attitude of defiance; and woe to the dog that attempts to dislodge it from its fort! If it has time to get its body fairly buried, it is secure from any dog, or even a man with a shovel, as it digs so rapidly that it will work its way into the earth faster than dog or man can follow. It is said that Badger are very numerous in some parts of the State of Washington, where the farmers protect them because they devour the ground-squirrels, which are such a pest, destroying



The European Badger

the crops. These squirrels breed very rapidly and were they not kept down by the Badger would be a serious problem.

The American Badger was at first supposed to be a mere variety of the European Badger, but has proved to be so distinct as to be regarded by some naturalists as worthy of a separate genus (*taxidea*), and is sometimes called *taxel*. Its teeth are more adapted for carnivorus subsistence than those of the European Badger, and it preys chiefly on small animals such as marmots, which it pursues into their holes in the sandy plains near the Missouri and the Rocky Mountains. It is in that region that it abounds over a considerable range of latitude. Its prevailing color is hoary gray in winter, yellowish brown in summer, the under parts generally yellowish white. A white stripe runs from the nose over the forehead to the neck. The hair becomes not only very long but very woolly in winter. It sometimes makes burrows 6 or 7 feet deep running under ground for a distance of 25 or 30 feet, and rendering the surface dangerous to persons on horseback.

The fur of the Badger, when properly dressed, is said to make the best pistol furniture, and the coarser hairs are used for the fine brushes of the oil-painter. The hairs of the upper part of the Badger's body individually have three distinct colors: Yellowish-white at the root, black in the middle, and ashy-gray at the end. This gives a uniform sandy-gray color to all the upper parts. The tail is furnished with long, coarse hair of the same color and quality. The throat, under parts, and legs are covered with shorter hair of a uniform deep-black.

The female Badger brings forth from three to five young in the early spring, suckles them for five or six weeks, and then turns them off to shift for themselves.

The American Badger differs considerably from the European species, to which the foregoing description applies. Its snout is less attenuated, though its head is equally long. The claws of its forefeet are much longer in proportion, and its tail shorter. Its fur, both in color and quality, is different. It is also more carnivorous. Audubon describes its color and fur as follows: "Hair on the back, at the roots dark-gray, then light-yellow for two-thirds its length, then black and broadly tipped with white, giving it in winter a hoary-gray appearance; but in summer it makes a near approach to yellowish-brown. The eyes are bright, and piercing black. . . . There is a white stripe running from the nose over the forehead and along the middle of the neck to the shoulder. Legs, blackish-brown; chin and throat, dull-white; the remainder of the under surface, yellowish-white; tail, yellowish-brown." The fur on the back in winter is three inches long, dense and handsome. The body is broad, low and flat.

The American Badger is found on the plains of Minnesota, the Dakotas, Nebraska and Kansas and in the timberless regions of the Yakima River Valley, in Washington. It is not found east of the Mississippi. It has been traced as far north as latitude fifty-eight degrees, and south into Mexico, where a distinct variety is found

Badgers can be taken by setting traps at the mouths of their holes, or by the method prescribed on a preceding page for taking the Raccoon. The trap should be carefully concealed, as the Badger is somewhat cunning, and disposed to be suspicious of such apparatus near his haunts.

Bob Cats

THE WILD CAT OR BAY LYNX

The American Wild Cat is a species of Lynx. It is about thirty inches long, with a tail of five or six inches, and weighs from seventeen to twenty pounds. Its general color above and on the sides is a pale reddish brown, overlaid with grayish; the latter color most prevalent in spring and summer. The throat is surrounded with a ruff or collar of long hair. The under parts are light-colored and spotted. On the sides are a few obscure dark spots, and indistinct longitudinal lines along the middle of the back. The tail is marked with a small black patch above at the end, and with half rings on its upper surface. The inner surface of the ear is black, with white patch. The legs are long, the soles of the feet naked. The fur is moderately full and soft. The ears have a pencil of dark hairs in winter.

A variety of the American Wild Cat exists west of the Rocky Mountains, which was called by the early settlers in that region the Red Cat. Its color is somewhat darker than the common variety, being a rich chestnut-brown on the back; sides and throat, a little paler; fur soft and full.

The Wild Cat is cowardly, rarely attacking anything larger than a hare or young pig or lamb. The pioneer's hen-roost sometimes suffers from its nocturnal visitations. It feeds on grouse, partridges, squirrels, mice and other small birds and quadrupeds. It is fond of the dark, thick cedar swamps, where it preys on Rabbits, pouncing on them from an overhanging cliff or tree. In the Southern States, it frequents the swamps and canebrakes bordering on rivers and lakes, and also the briery thickets which grow up on the old fields and deserted cotton lands. In dry seasons, or during the sultry weather of summer, it explores the courses of small streams, to feed on the fish that are left in the deep holes as the water dries up.

Wild Cats are taken in the same way as Raccoons or Mink, by baiting with meat, and covering the trap smoothly over. The best way is to find a place where they have killed a Hare, grouse or other game, and have left a part of the flesh for a second meal. Set your trap there, and you will be pretty sure of a visit.

The European Wild Cat is a distinct animal from the Bay Lynx. Goodrich, in his "Illustrated Natural History," gives the following account of this Cat and its relations to the common Cat:

"There are many kinds of Wild Cat, but that from which the domestic Cat is supposed to have sprung is called the *Common European*

Photo by L. E. Webster *The American Wild Cat*

Wild Cat, and is found in most parts of that quarter of the globe, as well as in Asia and Africa; it is also sometimes met with in this country. When America was first discovered, this species, either tame or wild, was not found here; all our domestic Cats, as well as the wild ones occasionally found in the woods, are the descendants of those brought hither by the Europeans. The Wild Cats of the European Continent are either the descendants of the original races that have continued untamed from the beginning, or of domesticated Cats that have wandered from their homes and living apart from man, have relapsed into barbarism. It is said that the wild and tame Cats, in their wanderings, sometimes meet; when this is the case, the females of the tame breed are well treated by the savage Cats, but the males are rudely set upon and sometimes torn in pieces. The wild and tame Cats sometimes breed together, and produce the kind called *Tiger Cats*. Some authors hold that the Wild Cat is a distinct species, because its tail is shorter and more bushy than that of the domestic Cat; but this opinion seems not well founded, for still greater differences are found in dogs which are acknowledged to be of the same race."

The European Wild Cat is common in France, Germany, Russia, Hungary and some other parts of Europe, and is found in Northern Asia and Nepaul. It was formerly found in England and a few yet linger among the hills of Scotland. It resembles the tame Cat, but is rather larger and more robust and has a more savage aspect. Its fur is long, soft and thick. Its color is gray, darker on the back than below, with a blackish stripe along the back and paler curved stripes on the sides. It is a very shy animal; lurks in the woods and preys on hares, squirrels and birds and is for the most part nocturnal in its habits. It makes its home in clefts among rocks or in hollow trees. The female brings forth from three to six young at a time. A full-grown male is about two feet and a half long from the nose to the root of the tail; with a tail of considerable length. The female is smaller.

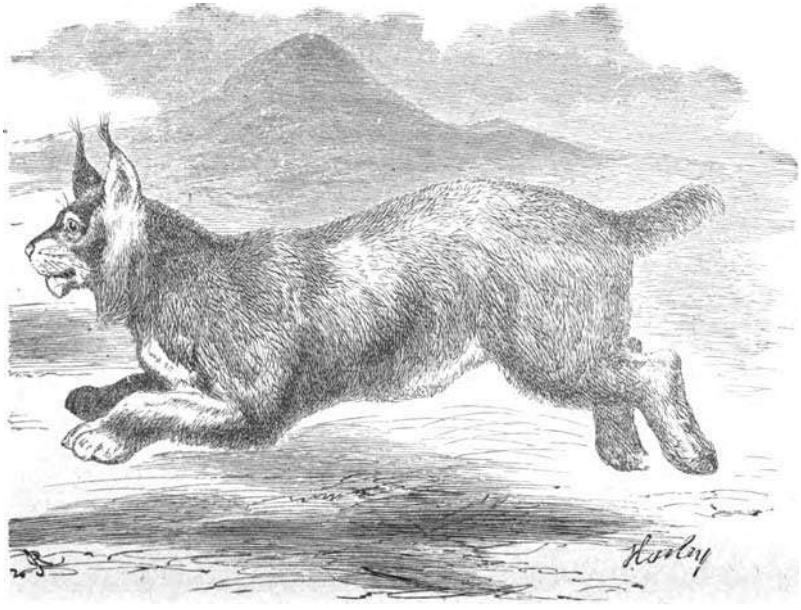
This Wild Cat is of great strength, and when pursued and hard pressed exhibits daring and ferocity in an extraordinary degree. When caught in a trap they fly without hesitation at any person who approaches them, without waiting to be assailed. The directions given for trapping the American Wild Cat are appropriate for the capture of this species. St. John, the author of a work on "Highland Sports," gives the following plan for taking them: "Like other vermin, the Wild Cat haunts the shores of the lakes and rivers, and it is, therefore, easy to know where to lay a trap for them. Having caught and killed one of the colony, the rest of them are sure to be taken, if the body of their slain relative is left in some place not far from their usual hunting-ground and surrounded with traps; as every Wild Cat that passes within a considerable distance of the place will surely come to it."

THE LYNX

There are several species of Lynx. The Canadian Lynx and the European Lynx are the most important to the trapper and fur dealer. The former inhabits North America from the latitude of Northern New York to the northern limits of the woods, or within the Arctic Circle. It is not found in the Mississippi Valley, but occurs west of the Rocky Mountains and is supposed to exist in the northeastern part of Asia. Its size is between that of a Fox and a Wolf. Its length, from the tip of the nose to the tip of the tail is about three feet. The tail is shorter than the head and is densely furred and tipped with black. Its feet are large, thickly covered with fur, and armed with strong claws. The ears are pointed, not large, and tipped with a pencil of long black hairs. The color in winter is silver-gray on the back, paling toward the belly, which is sometimes white. A rufous under-shade mixes with the tints. It has a ruff on the sides of the neck and under the throat. In winter its fur is long and silky. The average weight of this Lynx is about twenty-five pounds.

The Canada Lynx lives in the darkest woods and swamps, preying on hares, mice, squirrels, grouse and smaller birds, and rarely attacking the deer. When pressed with hunger it prowls about the pioneer's cabin in search of lambs, pigs and poultry. It is an active climber and frequently seizes its prey by pouncing upon it from an overhanging tree; at other times it crawls stealthily like a cat within springing distance, or leaps upon it from a cliff. It pursues birds to the tops of the loftiest trees and kills fish in the streams. It also feeds on carrion, and when pressed with hunger on its own kind. It is said to have a strong passion for perfumes, particularly the castoreum of the Beaver. This is the principal scent or "medicine" used by trappers in capturing the Lynx. The female brings forth generally two young ones at a time and hides them in hollow trees or caves until they are large enough to follow her.

The Canada Lynx is a stupid animal and easily caught. It readily enters a trap that is properly set and baited with meat. The general directions already given for trapping various carnivorous animals are applicable in this case. The Hudson's Bay Company's trappers practice the following method, according to Bernard Rogan Ross: The trap is covered, inside the jaws, with a well fitting "pallet" of



The Canada Lynx

birch bark. On the "pallet" a piece of hare skin, well rubbed with the "medicine" or scent, is tied. The trap is then placed indifferently either under or on the snow. The Lynx, scenting its favorite perfume, endeavors to withdraw the skin with his paw, and consequently springs the trap. It does not, like most of the fur-bearing animals, make violent efforts to escape, or drag the trap to a distance: it generally lies down until aroused by the approach of the hunter, when, instead of attempting to escape by flight, it springs at him.

The European Lynx closely resembles the Canada species; its habits are also similar. Its fur is valuable. Its general color is a dull reddish-gray above, whitish below, mottled with black. On the sides are dark oblong patches. In winter the fur is longer and lighter colored than in summer. The keenness of its sight has long been proverbial. It is found from the Pyrenees to the far north, and throughout Northern Asia. The directions given for trapping the Canada Lynx are sufficient in the case of this species.

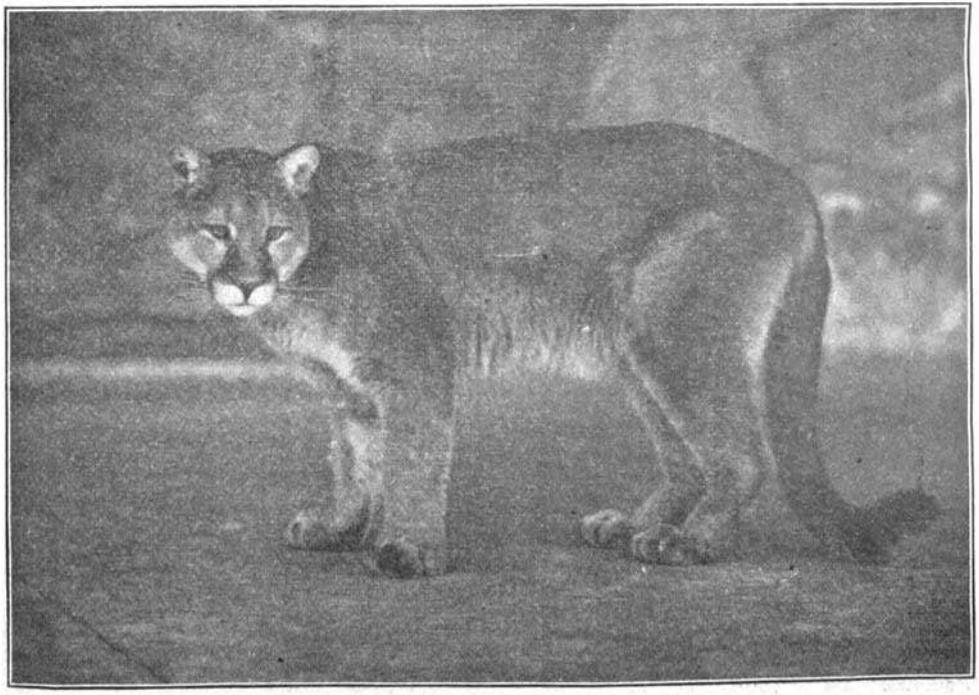


Photo by Prof. Hornaday *The Cougar or Puma*

THE COUGAR, OR AMERICAN PANTHER

This animal is one of the largest of the cat family that exists on the Western Continent, being rivalled only by the Jaguar. It inhabits every latitude from Canada to Patagonia. In different localities it receives different names and varies somewhat in size. In the United States, east of the Rocky Mountains, it is commonly called the Panther, and sometimes the Catamount; on the west coast it is called the California Lion; in South America its common name is Puma. Cougar, however, is the scientific and proper name. The true Panther is confined to the Western Continent and is a variety of the Leopard, being found mostly in Asia. In the north Cougars prefer for their retreat ledges of rock inaccessible to man, called by hunters, *panther ledges*. They appear rarely by daylight, except when pressed for food, but conceal themselves behind rocks and fallen trees till evening. In South America their favorite haunts are the vast grassy plains where they destroy great numbers of wild cattle.

Full grown Panthers killed in northern New York have been known to measure over eleven feet from the nose to the tip of the tail, being about twenty-eight inches high, and weighing nearly two hundred pounds. Their color is a reddish-brown above, shading into a lighter color underneath. They are armed with sharp teeth and long heavy claws. They feed chiefly on deer, crawling stealthily to within springing distance, or watching on some cliff or tree, and pouncing like a cat on their prey. Their activity enables them to take the deer with ease. It is asserted by hunters that each Panther destroys as many as two deer per week, and a pair of Panthers have been known to attack and kill a full-grown moose. In newly settled countries, they frequently carry off young cattle and sheep. They are good climbers and readily take to a tree when pursued by dogs, from which they can easily be brought down by the rifle. This is the most common way of taking them. They are cowardly, and rarely attack a man unless wounded, when they are dangerous.

The best way to take Panthers with steel traps, is to find where they have killed a deer or other animal, and left part of the carcass. Secrete the trap near the remains, and you will catch them when they return for a second meal. They seldom leave the vicinity of an animal they have killed, till it is all devoured. The same is true of all the large animals of the Cat kind, such as the Lion, Tiger, Leopard, Jaguar, etc.

THE JAGUAR

Like the Cougar, this is an exclusively American animal. Though scarcely equalling the Cougar in extreme length, the Jaguar is stouter and more formidable. It is found from Louisana to Buenos Ayres. This animal has a large head, a robust body, and is very ferocious. Its usual size is about three-fourths that of the Tiger. Humboldt, however, states that he saw Jaguars which in length surpassed that of all the Asiatic Tigers which he had seen in the collections of Europe. The Jaguar is sometimes called the American Tiger. Their favorite haunts are the swamps and jungles of tropical America. There they subsist on monkeys, capabyras or water-hogs, tapirs, peccaries, birds, turtles and turtle eggs, lizards, fish, shell-fish and insects. Emerging from these haunts in the more open country, they prey upon deer, horses, cattle, sheep and farm stock. In the early days of settlement of South America the Jaguar was one of the greatest scourges the settlers had to meet. They haunted the clearings and plantations and devoured horses, cattle and sheep without mercy. Nor were the settlers themselves and their children free from their attack. For many years where Jaguars abounded, the settlers had an arduous warfare before they could exterminate the ferocious marauders, or drive them from the vicinity of their habitations.

The Jaguar is a cautious and suspicious animal. It never makes an open attack on man or beast. It approaches its prey stealthily, and pounces upon it from some hiding place, or some position of advantage. It will follow a herd of animals for many miles in hopes of securing a straggler and always chooses the hindmost animal, in order that if turned upon it may escape with its prey the more easily. In this way it pursues men. A Jaguar has been known to follow the track of travelers for days together, only daring to show itself at rare intervals. A full grown Jaguar is an animal of enormous strength and will kill and drag off a horse or ox without difficulty. They commit vast havoc among the horses which band together in great herds on the plains of South America. Full grown colts and calves are their favorite prey. Goodrich in his Natural History describes their operations as follows: "Frequently two Jaguars will combine to master the more powerful brutes. Some of them lie in wait around the salt-licks and attack the animals that resort to these places.

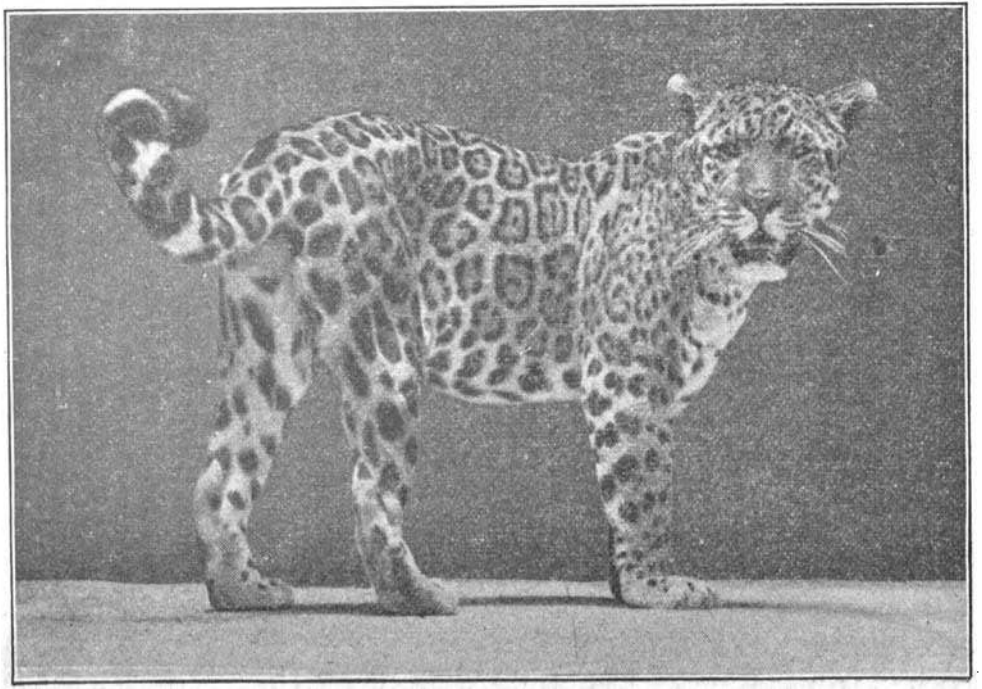


Photo by Prof. Hornaday. *The Jaguar*

Their habit is to conceal themselves behind some bush, or on the trunk of a fallen tree; here they will lie, silent and motionless for hours, patiently waiting for their victims. When they see a deer or a mule or mustang approaching, the eyes dilate, the hair rises along the back, the tail moves to and fro, and every limb quivers. When the unsuspecting prey comes within his reach, the monster bounds like a thunderbolt upon him. He fixes his teeth in his neck and his claws in the loins and though the dismayed and aggravated victim flies and rears, and essays to throw off his terrible rider, it is all in vain. His strength is soon exhausted and he sinks to the earth an easy prey to his destroyer. The Jaguar, growling and roaring in triumph, already tears his flesh while yet the agonies of death are upon him. When his hunger is appeased he covers the remains of the carcass with leaves, sticks and earth to protect them from the vultures; and either remains watching near at hand or retires for a time until appetite revives, when he returns to complete his carnival." The Jaguar makes its attacks upon the larger quadrupeds by springing upon their shoulders. Then placing one paw on the back of the head and another on the muzzle, with a single wrench it dislocates the neck. The smaller animals it lays dead with a stroke of its paw.

The Jaguar in external appearance and in habits closely resembles the Leopard of the Old World. The female produces two at a birth. The ground color of a full grown animal is yellow, marked with open figures of a rounded-angular form. In each of these figures are one or more black spots. The figures are arranged longitudinally and nearly parallel along the body. The belly is almost white. There is considerable variation in color among Jaguars, some being very dark or almost black, with indistinct markings. The richly tinted skins are highly valued and are exported to Europe in large numbers, where they are used by the military officers for saddle coverings.

For capturing the Jaguar in steel traps the directions given for the Cougar should be followed.

THE WOLVERENE, OR CARCAJOU

This animal is found throughout a large part of British America, and in some of the wildest portions of the Northern States. It is about two and a half to three feet long from the nose to the root of the tail, and has a tail fourteen inches in length. In general appearance and movement it resembles the Bear, while its head bears a strong likeness to that of the Fisher, except that the muzzle is shorter. The habits and food of the Wolverene are much like those of the Marten. They seem, therefore, to be a sort of connecting link between the Bear family and the Weasel family, having teeth like the Weasel tribe, while walking on the whole bottom of the foot like the Bear. Both body and tail are covered with long hair, under which is a rich, thick fur. The general color of the long hair is brown, sometimes approaching to black, lighter bands passing from the neck along the flanks and meeting at the tail. The short fur is chestnut-brown. The muzzle is black. A light-brown band runs across the forehead from ear to ear. The fur is used for muffs, cloaks, etc. The Wolverene is specifically identical with the Glutton of the Old World, and is sometimes called the *Skunk-Bear*. It is said to be very troublesome to trappers by eating the bait from traps set for other animals, such as Ermine and Sable.

They hunt hares, mice, birds and kill disabled deer. They are powerfully built and possess great strength. Their prevailing color is dark brown on the back and under parts. A broad stripe of yellowish brown sweeps along each side and ends at the root of the tail. The legs and feet are black. Stripes and patches of black and yellow occur on the under parts. The fur is long, soft and tolerably fine, overlaid with larger and coarser hairs which are about three inches long on the rump but shorter in front. The Wolverene is a great mischief-maker for the trapper in the region where it dwells, especially the Marten-trappers of British America, who use the old fashioned "dead-fall." One of these animals will follow a line of traps for miles, tearing them down, devouring the bait and the animals that have been caught. They are also very troublesome in destroying *caches* of provisions. On account of its destructive propensities, and great cunning and sagacity, the Indians call the Wolverene the Evil One or Devil. They are seldom caught in traps, and the most successful way of destroying them is said to be by strychnine.

THE OPOSSUM

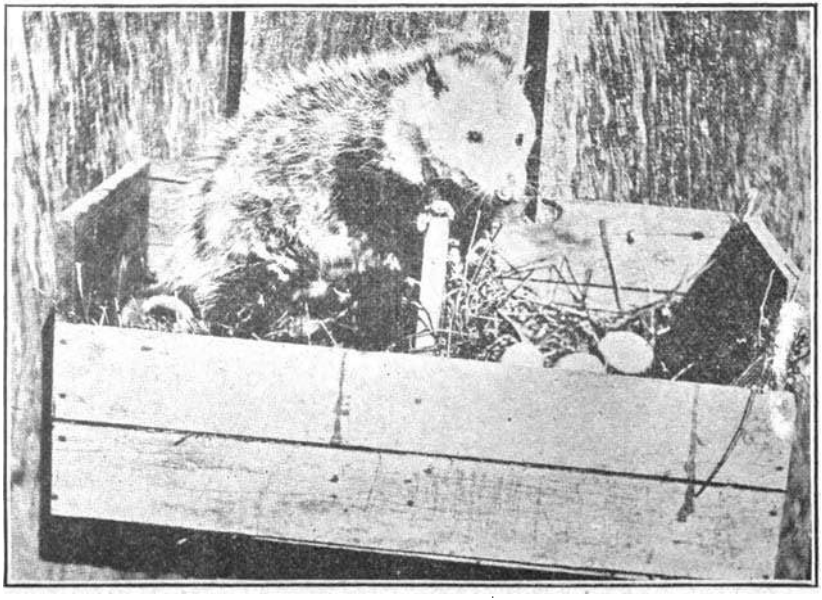
This animal inhabits the warmer parts of the United States, and several species of it are said to exist also in Australia. In form it somewhat resembles the common house Rat. Its body is about twenty inches long, stoutly built, and its tail, which is generally fifteen inches in length, is prehensile like that of some Monkeys, *i. e.*, capable of holding on to anything that it encircles. The Opossum is five-toed, and walks on the soles of its feet like the Bear. Its ears are large, rounded and almost naked. The female has from nine to thirteen teats, the odd one being in the center of the ring formed by the rest. The fur is long, soft and woolly, whitish at the roots, and brown at the top. The Opossum is omnivorous, feeding on corn, nuts, berries, roots, insects, young birds, eggs, mice, etc. It is nocturnal in its habits; hiding in the thick foliage of the trees in the daytime, and seeking its food by night. It is an active climber, and is said to spend much of its time and even to sleep suspended from the limb of a tree by the tail! The females are very prolific, producing from nine to thirteen young at a birth, and three and even four litters in a year. They are provided with a pouch under their belly, in which they protect and suckle their young.

These animals are trapped in the same manner as the Raccoon and the Badger, by setting traps in their haunts, and baiting with any of their favorite kinds of food. They have a habit, when caught, of feigning death, and will bear considerable torture without betraying any signs of life. This habit doubtless gave rise to the common by-word which calls certain kinds of deceit "playing 'possum."

Practical Suggestions

—In trapping Opossum bait and set as for Skunk or Mink, using an apple, a bird's body, the head of a fowl or a piece of fresh, smoked or salted fish. Often you can make a nest of leaves in a hollow tree or the end of a hollow log, put trap in this nest, throwing a little scent in beyond the trap.

—A good place to make sets for them is at the mouth of dens, runways, in brush and by log fences. I have also caught them at the edge of ponds and creeks at a water-set. A. E. French.



The Opossum

THE SKUNK

This animal, though generally much despised in this country, is said to furnish the staple fur to Poland and deserves at least the respectful attention of the trapper. It is related to the Weasel. Its head is small, with a projecting, naked nose, small, piercing eyes and short, rounded ears. The body is about eighteen inches long, the tail twelve or fourteen inches, and bushy. The feet are short and well adapted to digging, having naked soles and closely united toes with claws. The prevailing color is white and black, some varieties being mostly white and others mostly black. The fur of the latter is the most valuable. The Skunk walks with its back much curved and its tail erect as though proud of its beauty. It is nocturnal in its habits, and during the summer months searches the fields in the vicinity of its haunts every night, feeding principally on worms, bugs and grasshoppers, but sometimes devouring frogs, mice, young birds, green corn, etc., and occasionally making free with poultry and eggs. Its services in cleaning the farmer's fields and gardens of bugs and worms more than pay for its depredations and it ought to be regarded as a useful animal. Its breeding season is in April and May. From six to nine young are brought forth at a litter and are reared in holes of among rocks until large enough to shift for themselves.

These animals are taken in traps set at the mouths of their holes or in the fields where they search for food. The trap should be covered with loose earth or soft vegetable substances and should be baited with small pieces of meat scattered around it. They are not cunning and it requires no great skill to take them. The great difficulty in trapping for them or meddling with them in any way is in the liability of catching a charge of their perfumery, which is very disagreeable and ruins all clothing that is once impregnated with it. This offensive essence is ejected from two glands near the anus by the contraction of the muscular coverings and the only way that I know to prevent the discharge is to approach the animal in the trap stealthily and give it a smart blow with a club across the back near the tail, which will paralyze the ejecting muscles. But this expedient is not always available, as the animal sometimes takes the trap for a living enemy and discharges when first taken. One thing, however, is in its favor, namely, it is very neat in its personal habits, rarely allowing

its own fur to be soiled with its offensive secretions; so that if you can get away its skin without being overwhelmed yourself by its perfumery, your spoil is likely to be as clean and salable as in the case of any other animal.

As accidents are liable to occur the following recipes by an old trapper may prove useful:

"To get rid of Skunk scent or other offensive odors, wash the hands in hot cider vinegar."

"To remove odor of Skunk from clothes, rinse in gasoline, wring out and hang in open air to dry and evaporate."

Gasoline is very inflammable and should never be used near lighted matches, lamps or fire of any kind but in the open air by daylight.

To rid the odor of Skunk scent from the hands as well as clothing is very easy by the use of benzine. Said scent will not dissolve in water, therefore it is impossible to take it from your clothing by washing, which will only make it worse by spreading it. Once when skinning one of the "black violets," by accident I got a full charge on my whiskers and clothing. A friend just at that time stepping into the studio, jumped back through the door exclaiming, "Whew! You must be crazy to stay in such an infernal atmosphere." A liberal use of benzine made things all right in a few minutes, without changing my clothing.

Practical Suggestions by Trappers

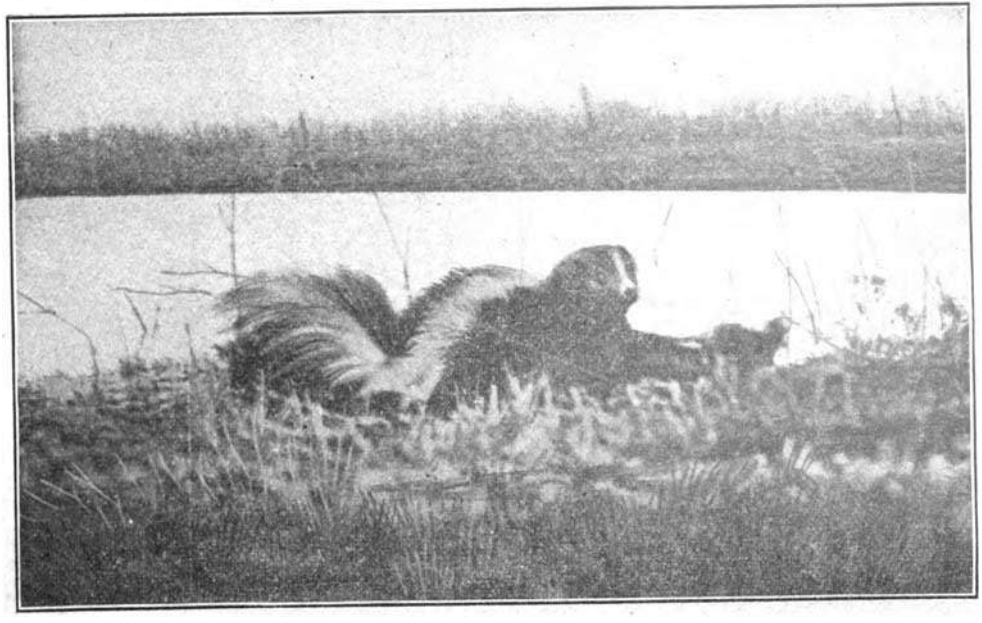
—Hang a Skunk's carcass or a dead hen to a limb or bush about a foot from the ground and set a trap below it.

—The musk of the Skunk and rotten eggs, with a piece of tainted meat, will attract Skunks, showing that not only their odor, but their sense of smell is peculiar.

—In November Skunks re-visit old dens looking for winter quarters. Place your traps in these holes, with bait of Muskrat, Rabbit or chicken placed beyond the trap at each setting.

—Skunks hunt over old logs in search of grub-worms. Set a trap beside such a log and bait with a piece of chicken. A chicken's head, a Skunk's carcass or a piece of fish makes a good bait for Skunks.

—I will tell you how I make a novel set for Skunk or Mink: I take an old wooden churn—the bigger the better—make holes through hoops and fasten each stave with small nails and nail staves to the bottom; then with a saw rip the churn lengthwise and divide it into halves. Take one of these and lay it flat side down in a place where you think there is game and cover with leaves or sand, making everything look as natural as possible. Throw a piece of Muskrat carcass in the back end and set a No. 1 trap at the mouth and you have a set hard to beat. It is some trouble to make this set but you can use it for years.



The Skunk

THE LITTLE SPOTTED SKUNK

This little animal prefers a warmer climate than his white-backed relation, and is seldom found very far north. The fifteen species range the southern and western States and a part of Mexico. In size he is scarcely more than half that of the others, and he is more slender and active. He is a great benefit to the farmer and probably does very little damage, though I am sorry to say one Florida variety at least has learned to climb trees and rob the birds' nests therein.

These little creatures are beautifully, but quite variously marked with white stripes and spots on a black ground, and their furs, when made up undyed, are very striking. He is a true born American, and has been much abused by being called a Pole Cat, a Civet Cat and other foreign names. He is a genuine Pigmy Skunk of the genus Spilogale (meaning spotted). Why not then give him his true name—THE SPILOGALE?

These skunks are not a very suspicious or wise animal, and any boy knows how to catch one, but the great trouble is to know how to "uncatch" him without serious consequences. They have the same means of defence as their larger cousins, though in a less degree in proportion to their size. They delight to make their home around some old barn and are said to be very useful in destroying mice and rats, in fact some farmers have taken pains to protect them in this pursuit and in some instances they have become quite tame.

The No. 0 steel trap is strong enough for these animals, though No. 1 is more sure. They are sometimes taken in the common wire spring rat trap also.

THE BADGER SKUNK

This genus of Skunks is about the size of our common skunks, but in shape resembles the Badger. He has a broad white stripe on his back, and is furnished with powerful front claws and like the Badger is a great digger. His range is nearly all of South and Central America. He is also found in Mexico and as far north as Arizona. There are six species of this strange creature, and they are the only Skunks found in South America.

THE BASSARISK

Among other little-known animals of the southwestern United States is the Bassarisk (Mexican Cacomixile), sometimes called Ringtailed Cat and Civet Cat, but as it is not a Civet or a Cat, neither of these names should be used by the intelligent trapper.

The animal is nearly related to the Raccoon family, and in habits and appearance it closely resembles the Coon, except that it is smaller, slimmer and much more active. It has yellowish brown sides, shading to grayish dark brown above and dirty white or salmon color below, with a body twelve to fourteen inches long and a curved, bushy tail about the same length distinctly ringed with black and white. Its ears are carried very erect and there is a quarter circle of light colored fur over each jet black eye, which gives it the appearance of wearing a pair of spectacles.

This animal ranges from Central America north and west as far as the State of Washington. It inhabits thickly wooded regions where it is very active in climbing from tree to tree. Like the Coon it is nocturnal in its habits and omniverous in its appetite, and destroys large numbers of birds' eggs and their young.

The fur is quite soft and brings a higher price than formerly, ranging from fifteen to fifty cents.

The directions given for capturing the Coon will mostly apply to the Bassarisk, although it is doubtful if it could be caught in a water set, as it is more of a dry land animal.

THE CHINCHILLA

The most delicate and silken of all furs is that produced by the Chinchilla. This animal is found in South America, along the Andean region from Chili to Peru. It burrows in the valleys which intersect the hilly slopes and collects together in great numbers in certain favored localities. It belongs to the group of animals called *Jerboidae*, which are characterized by great comparative length of hind legs. It is a small animal, measuring only about fourteen or fifteen inches in total length, of which the tail forms about one-third. They are very prolific, the female bringing forth five or six young

The Chinchilla

twice a year. Their food is exclusively vegetable, consisting mostly of bulbous roots. They are very cleanly in all their habits. The fur of the Chinchilla is long; its color is a delicate clear gray on the back, softening to a grayish white on the under portions and its texture is wonderfully soft and fine. It is used for muffs, tippits, linings to cloaks and pelisses and trimmings. The skins which are obtained in Chili are the best. Great numbers of Chinchillas are caught in the vicinity of Coquimbo and Copiapo. They are usually hunted with dogs by boys. The true method is to take them at the mouth of their burrows with a small steel trap.

THE LION

The principal habitat of the Lion is in Africa. Some also exist in Asia, but nowhere else. There are three African varieties—the Black, the Red or Tawny and the Gray. In Asia the dark-colored Bengal, the light-colored Persian or Arabian and the Maneless Lions exist. A full-grown Lion, in its native wilds, is usually four feet in height at the shoulders and about eleven feet long from the nose to the tip of the tail. He is of great strength and ferocity, and is commonly called the "king of beasts." Lions belong to the cat family, and prey upon all animals they can master. They approach their prey stealthily, like a cat hunting a mouse, and spring upon it unawares. Human beings are not exempt from their attack, but form their most coveted prey when once an appetite for human flesh has been established. In Africa they hang around the villages, and carry off every man, woman or child they can secure, and make great havoc among all kinds of domestic animals. Gerard, the French Lion hunter of North Africa, estimates that the average length of life of the Lion is thirty-five to forty years and that he kills or consumes, year by year, horses, mules, horned cattle, camels and sheep to the value of twelve hundred dollars. Taking the average of his life, which is thirty-five years, each Lion costs the Arabs of that country forty-two thousand dollars. The Lion is mostly nocturnal in its habits, hunting is prey and satisfying its appetite during the night, sleeping and digesting its food during the day. The Lioness is smaller than the male, and brings forth from one to three young at a time, about the beginning of the year. Lions are not numerous in Asia, and are steadily growing less so in Africa. They are now seldom found near the coasts of that Continent. Wherever the white man appears he wages relentless warfare against the "king of beasts." Its favorite haunts are the plains rather than the forests, and it is is content with the shelter of a few bushes or low jungle. They sometimes hunt in troops—several attacking a herd of Zebras or other animals, in concert. Their strength is very great, and one has been known to carry a horse a listance of a mile from where he had killed it. Their most common prey are the Deer and Antelope which abound on the plains of Africa and in India. The Zebra, the Quagga, and the Buffalo are their frequent victims.

The directions already given for taking the Cougar with steel trap are adapted to the Lion. It may also be taken by setting a trap near its haunts and baiting it with a dead sheep or other animal. Great care must be taken to thoroughly secrete the trap, as the Lion is a

The Lion

very suspicious and intelligent beast. It is said that when a Lion is killed all others retire from and avoid that immediate vicinity. The Lion is not a fastidious feeder. While on one hand he likes to strike down a living animal and suck the hot blood from its body, on the other, he will devour any dead animal he may find, whether fresh or otherwise. "So thoroughly is this the case," says Wood, "that Lion hunters are in the habit of decoying their mighty game by means of dead Antelopes or Oxen, which they lay near some water-spring, knowing well that the Lions are sure to seize so excellent an opportunity of satisfying at the same time the kindred appetites to thirst and hunger.

THE TIGER

If the Lion is the scourge of Africa, the Tiger holds that place in India and Southern Asia. The Royal Tiger of India rivals the Lion in size, strength, ferocity and activity, and excels him in beauty of form and color, and grace of movement. The Tiger is of great size, measuring in the largest specimens four feet in height, four feet eight inches in girth and thirteen feet six inches in total length. Its color is a tawny yellow, with transverse dark colored or black stripes. The under parts, the chest and throat, and the long tufts of hair on each side of the face are nearly white, and the markings on these parts are indistinct. The general make of the Tiger is a little more slender than that of the Lion. Their haunts are the forests and jungles, and they prey upon all animals which come within their reach and power. They are of amazing strength and often bound upon their prey by a single leap of fifty feet. The Indian Buffalo, which is as large as an ox, is killed and dragged off by the Tiger without difficulty. The female has from three to five young at a birth which she defends with great fierceness. The range of the Tiger is confined to Asia, and to certain districts of that Continent. Some sections are terribly infested with them, and the inhabitants are kept in a state of terror by their depredations. They are common in the wilds of Hindostan, in various parts of Central Asia, even as far north as the Amoor River, and are also found on some of the large Asiatic Islands. Portions of Sumatra are so infested with them as to be almost depopulated. Here and in some parts of India the Tiger is protected by the superstition of the people who regard it as a sacred animal, animated by the souls of their dead ancestors, and none are killed but the "Man-Eaters."

There are a number of modes adopted by the natives of Asia for killing the Tiger, such as spring-bows armed with poisoned arrows, nets, cages with trap doors, enticing them into locations where they can be shot, etc.: but they are all inferior to the steel trap. This instrument should be introduced wherever this lurking marauder abounds. The habit of returning to the unfinished carcass of the

beast it has slain or found, which I have already noticed as pertaining to the cat family, is very strong in the Tiger, and can be taken advantage of in trapping them, in the same manner as described for the Lion and Cougar. The trap should be set near the hind parts of the carcass, as the Tiger always begins with those parts and eats towards the head. They may also be taken by setting traps along the paths which they make through the jungle near their lairs. In all cases the traps should be carefully secreted. A Tiger is easily killed with a bullet. Next to brain and heart, the lungs and liver are its most mortal parts. A Tiger, when struck by a bullet in the liver, generally dies within fifteen or twenty minutes. If once wounded *anywhere* they usually die, though perhaps not immediately. From sime unknown cause a wound on a Tiger very soon assumes an angry appearance, becomes tainted and the abode of maggots and finally proves fatal. This tendency to putrefaction in the Tiger renders it necessary that they should be skinned immediately after they are killed if the preservation of the skin is any object. Especially should they be removed out of the sunshine, instantly after being slain. A delay of ten or fifteen minutes will often ruin the skin by the loosening of the hair from putrefaction. The skin, after being removed, should be at once stretched and treated with a very strong solution of salt, alum and catechu.

Several other large animals of the cat kind are found in Asia and Africa, such as the Leopard, the Ounce, the Rima-Dihan or Tree-Tiger, etc. They are all carnivorous and of similar habits, and should be trapped on the same general principles as the Tiger and Cougar. Of these animals the Leopard is the most formidable and destructive. It is found in both Asia and Africa, but in greatest numbers in the latter country. It is much smaller than the Tiger, but of extraordinary strength for its size. It does not usually attack man unless wounded or pursued. It is very destructive among the herds of domestic animals, Antelope, Deer and Monkeys. It is celebrated for the beauty of its skin and the agility and grace of its movements. Its haunts are the forests where thick, high undergrowth prevails.

Of late years the trapping of Tigers in India by the use of the Numbers 5 and 6 Newhouse Traps has given the natives new confidence and it is probable that as they become more expert in this, the number of human lives sacrificed to these ferocious beasts will be much reduced. Heretofore thousands of people have been killed by them annually. There was great rejoicing when the natives first saw the helplessness of a full grown Bengal Tiger in a No. 6 Newhouse trap fastened to a heavy clog. They saw that here was something that was stronger than their old enemy.

To give a complete review of the business of trapping, several less valuable animals should be briefly noticed, not as fur-bearing, but as a legitimate subject of the trappers' art.

THE SQUIRREL

The American varieties of the Squirrel do not produce fur of much value and are of little importance in the fur trade. They are generally taken only for food or as nuisances. The European variety, however, is much more valuable, and its skins are brought into the fur markets of Europe by the million. They are spread over all the north of Europe and Asia. Those of Russia and Siberia produce the finest and handsomest fur. This kind is a small Squirrel with tufted ears and a beautiful gray coat.

For taking Squirrels the trap should be set on the top rail of a fence near a wood that they frequent. A pole with an ear of corn or some other favorite Squirrel food fastened to the end of it should be set up by the side of the fence, leaning in such a position as to bring the bait over the trap at the height of six or eight inches. In reaching for the bait the Squirrel gets into the trap.

THE WOODCHUCK OR MARMOT

Marmots are burrowing animals. There are a number of species, and they are found on both continents. In this country they are commonly called Woodchucks. The curious Prairie Dog of the Western plains is allied to the Marmot. This little animal lives in villages from a few acres to several miles in extent, in the country bordering on the Arkansas and Missouri Rivers and their tributaries. The entrance to their burrows is in the summit or side of a small mound of earth, somewhat elevated, but seldom more than eighteen inches high. In pleasant weather they may be seen sporting about the entrance of their burrows and five or six individuals may be sometimes seen sitting on a single mound. They make a noise somewhat like the barking of a dog, whence their name, Prairie Dog. When alarmed they retreat at once into their holes. The skin of the common Woodchuck is valuable for whip lashes, and its fur even is not despised by rustics. All kinds of Marmots may be taken by setting steel traps completely covered and without bait at the mouth of their holes.

THE GOPHER

This animal, called the Canada Pouched Rat, inhabits the prairie region west of the Mississippi. It is a burrowing animal and lives on roots and vegetables. Its body is firmly built, about nine inches long, with short tail and legs, the latter armed with long claws for digging. The head and neck are relatively large and the mouth has four broad, long incisors, two on each jaw, adapted to cutting roots. On the sides of the face and neck, extending back to the shoulders,

The Woodchuck

are large pouches, in which to carry earth, food, etc. The Gopher digs paths or galleries of an oval form, several inches in diameter, a short distance below the surface, coming to the surface once in about a rod, where the excavated earth is deposited in little hillocks. These galleries ramify in all directions. When the animal has brought to the surface in one place as much earth as its sense of economy dictates, it closes up the hole and begins a new deposit further on, so that nothing remains but a neat little mound of earth, large enough to fill a half bushel, more or less. Gophers are great pests to the western farmers, injuring and destroying the roots of their crops and infesting their fields and gardens. They may be trapped in the following manner: Carefully cut away a square section of sod on a line between the two most recent deposits. On finding the gallery, excavate down until a trap will set on a level with the bottom of the passage. Place the trap there; then lay a piece of board or shingle across the excavation, just above the passage, and replace the sod. The Gopher, while at work, will run into the trap and be taken. The No. 0 Newhouse trap is especially suitable for catching the Gopher. Also the regular Newhouse Gopher trap, see page 166.

THE RAT

This pest of all countries may be taken in any or all of the following ways: 1—Set your trap in a pan of meal or bran, cover it with meal and set the pan near the run-ways of the Rats; or 2—Set the trap in a path at the mouth of a Rat's hole, with a piece of thin brown paper or cloth spread smoothly over it; or 3—Make a run-way for the Rats by placing a box, barrel or board near a wall leaving room for them to pass, and set the trap in the passage, covered as before. In all cases, the trap should be thoroughly smoked over a fire or heated over a stove before it is set, and at every re-setting; but care should be taken not to overheat the trap so as to draw the temper of the spring. Also the position of the trap should be frequently changed.

To conclude these instructions for capturing animals, I will introduce the trapper to one or two of a larger and nobler family, which he will find well worthy of his attention, not for their skins or furs (though these are valuable), but for their flesh, which in his more distant and adventurous excursions, will often be the only resourse of his commissariat. The soldier must look out, not only for his means of fighting, but for his means of living—for his larder as well as for his enemy—and happily I can show the soldiers of the trap how to supply themselves with food by the same weapons that they use in taking animals for their furs.

THE DEER

This family of ruminating animals embraces a great variety of species, ranging in size from the Pigmy Musk Deer of Java, which is not larger than a hare and weighs only five or six pounds, to the gigantic Moose-Deer of America, whose height is seven or eight feet and its weight twelve hundred pounds. But the species with which American trappers are most practically concerned, are the common Red or Virginia Deer, and the Black-tailed Deer of the region west of the Mississippi. These species differ but little in habits and general characteristics, and a description of the Virginia Deer is sufficient for the purposes of the trapper. The Virginia Deer are found in nearly all of the States of the Union east of the Rocky Mountains, and abound in both provinces of Canada. They are gregarious in their habits, though frequently seen alone. Their food in summer consists of twigs, grass, berries, nuts, roots, acorns, persimmons, etc., and at that season they frequent rivers and lakes to feed on water-plants, as well as for the purpose of freeing themselves of insect pests. They are also fond of visiting the pioneer's clearing and appropriating his wheat, corn, oats, potatoes, turnips and cabbages. In winter they retire to the elevated ridges, where maple and other hard wood trees abound, the bark, twigs and branches of which are at that season their chief support. They form "yards" by tramping down the deep snows and live together in large herds, numbering sometimes thirty animals in a single "yard." These enclosures are enlarged from time to time as the Deer require more trees for browsing. Wolves and Panthers are their most formidable enemies—always excepting man. Packs of Wolves frequently attack them in their "yards" and sometimes, when the snow is deep and crusted over, whole herds are destroyed. Wolves sometimes pursue a single Deer with the "long chase." In summer a Deer thus pursued generally takes to the water and so baffles his pursuers, but in winter, when the streams and lakes are frozen over, he rarely escapes. Panthers take Deer by crawling within springing distance of them in their "yards" or elsewhere, or by watching and pouncing on them from some cliff or tree as they pass below.

The methods by which men take Deer are various. They are sometimes driven by dogs into rivers or lakes and are then overtaken and dispatched by the hunter in his canoe. A favorite method

is to shoot them at night at the places by the water-side, where they resort to feed on aquatic plants and relieve themselves of insects. For this purpose the hunter prepares himself with a boat, gun and lamp. The light is set on the bow of the boat, so that it will shine on the forward sight of the gun and at the same time conceal by its glare the hunter crouching behind. With muffled oar the boat approaches the game. The reflected gleams from the eyes of the Deer betrays his position to the hunter. If no noise is made the victim will stand and gaze at the light until it is within a few yards, and so give a sure opportunity for the fatal shot. Many are taken in this way in the early autumn and later in the season, when snow first comes, many more are taken by the "still hunt," either by following on their trail or by watching at their run-ways.

The steel trap, it must be confessed, is not much used for taking Deer, and I am not sure but that this use of it is regarded by sportsmen as somewhat barbarous. But all the ways of deceiving and killing these noble animals seem to be open to the same objection, and the necessities of the trapper often forbid him to be very particular as to the means of furnishing himself with food. There are times when the trap is the best and even the only available means of taking Deer; for instance, when the trapper is without his rifle, or has exhausted his ammunition and finds himself in the far wilderness without food. In such circumstances he might starve if he could not betake himself to his traps for supply. And even when the rifle and ammunition are at hand, sometimes in dry weather (technically called a "noisy time"), everything is so crisp and crackling under foot that it is impossible to approach the Deer within shooting distance. I therefore recommend to practical woodsmen to learn how to take Deer in traps and not be over scrupulous in doing so when occasion requires.

For taking Deer the trap must be a strong one and the jaws should be spiked and shaped with an "offset," so that when sprung they will remain open about half an inch, to prevent breaking the bone. The trap should be placed in the path of the Deer where it crosses a stream or enters a lake and it should be set under water and concealed by some covering. If it is as heavy as it ought to be (say of three or four pounds weight) it should not be fastened at all, or even clogged, as the animal is very active and violent when taken and will be sure to break loose by tearing off a limb or smash the trap, if his motions are much impeded. If the trap is left loose, the Deer, when caught, will make a few desperate plunges and then lie down and will seldom be more than ten or fifteen rods from where he was taken. When the hunter approaches he will make a few more plunges, but can easily be dispatched.

Mr. Gunter, the Canadian trapper, whom I have heretofore quoted, gives the following directions for trapping Deer in winter:

"Fell a maple or basswood tree near where the Deer haunt. These trees furnish their favorite browse. Make a small hole in the snow, close to the top of the tree. Set your trap, lower it into the hole and shove it to one side, eighteen or twenty inches, through the snow. Finally take some deer-scent, obtained from the glands on the hind legs of a Deer, and which has a very strong odor, and rub it on your trap. This done, when the Deer come to feed on the twigs of the fallen tree, you will be pretty sure to take one."

THE MOOSE

This is the largest kind of Deer, and its habits are in many respects like those of the common Deer. It is more confined, however, to the snowy regions of the north. It is found throughout the greater part of British America, ranging as far north as the Arctic Sea. In the United States it is found in Maine, Northern New York, Oregon and Washington. On the Eastern Continent it is found throughout the northern parts of Europe and Asia. Its favoriate haunts are the hardwood lands. In general color it is yellowish-brown or ashy-gray. The hair in summer is short and soft, and long and coarse in winter. The full-grown Moose weighs from eight hundred to fifteen hundred pounds, and stands seven and even eight feet high. Its horns have an expanse of nearly six feet between the tips and a palm or spade on each of a foot in width and weight from forty-five to seventy pounds. Under the throat of both sexes there is a tuft of coarse, bristly hair a foot or more in length, attached to a sort of a dew-lap. The breeding season of the Moose is in May. At the first birth but a single one is brought forth; afterwards two are brought forth annually. Moose, like the common Deer, frequent rivers and lakes in summer to feed on the roots of the water lily and other aquatic plants and retire in winter to the high ridges, to browse on the twigs of the striped maple and birch. Their height enables them to crop the overhanging branches of large trees and their weight and strength enable them to bend down small trees and slide over them with their bodies, stripping the bark and twigs to the very extremities. Like the common Deer, they form "yards" by treading down the snows, and enlarge them as fast as they strip the trees and require more. In these "yards" there are commonly found a male, female and two fawns.

Moose are taken in winter by the "long chase" on snow-shoes and in summer they are shot at their feeding places in marshes. They are, however, very wary and timid and their sense of smell is so acute that the greatest caution is necessary on the part of the hunter in approaching them. The males in the rutting season are very dangerous and will attack and, if possible, kill any person who approaches them. Moose can easily be taken either in summer or winter by setting steel traps in their haunts, as they are not cunning and enter a trap as readily as an ox or a horse. The trap should be a strong one of about forty pounds weight, and it should be fastened to a clog of sixty pounds weight.

The flesh of the Moose is much esteemed by hunters and trappers, being generally preferred to that of the common Deer. The marrow in the large bones is an excellent substitute for butter.

III.—CURING SKINS

However successful a trapper may be in taking animals, he will not secure a full reward for his labor unless he knows how to take care of their skins and prepare them for market in such a manner that they will command the highest prices. As skins that have been riddled with shot find little favor with fur-dealers, so skins that have been cut in stripping off, or that are encumbered with remnants of flesh, or that have passed into a state of incipient putrefaction before drying, or that have not been properly stretched, or that have been dried too fast, or that have been neglected and exposed after being cured, are very sure to be thrown out by the fur-inspector as second or third rate skins, deserving only poor prices. The importance of properly stretching the skins should always be borne in mind. Otherwise you need never hope to get a good price. Great quantities of valuable furs, taken by boys and inexperienced trappers, are rendered almost worthless by bad treatment in some of the processes of preservation. I shall give such information on this part of the trapper's business as I have obtained, both from my own experience and from conversation with fur-dealers.

GENERAL RULES

1. Be careful to visit your traps often enough, so that the skins will not have time to get tainted.
2. As soon as possible after the animal is dead and dry, attend to the skinning and curing.
3. Scrape off all superfluous flesh and fat, but be careful not to go so deep as to cut the fibre of the skin.
4. Never dry a skin by the fire or in the sun, but in a cool, shady place, sheltered from the rain. If you use a barn door for a stretcher (as boys sometimes do), nail the skin on the *inside* of the door.
5. Never use "preparations" of any kind in curing skins, nor even wash them in water, but simply stretch and dry them as they are taken from the animal.

STRETCHING SKINS

In drying skins, it is important that they should be stretched tight, like a strained drum-head. This can be done after a fashion

by simply nailing them flat on a wide board or a barn door. But this method is not altogether practicable on a large scale in the woods where most skins have to be cured. The stretchers that are generally approved and used by good trappers are of three kinds, adapted to the skins of different classes of animals. I shall call them the *board-stretcher*, the *bow-stretcher* and the *hoop-stretcher*, and will describe them, indicating the different animals to which each is adapted.

THE BOARD-STRETCHER

This contrivance is made in the following manner: Prepare a board of basswood or other light material, two feet three inches long, three inches and a half wide at one end, and two inches and an eighth at the other, and three-eighths of an inch thick. Chamfer it from the center to the sides almost to an edge. Round and chamfer the small end about an inch up on the sides. Split this board through the center with a knife or saw. Finally, prepare a wedge of the same length and thickness, one inch wide at the large end, and tapering to three-eighths of an inch at the small end, to be driven between the halves of the board. This is a stretcher suitable for a Mink or a Marten. Two larger sizes, with similar proportions, are required for the larger animals. The largest size, suited for the full-grown Otter or Wolf should be five feet and a half long, seven inches wide at the large end when fully spread by the wedge, and six inches at the small end. An intermediate size is required for the Fisher, Raccoon, Fox and some other animals, the proportions of which can be easily figured out.

These stretchers require that the skin of the animal should not be ripped through the belly, but should be stripped off whole. This is done in the following manner: Commence with the knife at the hind feet, and slit down to the vent. Cut around the vent, and strip the skin from the bone of the tail with the help of the thumb-nail or a split stick. Make no other slits in the skin, except in the case of the Otter, whose tail requires to be split, spread and tacked on to the board. Peel the skin from the body by drawing it over itself, leaving the fur-side inward. In this condition the skin should be drawn

on to the split board (with the back on one side and the belly on the other), to its utmost length and fastened with tacks or by notches cut in the edges of the board and then the wedge should be driven between the two halves. Finally, make all fast by a tack at the root of the tail and another on the opposite side. The skin is then stretched to its utmost capacity, as a boot-leg is stretched by a shoemaker's "tree" and it may be hung away in the proper place, by a hole in one end of the stretcher, and left to dry.

A modification of this kind of stretcher, often used in curing the skins of the Muskrat and other small animals, is a simple board, without split or wedge, three-sixteenths of an inch thick, twenty inches long, six inches wide at the large end and tapering to five and a half inches at six inches from the small end, chamfered and rounded as in the other cases.

Muskrat Stretcher

The animal should be skinned as before directed and the skin drawn tightly onto the board and fastened with about four tacks. Sets of these boards, sufficient for a Muskrat campaign, can easily be made and transported. They are very light and take up but little room in packing, thirty-two of them making but six inches in thickness.

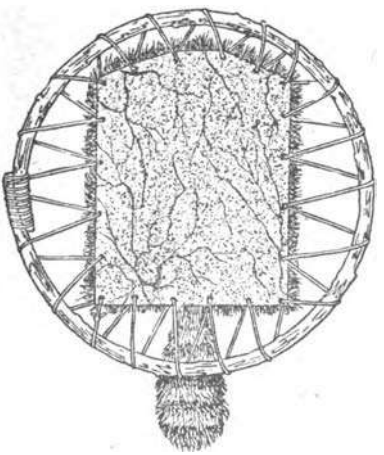
THE BOW-STRETCHER

The most common way to treat the Muskrat is to cut off its feet with a hatchet, then the skin is started by cutting around the hind legs and across the rump and is stripped over the body with the fur side inward. Finally a stick of birch, water-beech, iron-wood, hickory or elm, an inch in diameter at the butt and three feet and a half long, is bent into the shape of an ox-bow and shoved into the skin, which is drawn tight and fastened by splitting down a sliver in the bow and drawing the skin of the lip into it. This method is not the best to secure a good price for the furs unless carefully done.

THE HOOP-STRETCHER

The skins of large animals, such as the Beaver and the Bear, are

best dried by spreading them at full size, in a hoop. For this purpose a stick of hickory or other flexible wood should be cut, long enough to entirely surround the skin when bent. (If a single stick long enough is not at hand, two smaller ones can be spliced together). The ends should be brought around, lapped and tied with a string or a withe of bark. The skin should be taken from the animal by ripping from the lower front teeth to the vent and peeling around the lips, eyes and ears, but without ripping up the legs. It should then be placed inside the hoop and fastened at opposite



The Hoop Stretcher

sides, with twine or bark, till all loose parts are taken up, and the whole stretched so that it is nearly round and as tight as a drum head. When it is dry it may be taken from the hoop and is ready for packing and transportation.

SPECIAL DIRECTIONS FOR TRAPPERS AND FUR COLLECTORS

All skins taken for their furs should be either "cased" or "open" and although opinions differ somewhat in regard to details, the following classifications may be accepted as substantially correct.

"Cased"

Cat, Fisher, Fox, Lynx, Marten, Mink, Opossum, Wolverine, Otter, Skunk and Muskrat must be "cased," that is, not cut open.

In skinning, cut at the rump and turn the skin inside out over the body of the animal, leaving the pelt side out. Wolves or Coyotes are all right open or cased, although the cased are preferable.

After scraping, cleaning and drying, some dealers advise turning the skin back again, leaving the fur side out, but with the exception of Foxes, Red, Silver and Cross, the large dealers now prefer the skin left pelt side out, as the quality can be more easily determined by examining the rumps and are better preserved and protected in the numerous handlings.

"Open"

Badger, Bear, Beaver and Raccoon must be "open," that is, cut up the belly from rump to head. After scraping, cleaning and drying, stretch to a uniform shape to the fullest extent of the skin, as described above, but not so much as to make the fur thin. When thoroughly dry, trim off any little pieces that spoil the appearance of the skin, but leave the heads, noses and claws.

There is some difference of opinion among people who consider themselves experts as to the proper method of skinning fur-bearing animals for stretching in the whole or "cased" form. In fact, in the early editions of the NEWHOUSE TRAPPER'S GUIDE, some statements were made which do not agree with the present views of the fur-buyers. For example it was said: "The most common way of treating the Muskrat is to cut off its feet with a hatchet, and rip with a knife from between the two teeth in the lower jaw down the belly about two inches below where the fore legs come out. Then the skin is started by cutting around the lips, eyes and ears, and is stripped over the body with the fur side inward."

An experienced fur buyer has lately said that he finds less than one per cent skinned from the nose. Nearly all of them are started from the rump end. A large New York dealer writes us that if the skins are started from the head the value is ten per cent less. This is a convincing reason and we have changed our instructions for Muskrat, etc., to conform to this opinion.

In this connection it ought to be said that the market reports of furs published in *"Hunter-Trader-Trapper,"* a trapper's magazine, will keep everyone well informed and prevent cheating.

DRESSING AND TANNING HIDES AND FURS*

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).

TO DRESS DEER SKINS—We will commence with what is called oil-dressing, and to begin at the beginning, the directions would be,

**From the "Hunter and Trapper," Orange Judd Co., New York.*

"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 can 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 constantly 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, 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 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. This is a very good way. I have practiced 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 in 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 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 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 wood slips off easily.

If it is desired to keep the hair or wool 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 in 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 ounce of 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 pounds of oak bark, six pounds of young fustic, one pound 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 may be produced.

ANOTHER—One ounce of crystallized nitrate of silver, eight ounces 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 OR TAN FURS—Use 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 the skin side of a dry fur about half an inch thick and when dry scrape it off. If this is not enough put the same mixture on a second time.

In using this process on small furs, such as Mink, after the mixture 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 substances will not shrink it too much. In this manner the skins may be dressed as soft as velvet and the alum and salt will set the hair securely.

TO TAN 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.

To Tan 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 two ounces of alum, two ounces of salt, one drachm of sulphuric acid, one 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.

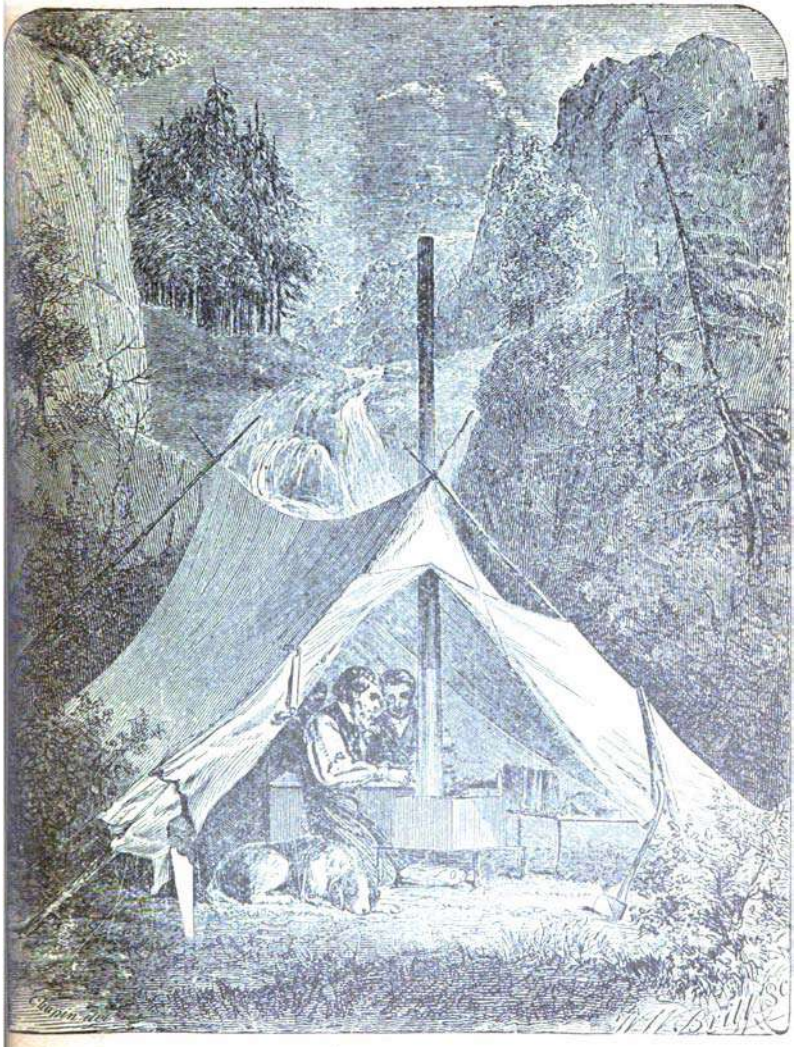
IV.—LIFE IN THE WOODS

[*The outfit for campaigning in the woods proposed by Mr. Newhouse in the following chapter may seem rather elaborate and luxurious, adapted perhaps better to amateur sportsmen than to the "rough and ready" followers of the trap, but experience has proved that the equipment here recommended is not far out of the way.*]

The great question, after all, for the trapper as well as for the soldier, is how to live and keep himself comfortable while he carries on the war. He requires in some respects even more than a soldier's courage, for he is to encounter the hardships of camp life *alone*, or with but one or two companions, and without a baggage train to bring up provisions at every halt. The very first article of outfit that he should equip himself with, I should say, would be a firm trust in Providence. But as Cromwell told his soldiers to "trust God and keep their powder dry," so the trapper will need to provide some things for himself, while he trustes in Providence. I will therefore tell him as well as I can how I equip myself for life in the woods.

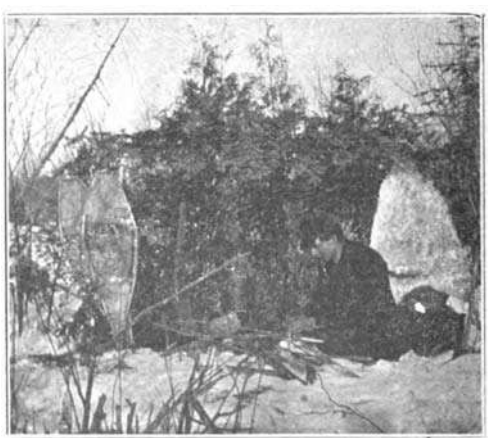
OUTFIT FOR A CAMPAIGN ON FOOT

If the region in which you propose to trap cannot be reached by boat or wagon, you must be content with such necessaries as you can carry on your person. A trapper on foot should not tire himself with long stiff-legged boots, but should wear short half-boots (with soles well nailed), fitting snugly above and around the ankles. His pantaloons should be gray woolen, closely fitting below the knee, but roomy above. His coat should be of the same material and color, with plenty of pocket-room. His hat should be of soft felt, gray, and with a moderate brim. He should carry a "change" of woolen drawers, wrappers, shirts and stockings. A towel with soap, a night-cap and a blanket, or what is better, a flannel bag to sleep in, will complete his personal equipments. Then he may carry for shelter a small tent, made of firm cotton-drilling, weighing not more than two pounds and a half; for subsistence, a double-barrelled gun (rifle and shot), weighing seven or eight pounds, with ammunition and fishing tackle; and for all sorts of purposes, an ax of two and

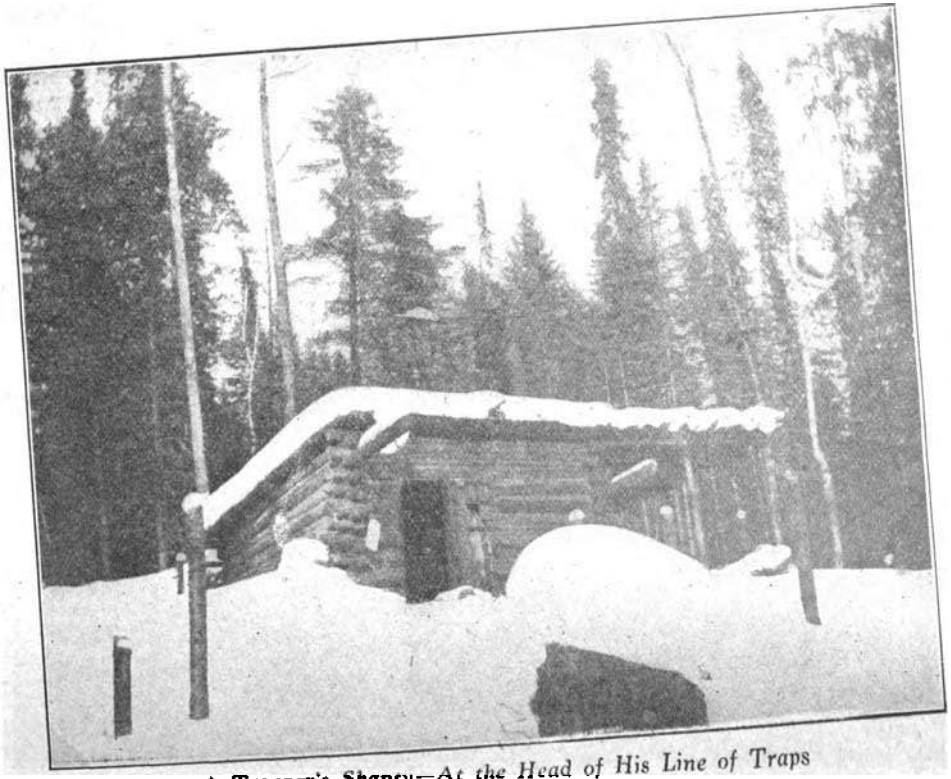


Mr. Newhouse's Tent and Stove

a half pounds (with a good length of handle) and plenty of tacks and nails. For cooking and table service he must carry a frying-pan, a camp-kettle, a hunting knife, some knives and forks, spoons of two sizes, a few pressed tin plates, and a drinking-cup. Above all, he must not forget to take a good supply of matches and a pocket compass. These necessaries (exclusive of clothing) will weigh, according to my reckoning, about twenty-five pounds. The rest of his load must be made up of traps and provisions. If he is stout enough to undertake trapping on foot, he ought to be able to travel with about fifty pounds. He may take then five pounds of provisions and twenty pounds of traps, or any other proportion of these articles that will make up the remaining twenty-five pounds. His provisions should consist of articles that will be desirable as accompaniments to the product of his gun and fishing tackle, namely, sugar, tea and coffee (rather than whiskey), salt, pepper, butter, lard, sifted Indian meal, white beans, crackers, etc. The butter and lard should be put up in air-tight cans, and on arrival at the trapping grounds should be sunk in a spring. The best kind of knapsack for carrying such an outfit is made of rubber cloth with shoulder straps, but you can easily convert your sleeping-bag or your blanket into a knapsack that will serve very well. If you trap with one companion or more (which is a good plan and according to



Shelter Made of Boughs



A Trapper's Shanty—At the Head of His Line of Traps

the general practice) many of the articles named in the above list will answer for the party and so the load for individuals will be lightened. Thus equipped, you can turn your back on the haunts of men, march into the wilderness, and with a little hunting and fishing in the intervals of trap duty, live pleasantly for months and return with your load of furs, a stouter and healthier man than when you started.

OUTFIT FOR AN EXCURSION BY WAGON OR BOAT

If your trapping district can be reached by road or by water, some changes should be made in the foregoing inventory. For the interest of your larder it will be best to take more ammunition. A lamp and lantern, with a supply of oil, a camp hatchet of twelve ounces in weight with a fourteen-inch handle, a stone for sharpening knives, axes and hooks, a magazine of needles, thread, scissors, etc., and many other like conveniences may be stowed away in the odd corners of your luggage. You may also carry more clothing and more provisions, such as potatoes, and ought certainly to take along at least one hundred and fifty traps of different sizes and a good set of board stretchers for curing skins.

TENT

In the place of the light half-tent recommended for a campaign on foot, you should take a regular A tent of eight or nine pounds weight, house shape and buttoning up in front. This should be dipped two or three times in a solution prepared by mixing equal parts of sugar of lead and alum in a pailful of milk-warm water. This treatment will render the tent almost impervious to rain and will protect it from the sparks of fire that will occasionally be blown upon it. Instead of a ridge pole and two forked stakes for supporting it, all you need is a cord thirty or forty feet long to be drawn through the ridge of the tent, fastened to it about midway and tied at the ends to two trees at the proper height. The sides should be drawn down tight and fastened by hooks driven into the ground.

STOVE AND FURNITURE

A much needed convenience for life in the woods is a stove with its furniture, that shall on one hand afford all necessary facilities for cooking and warming, and on the other hand shall take up the least possible room in packing. Having devoted considerable study to this matter, I flatter myself that I can put the ingenious trapper in a way to make or procure the exact article that he wants. Your stove should be made of sheet iron and should be twenty-seven inches long, ten inches wide and eight inches deep, having on the top two eight-inch holes for boilers and one four-inch hole for

the smoke pipe. Ten feet of pipe will be sufficient and this can be made in five joints of two feet each, tapering in the whole length from four inches in diameter to three, so that the joints will slip into each other and the whole can be packed for transportation inside the stove. For an outlet of the pipe through the roof of the tent, there should be a piece of tin ten inches square, with an oblong hole, to be fastened at the proper place on the roof by means of lappels.* The furniture of the stove should be two dripping pans of Russia iron, one thirteen inches ling, nine inches wide and an inch and a quarter deep; the other enough smaller to pack inside the first; a kettle, also of Russia iron, nine inches across the top, seven inches and a half deep, and six inches and a half across the bottom; and two or three tin pails and several basins, all made in a diminishing series, so that they will slip into each other, and all into the iron kettle. The kettle and pails match the holes in the top of the stove and when used in cooking tea, coffee, etc., should be covered with pressed tin plates. The whole of this furniture can be packed with the pipe in the stove. For supporting the stove in the tent, prepare four posts eighteen inches long, made of three-eighths inch iron rod, sharpened at one end, flattened at the other and fashioned like a small tenon. Two pieces of band iron just long enough to reach across the bottom of the stove and receive the tenons of the posts into holes drilled in each end. Then to set up your stove, drive the posts into the ground, adjust the cross pieces to their places and place the stove on the cross pieces. Small depressions should be filed in the edge of the stove bottom to fit the ends of the tenon, above the cross pieces, so as to prevent the stove from moving from its position. Your tent is large enough to accommodate any number of persons from two to six, and your stove will warm them and do the cooking with an amount of fuel that will be a mere trifle compared with what is required for an open fire. It has the advantage also of giving a quick heat, and with a damper will keep fire all night.

BED AND BEDDING

Good sleeping accommodations can be provided in the following manner: Take two pieces of sacking or other coarse cloth, six and a half feet long and two feet and three-quarters wide and sew them firmly together at the sides, making a bag with both ends open. Cut two poles, each seven feet long and two inches in diameter, and run them through the bag, resting the ends in notches on two legs placed parallel to each other at the proper distance apart. The notches should be so far apart that the poles will tightly stretch the bag.

*NOTE—*There are many very good camp stoves now made and sold by dealers in sporting goods.*

Four forked stakes, if more convenient, may be substituted for the logs and driven into the ground so as to receive the ends of the poles and stretch the sacking. The space in the bag between the poles should be filled with dry grass, evergreen boughs or moss, which will give it the warmth and softness of a straw bed. By this arrangement you have an extempore bedstead, raising you above the cold, damp ground, and a bed as good as the best. For bed clothes, the best contrivance is a bag made of wide, firm Canton flannel, six and a half feet long, open at one end. Let the tired hunter insert himself into this bag feet foremost, and he will need no "tucking up" to keep himself comfortable even on the ground or in the snow and if he is fortunate enough to be perched on such a bed as is above described, in a tent well buttoned up, with a friendly stove at his feet, the cry of the loon, the howl of the wolf, or the scream of the panther will hardly disturb his slumbers.

CAMP CHEST

A chest made of light materials, two feet nine inches in length, eighteen inches in width and fourteen inches in depth—not larger than an ordinary trunk—will hold in transportation the stove with its pipe and all its furniture, the bed and bedding, the tent and all its rigging, and in fact nearly the whole outfit that has been described. The cover of the chest should be made of two thicknesses of boards, five-eights of an inch thick, with double hinges, so that the upper lid can be turned back separately and form, with the other lid, a good table.

COOKING

It will not be expected that the trapper's larder will be supplied with all the varieties and luxuries that can be found at a first-class hotel, but it will always be a satisfaction to know that flesh, fish and fowl are fresh from their native elements and have not hung in the market two or three weeks before coming on the table.

The ways of cooking in camp are as various as in the kitchen at home. Fresh fish can be fried in butter, lard, or the fat of the deer, or they can be boiled, or broiled and buttered. Venison can be fried or broiled in cutlets or roasted before a camp fire in joints, or stewed *a la fricassee*, or boiled into soup with potatoes. Squirrels, ducks, partridges and any other game that comes to hand can be fried, broiled or boiled as well in the woods as in the best hotel.

The very best way of cooking fish and fowl ever devised is familiar to woodsmen, but unknown to city epicures. It is this: Take a large fish—say a trout of three or four pounds, fresh from its gambols in the cool stream—cut a small hole in the neck and

abstract the intestines. Wash the inside clean and season with pepper and salt; or if convenient, fill it with stuffing made of bread crumbs or crackers chopped up with meat. Make a fire outside the tent and when it has burned down to embers, rake it open, put in the fish and cover it with coals and hot ashes. Within an hour take it from its bed, peel off the skin from the clean flesh, and you will have a trout with all its original juices and flavors preserved within it; a dish too good, as Isaac Walton would say, "for any but very honest men."

Grouse, ducks and various other fowls can be cooked deliciously in a similar way. The intestines of the bird should be taken out by a small hole at the vent and the inside washed and stuffed as before. Then wet the feathers thoroughly and cover with hot embers. When the cooking is finished, peel off the burnt feathers and skin, and you will find underneath a lump of nice, juicy flesh, which, when once tasted, will never be forgotten. The peculiar advantage of this method of roasting is that the covering of embers prevents the escape of the juice by evaporation.

Everybody knows how to cook potatoes and make tea and coffee, and anybody fit for a trapper must "know beans" and how to cook them. But bread! Ask the novice; what are we to do for bread? Well, we have good, sifted Indian meal and we will put some into a basin or pail, add a little salt, pour on scalding water, and mix to the consistency of stiff batter. After our venison or fish is cooked, we will put this batter into the hot fat that remains, a spoonful in a place, leveling it down smoothly and turning it over till it is "done brown." Such a Jonnycake, served up with butter and sugar, would tempt a man to leave the best wheat bread that ever was made.

JERKED MEAT

If you have the fortune to kill a Deer or Moose in warm weather and have an over supply of meat that is likely to be tainted, you can preserve it by the following process: Cut all the flesh from the bones in thin strips and place them, for convenience, on the inside of the hide. Add three or four quarts of salt for Moose, and a pint and a half for a Deer, well worked in. Cover the whole with the sides and corners of the hide to keep out flies, and let it remain in this condition about two hours. Drive four forked stakes into the ground so as to form a square of about eight or ten feet, leaving the forks four feet high. Lay two poles across one way in these forks and fill the whole space the other way with poles laid on the first two, about two inches apart. The strips of flesh should then be laid across the poles and a small fire of clean hard wood should be started underneath and kept up for twenty-four hours. This process will reduce the weight of the flesh more than

half, bringing it to a condition like that of dried or smoked beef, in which it will keep any length of time. This is called *jerked venison*. It is good eating and always commands a high price in market. An over supply of fish can be treated in the same manner. They should be split open on the back and the backbone taken out.

PROTECTION FROM INSECTS

In the warm months, chiefly from the first of June to the first of September, woodsmen are annoyed by myriads of flies, gnats and mosquitoes. These can be driven out of a tent by smoke, and can be kept out by buttoning all tight. But the trapper should also provide himself with a protective against these pests. A good preparation for this purpose may be made by warming about three ounces of hog's lard and adding to it half an ounce of the oil of pennyroyal. This ointment, applied once in an hour or less to the parts exposed, will give fair protection.

Another preparation can be made by mixing equal parts of common pine tar with olive oil, applying as before. This preparation is by some considered the best because it also prevents tanning and is easily washed off with soap, leaving the skin white and soft.

Still another preparation, more effective and in some ways preferable, is equal parts of sweet oil and oil of citronella.

THE SHANTY

The tent which I have recommended is probably best adapted to the irregular operations of amateur sportsmen, the volunteers and guerillas of the trap. The old regulars and veterans of the service always have built and probably will continue to build, rude huts called shanties, at various points in the region of their operations. Shanties are of two kinds, temporary and permanent. The temporary shanty is made by driving two forked stakes into the ground, laying a ridgepole across, leaning many other poles against this, and covering the skeleton thus formed with bark or split boards. The permanent shanty is made of logs laid one above another in a square form, joined at the corners by means of notches and roofed over with split logs formed into troughs and placed in this form: ⌒⌒⌒ . The crevices should be stopped with clay or moss. At one end a rude fireplace and chimney of stone should be built, the latter reaching just above the top of the shanty.

TRAPPING LINES

Trapping, when carried on systematically and on the large scale, has, like an army, its lines of operation, its depots of provisions and its arrangements for keeping open its communications with its base.

The general proceedings of a regular trapping campaign may be described as follows: The trapping company, which consists generally of two, three or four persons, start out a little before the trapping season commences; select their lines, extending into the woods frequently from thirty to fifty miles; carry along and deposit at intervals on the line, traps and provisions and build shanties at convenient points for sleeping posts and shelter from storms. These preparations sometimes require several journeys and returns, and are made in advance of the trapping season, so that when trapping commences, all hands may have nothing else to attend to. If the line extends directly from a settlement so that it has what may be called a home base, none but rude, temporary shanties are built and once in about ten days, during the season, a man is sent to the settlement to carry out furs and bring back provisions. But if the line commences so far from the frontier that such return journeys are impracticable, then, besides the temporary shanties, a more substantial and permanent hut, called the home shanty, is built at some point on the line, for depositing furs, provisions and other valuables and this becomes the base of operations for the season. A boy is sometimes taken along to "keep shanty," as trappers say, *i. e.*, to remain at the home shanty as housekeeper and guard. Such a resident at the main depot is very necessary, as bears and other wild animals (not to mention fire and human thieves) have a habit of breaking into an unguarded shanty and destroying everything within reach. Prudent trappers rarely leave furs in a shanty alone, even though it is strongly barricaded. If they cannot carry them out to the settlement, and have no boy to "keep shanty," they generally hide them in hollow trees. At the close of the season, if the party is satisfied with their line and intend to trap on it another season, they hide their traps under rocks where they will not be exposed to the fires that sweep the woods in dry times.

CONCLUSION

The trappers' art, like that to which I have so often compared it —the art of war—is, or should be, progressive. It is evidently yet in its infancy and has hardly begun to emerge from the narrowness and ignorance of mere individual cunning, into the liberal inventiveness and broad combinations which will come when trappers shall gather into conventions, compare experiences, and avail themselves of the help that all sciences are ready to give them. All that I can claim to have done in the preceding pages is the presentation of the art of capturing animals, curing their skins and living in the woods as it is now practiced, or at least as I understand it.

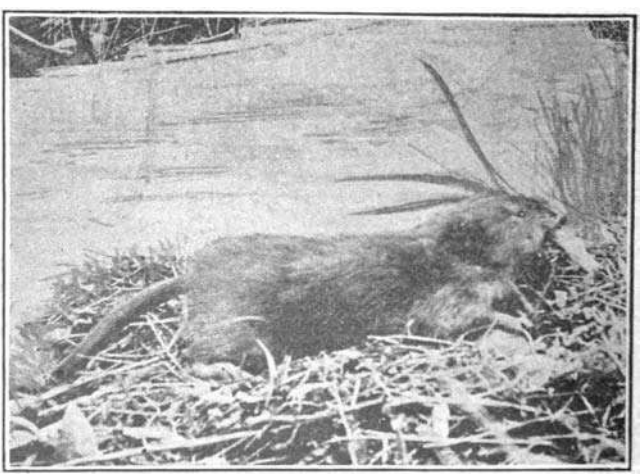
BOATS, SNOW SHOES, ETC.

Time was, and that not so very many years ago, when hunters

and trappers had to build their own boats, make their own snow shoes, refine some kind of animal oil for their guns, etc. In the early editions of the TRAPPER'S GUIDE it seemed desirable to publish instructions for doing these things, as a necessary part of woodcraft. The Indians had taught the white man to make birch bark canoes, which were light and portable, but not very safe. The dug-out, fashioned from the trunk of some large, soft-wood tree, was then often made. After saw-mills became common the flat bottomed boats, or *bateaux*, were made of boards and will probably always be found cheap and useful. No special directions are needed for making them. A little knowledge of carpentry will suffice.

Now-a-days so many good concerns are engaged in the manufacture of small boats suitable for the hunter and trapper that it does not pay to try to make them for one's self. The same is true of snow shoes and other things. Canvas boats, as light as the birch bark canoe of the Indians may now be had. Some of them are made to fold together, rendering their transportation easy.

Dealers in sporting goods can now supply at reasonable prices anything the trapper needs, whether in the line of boats, snow shoes, guns, ammunition, oils, or special waterproof clothing, boots and shoes. So a life in the woods need not be quite as rugged or strenuous as it used to be in the old days.



The Muskrat

APPENDIX

HISTORY OF THE NEWHOUSE TRAP

BY G. W. NOYES

The Steel Traps invented by S. Newhouse and for nearly fifty years manufactured exclusively by the Oneida Community, Ltd., Kenwood, Madison County, N. Y., have always been recognized as the trappers' chief aid in the conquest of the wilderness.

The reputation of these traps is world-wide. They have never been equalled as the trappers' sure and reliable weapons. The original Newhouse Trap was, for more than forty years, the synonym among all leading trappers and hunters for the *perfect trap*—"sure to go and sure to hold." Since the Newhouse trap entered the field and became generally known, all other traps that have attempted to win the attention of practical trappers have simply been cheaper imitations of it.

The wonderful growth of trapping during the past forty years, stimulated in part by the remunerative prices of furs, and in part by the ever-extending lines of frontier settlements in the interior of the continent and on the Pacific slope, but still more, perhaps, by the improvements in the manufacture of traps made by the Oneida Community, under the supervision of its chief in that department, Mr. Sewell Newhouse, will justify us in giving a historic sketch of the trap business and its founder.

Sewell Newhouse was a native of Brattleboro, Vt. His paternal grandfather was an English soldier, who, having been taken prisoner by the Americans at the battle of Bunker Hill, afterwards adopted this country is his home. From Brattleboro the parents of Mr. Newhouse removed, during his infancy, to Colerain, Mass., and in 1820, when he was fourteen years old, the family emigrated to Oneida County, N. Y. The central part of the State of New York, if not then an actually new country, retained some of the features of a frontier settlement. The Erie Canal, though it was building,

was not finished till several years later and travel was mainly accomplished by means of stage coaches, which at some seasons plowed their toilsome way through seas of mud. The large kinds of game, as Deer, Bears and Wolves, were not extinct in the great forest basin of Oneida Lake. Fur-bearing animals and salmon abounded in the streams and a remnant of the Iroquois Indians, several thousand in number, inhabiting the reserved lands in this and the neighboring counties, with their bow-and-arrow proclivities, gave a somewhat primitive cast to the population.

With a strong constitution and a taste for field sports, drawn perhaps from his English forefathers, Mr. Newhouse found his youth not inaptly placed in such a region. While making the usual school attainments in education, and rendering his share of assistance on the family farm, he also became known as a successful woodsman, wise in the ways of all sorts of game, from wild geese to honey bees, and from bull-pouts to bears. The instinct of a successful hunter or trapper amounts almost to a sixth sense and this inevitable tracking faculty which enables one man to detect the signs of game and to seize the strategic point for its capture, which to another are quite unintelligible, was strong in young Newhouse. It is unsafe for a pigeon to alight, or for a muskrat to make an audible plunge, within three miles of such a boy. Vulpine cunning may suffice to elude the common range of observation, but it is no match for the awakened sharpness of the practical woodsman.

The need of a trapper in a new country is not piano-fortes or visiting cards, but *traps*. At seventeen Mr. Newhouse felt this need and in the absence of other means of obtaining a supply, he set to work to make them. The iron parts of fifty or more were somewhat rudely fashioned in a blacksmith's shop and for the steel springs the wornout blades of old axes were made to serve as material. A mechanic of chance acquaintance showed the young artisan how to temper the springs. The trap thus extemporized proved, on the whole, a success; for they would catch, and what they caught they held. After the season's use they were sold to neighboring Indians for sixty-two cents apiece, and the making of a new supply was entered upon. These in turn were sold and replaced and thus the manufacture of "Newhouse traps" was launched.

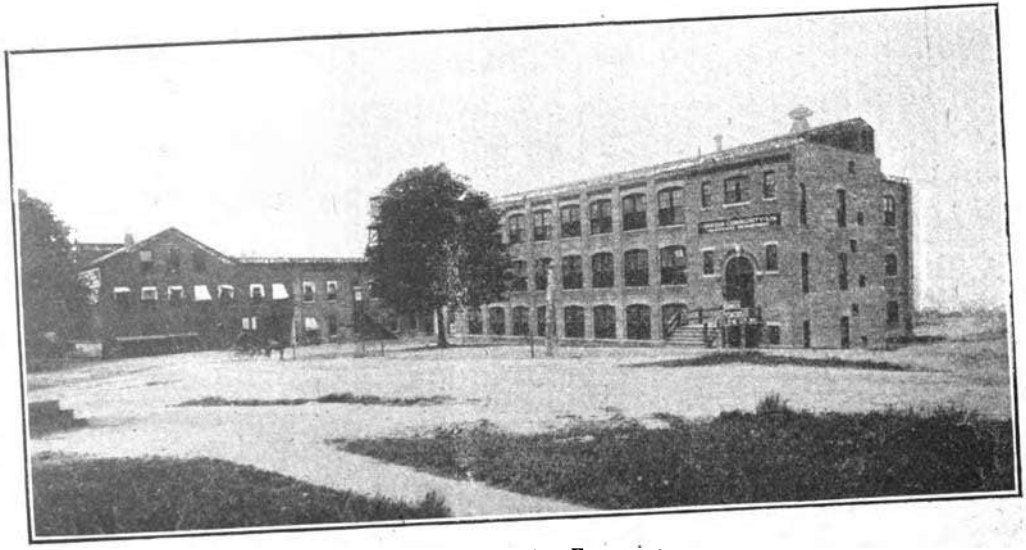
During the next twenty years Mr. Newhouse worked at trap making, sometimes alone and sometimes with a partner or with hired help. The extent of his manufacture was from one to two thousand traps per year, which supplied the local demand, and procured for him a reputation in skill in whatever pertained to woodcraft. During this period he also engaged to some extend in rifle making and his amateur productions in this line, being noted for

their shooting qualities, were considerably sought after. The working season was each year varied by trapping and hunting, excursions to "Brown's Tract," or to Oneida Lake, and gave the slightly woody flavor to the man always observable in his tastes and ways.

The characteristics which Mr. Newhouse possessed as a mechanic were a critical eye, sound judgment of material relations, nicety of hand and a conscientious attention to the minute details of any mechanism, on which so often its proper working depends. As a trapmaker, his original idea was to make faultless traps, and nothing could swerve him from this point. His main solicitude was that they should catch game, whether they caught custom or not. The reputation which came to him on this basis, made it seem desirable to other manufacturers, in several instances, to pirate his name to give currency to their "imitations" of the "Newhouse Traps." But this quality of particularity, so valuable in the pursuit of excellence, if not combined with other talents does not always lead to great success and the Oneida trapmaker would perhaps have scarcely risen above a local celebrity but for the introduction of him and his business to a new element of energy and enterprise in the Oneida Community.

THE COMMUNITY "NEWHOUSE TRAP"

The Community established itself near Oneida, about two miles from the residence of Mr. Newhouse, in 1848, and the next summer he and his family entered it as members. For several years after this but little attention was paid to the trap business. A few dozen were made occasionally by Mr. Newhouse in the old way, but it was not until 1855, under the earnest representation of Henry Thacker, a trapper from the Calumet River, near Chicago, that practical interest was directed to this branch of manufacture, with a view to its extension, by Mr. J. H. Noyes. Arrangements were then made for carrying on the business in a shop fifteen feet by twetny-five. The tools consisted of a common forge and bellows, hand-press, swagging mould, anvil, hammer and files. The shop so established employed about three hands. Mr. Newhouse then worked at the anvil daily, but as the little shop was located on the bank of Oneida Creek, at a point where, a few rods above, the water skirts a high bank and formed a deep eddy, bushes growing along the bank, his attention was often called to a passing Muskrat or Mink. Many times the writer has seen him suddenly stop his bellows, quickly seize his rifle off the pegs, and fire through the open window. He was a good shot and seldom burned powder for nothing. The next year it was removed to a larger room in a building connected with water power, and the number of hands was increased. Among them were Leonard F. Dunn, George W. Hamilton and several other young machinists, who, together with Messrs. Noyes and Newhouse,



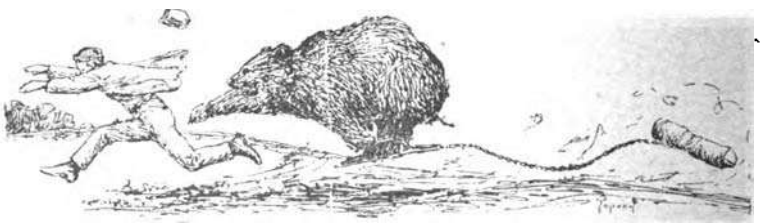
Oneida Community Factories

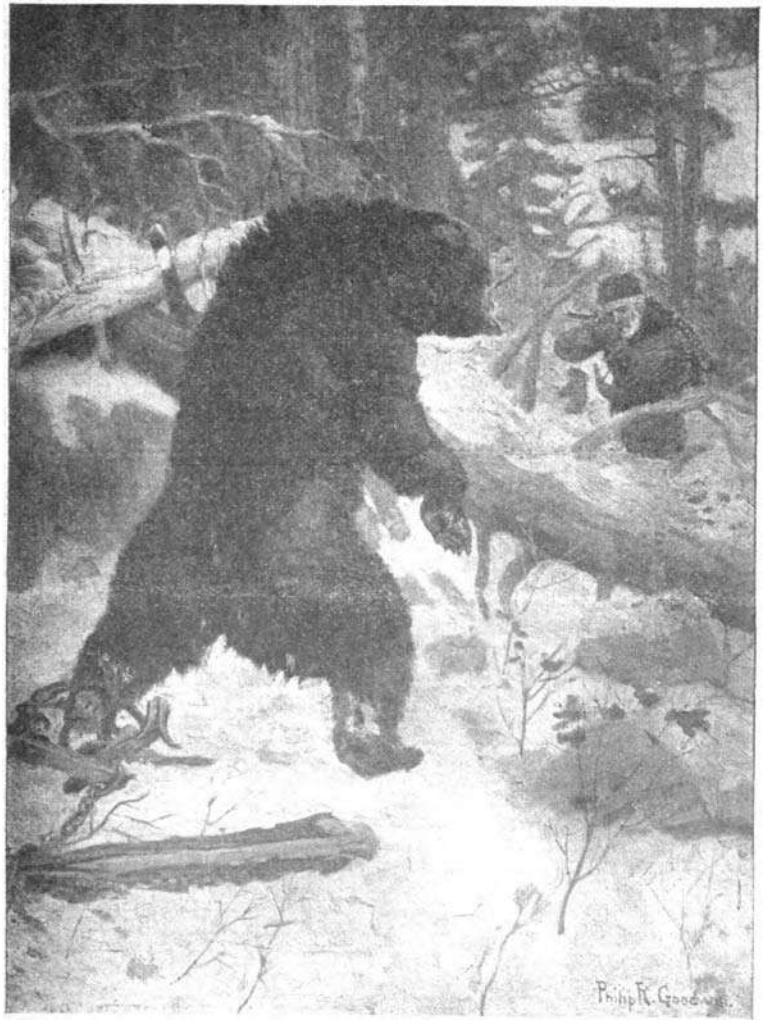
exercised their inventive powers in devising mechanical appliances to take the place of hand labor in fashioning the different parts of the trap. A power press was the first machine introduced, then a rolling apparatus for swaging the jaws. Soon it was found that malleable castings could be used as a substitute for wrought iron in several parts of the traps. The brunt of the labor expended had always been in the fabrication of the steel spring and this was still executed with hammer and anvil wholly by hand. Two stalwart men, with a two-hand sledge and a heavy hammer, reduced the steel to its elementary shape by about one hundred and twenty blows, and it was afterward finished by a long series of lighter manipulations. The attempt was made to bring this part of the work within the grasp of machinery. One by one the difficulties in the way were overcome by the ingenuity of our machinists, until at length the whole process of forming the spring, from its condition of rolled steel to that of the bent, bowed, tempered and elastic article ready for use, is now executed by machinery without the blow of a hammer. The addition of chain making (also executed by machine power) makes the manufacture of traps and their attachments complete.

With the progress of improvemetns in the process of manufacture, the cost and price of traps have correspondingly diminished, so that now the western pioneer or farmer's boy can equip himself with traps of far better quality than the weak and clumsy article in former use, and at much less price. The influence of these little utensils, now so widely used, on the progress of settlement, civilization and comfort, will occur to every observer. The first invaders of the wilderness must have other resources for immdiate support than are offered by the cultivation of the soil. These are present in the valuable peltries of fur-bearing animals which are the occupants of the soil in advance of man. Hence the trap for securing them, going before the axe and the plow, forms the prow with which iron-clad civilization is pushing back barbaric solitude; causing the Bear and Beaver to give place to the wheat field, the library and the piano. Wisconsin might, not inappropriately, adopt the steel trap into her coat-of-arms and those other rising empires of the west—Colorado, Nebraska, Montana, Dakota, Wyoming and Idaho—have been in their germ and infancy suckled, not like juvenile Rome by the Wolf, but by what future story will call the noted Wolf-catcher of their times—the Oneida Community "Newhouse Trap."

The NEWHOUSE Trap is universally admitted to be the BEST TRAP IN THE WORLD. It is fully warranted in every respect, and any part proving defective will be replaced by us free of charge. This trap has held its place in the estimation of professional trap-

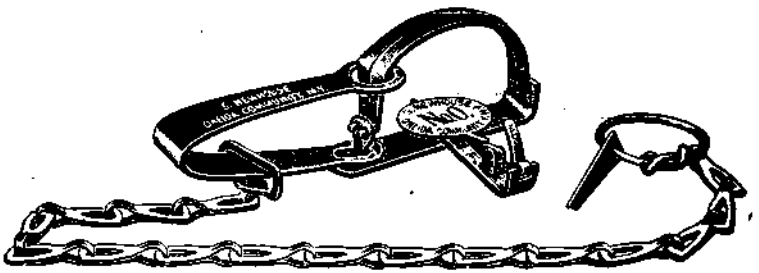
pers for the past fifty years. They cheerfully pay the slight extra cost for the "Newhouse" for the sake of having a perfectly reliable trap, which is sure to hold the game. Every trap is furnished with a swivel and chain of suitable length and strength.





Meeting a Grizzly

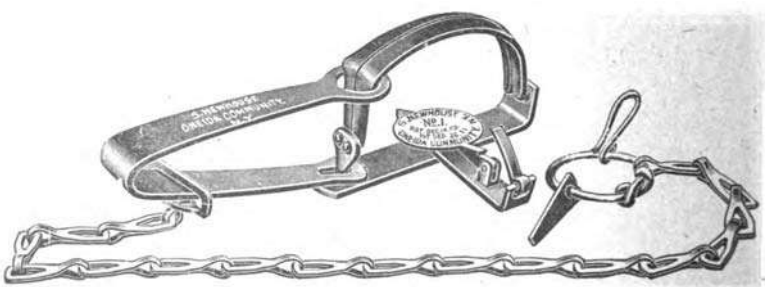
NO. 0 NEWHOUSE TRAP



Spread of Jaws, 3½ inches

This, the smallest Trap we make, is used mostly for catching the gopher, a little animal which is very troublesome to western farmers, and also rats and other vermine. It has a sharp grip and will hold larger game, but should not be overtaxed.

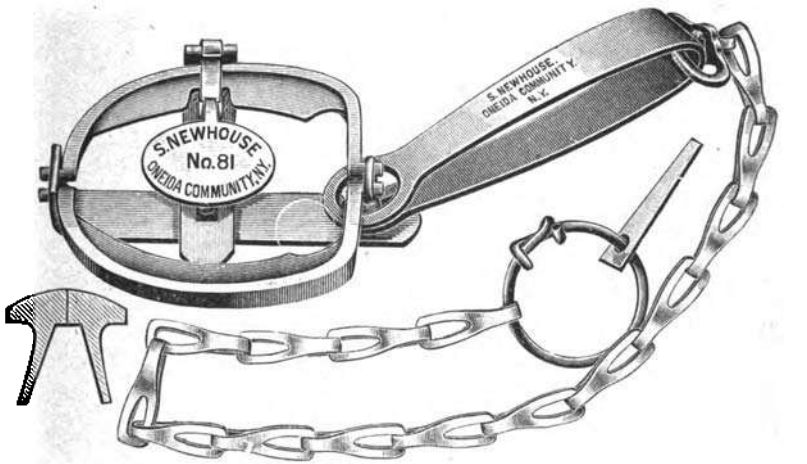
NO. 1 NEWHOUSE TRAP



Spread of Jaws, 4 inches

This Trap is used for catching muskrats and other small animals and is sold in greater numbers than any other size. Its use is well understood by professional trappers and it is the most serviceable size for catching skunks, weasels, rats and such other animals as visit poultry houses and barns.

NO. 81 AND 81½ NEWHOUSE TRAP



Spread of Jaws, No. 81, 4 inches; No 81½, 4⅜ inches.

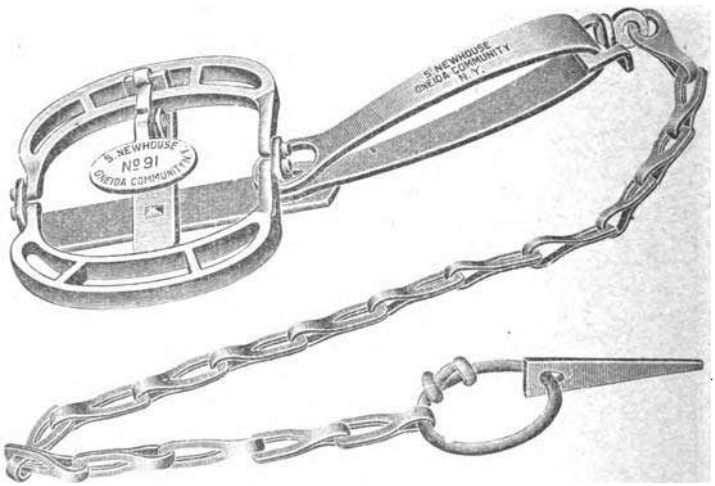
Occasionally animals free themselves from traps by gnawing their legs off just below the trap jaws where the flesh is numb from pressure. Various forms of traps have been experimented with to obviate this difficulty. The Webbed Jaws shown above have proved very successful in this respect.

Noting the cross-section of the jaws, as illustrated at the left, it is plain the animal can only gnaw off its leg at a point quite a distance below the meeting edges. The flesh above the point of amputation and below the jaws will swell and make it impossible to pull the leg stump out of the trap.

No. 81 Trap corresponds in size with the regular No. 1 Newhouse and the 81½ to the regular No. 1½.

NO. 91 AND 91½ NEWHOUSE TRAP

DOUBLE JAWS



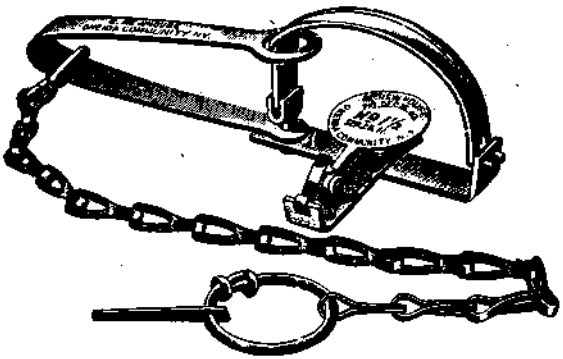
Spread of Jaws—91, 5¼ inches; 91½, 6¼ inches

The double jaws take an easy and firm grip so high up on the muskrat that he cannot twist out. A skunk cannot gnaw out either.

These traps are especially good for Muskrat, Mink, Skunk and Raccoon.

All parts of the No. 91, except the jaws, are the same size as the regular No. 1 Newhouse, while the 91½ corresponds to the regular No. 1½.

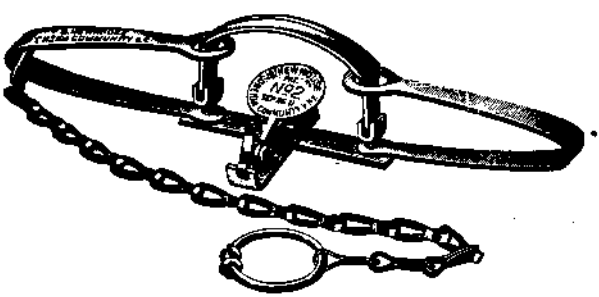
NO. 1½ NEWHOUSE TRAP



Spread of Jaws, 4⅞ inches

This size is called the Mink Trap. It is, however, suitable for catching the Woodchuck, Skunk, etc. Professional trappers often use it for catching Foxes. It is very convenient in form and is strong and reliable.

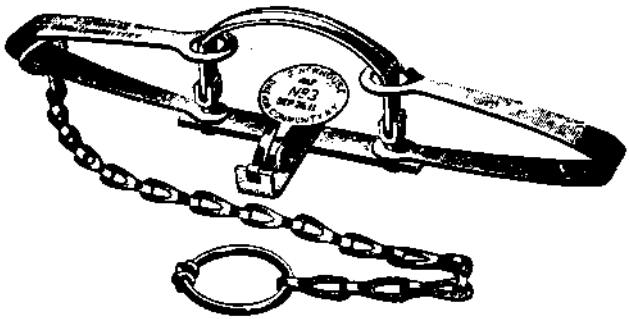
NO. 2 NEWHOUSE TRAP



Spread of Jaws, 4⅞ inches

The No. 2 Trap is called the Fox Trap. Its spread of jaws is the same as the No. 1½, but having two springs it is, of course, much stronger.

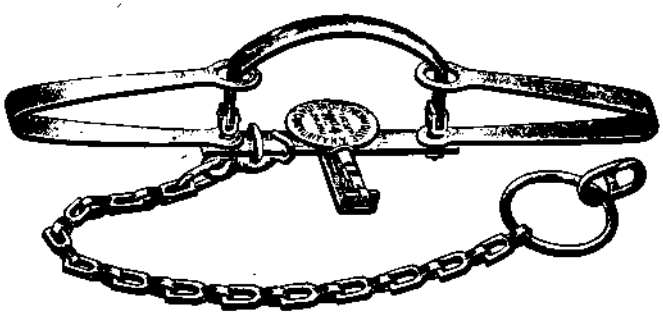
NO. 3 NEWHOUSE TRAP



Spread of Jaws, 5½ inches

This, the Otter Trap, is very powerful. It will hold almost any game smaller than a bear.

NO. 4 NEWHOUSE TRAP



Spread of Jaws, 6½ inches

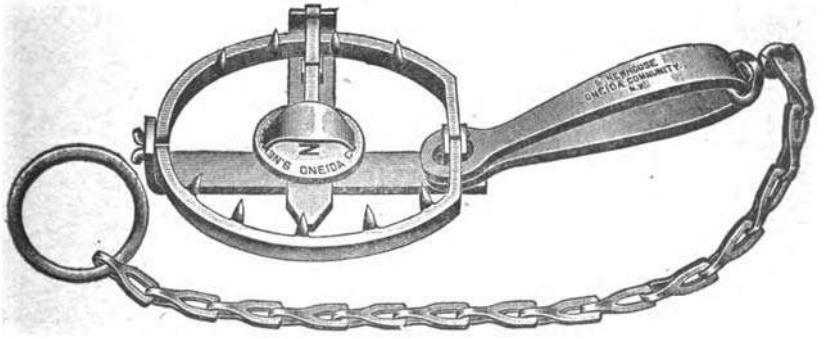
This is the regular form of Beaver Trap. It is longer than the No. 3 Trap, and has one inch greater spread of jaws. It is a favorite with those who trap and hunt for a living in the Northwest and Canada. It is also extensively used for trapping the smaller Wolves and Coyotes in the western stock raising regions.

NO. 2½ NEWHOUSE TRAP

Spread of Jaws, 5 inches

The No. 2½ Newhouse Trap is a Single Spring Otter Trap. It is used more especially for catching Otter on their slides. For this purpose a thin, raised plate of steel is adjusted to the pan so that when the trap is set the plate will be a trifle higher than the teeth on the jaws. The spring is very powerful, being the same as used on the No. 4 Newhouse Trap. The raised plate can be readily detached if desired, making the trap one of general utility.

NO. 3½ NEWHOUSE TRAP



Spread of Jaws, 6½ inches

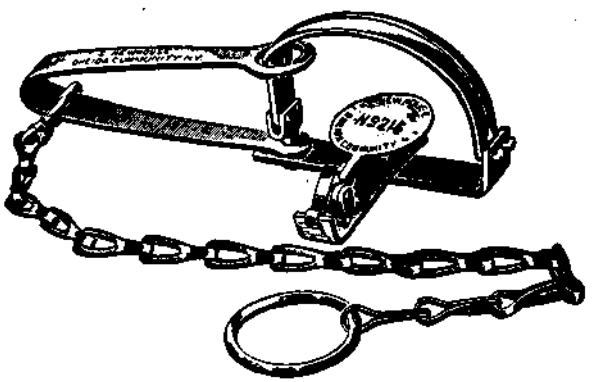
In some localities the Otter grows to an unusual size, with great proportionate strength, so that we have been led to produce an especially large and strong pattern. All the parts are heavier than the No. 2½, the spread jaws greater and the spring stiffer.

NO. 21½ NEWHOUSE TRAP

Single Spring. Same as a No. 2½, but without Teeth or Raised Plate

NO. 31½ NEWHOUUSE TRAP

Single Spring. Same as No. 3½ but without Teeth or Raised Plate

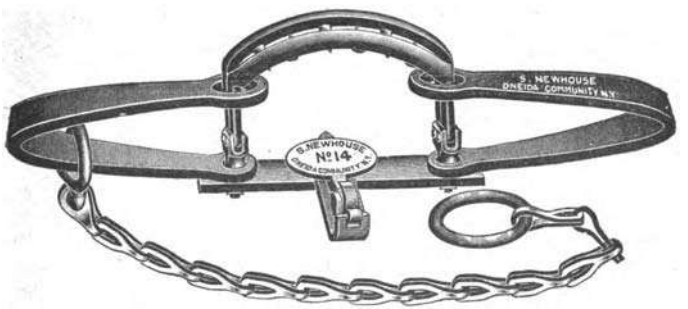


Spread of Jaws—No. 21½, 5¼ inches; No. 31½, 6½ inches

This trap is the largest smooth jaw, single spring size that we make. Professional trappers will find them especially valuable when on a long trapping line as they are more compact and easier to secrete than the large double spring traps. The springs are made extra heavy.

NOTE—The 21½ is Practically a single spring No. 3, and the 31½ a single spring No. 4.

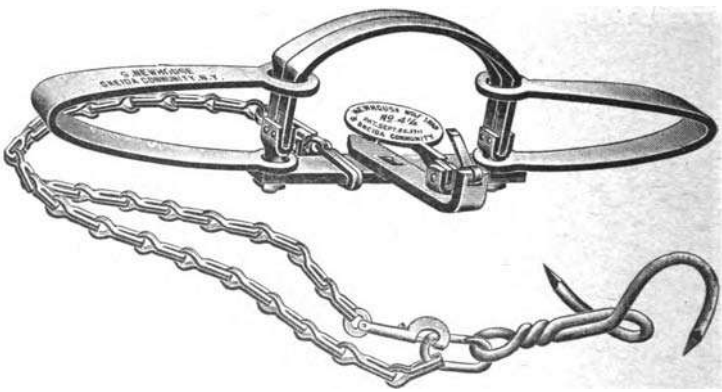
NO. 14 NEWHOUSE TRAP



Spread of Jaws, 6½ inches

This trap is the same in size as the No. 4 Beaver, but has heavier and stiffer springs and offset jaws which allow the springs to raise higher when the animal's leg is in the trap and is furnished with teeth sufficiently close to prevent the animal from pulling its foot out.

NO. 4½ NEWHOUSE TRAP

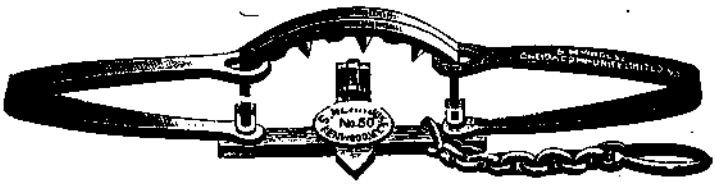


In response to a demand for a new model of the Newhouse Trap especially adapted to catching Wolves, we have perfected a trap which is numbered 4½ and will be called the "Newhouse Wolf Trap."

This trap has eight inches spread of jaw, with other parts in proportion and is provided with a pronged "drag," a heavy snap and an extra heavy steel swivel and chain, five feet long, warranted to hold 2,000 pounds. The trap complete with chain and "drag" weighs about nine pounds

For a full description of the the latest and best methods for using these Wolf Traps, send a two-cent stamp for our illustrated circular on "How to Catch Wolves with the Newhouse Wolf Trap," by Ernest Thompson-Seton, the well known artist, author and trapper of Toronto, Ontario.

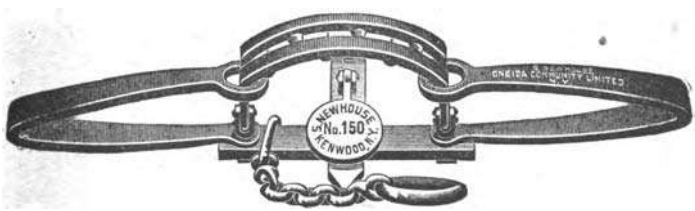
NO. 50 NEWHOUSE TRAP



Spread of Jaws, 9 inches

This trap is intended for catching small size Bears. In design it is exactly like the Standard No. 5 Bear Trap, only that the parts are all somewhat smaller. Weight, 11¼ pounds each.

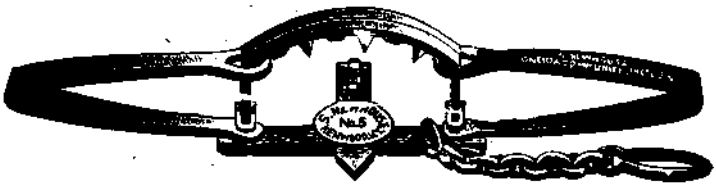
NO. 150 NEWHOUSE TRAP



Spread of Jaws, 9 inches

This Trap is identical with No. 50 excepting that the jaws are offset, making a space five-eighths between them. This allows the springs to come up higher when the Bear's foot is in the trap and thus secure a better grip. Also there is less chance of breaking the bones of the foot. Weight, 11¼ pounds each.

NO. 5 NEWHOUSE TRAP

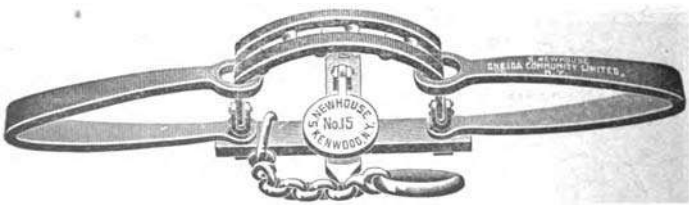


Spread of Jaws, 11¼ inches.

This trap weighs nineteen pounds. It is used for taking the common Black Bear and is furnished with a very strong chain.

NO. 15 NEWHOUSE TRAP

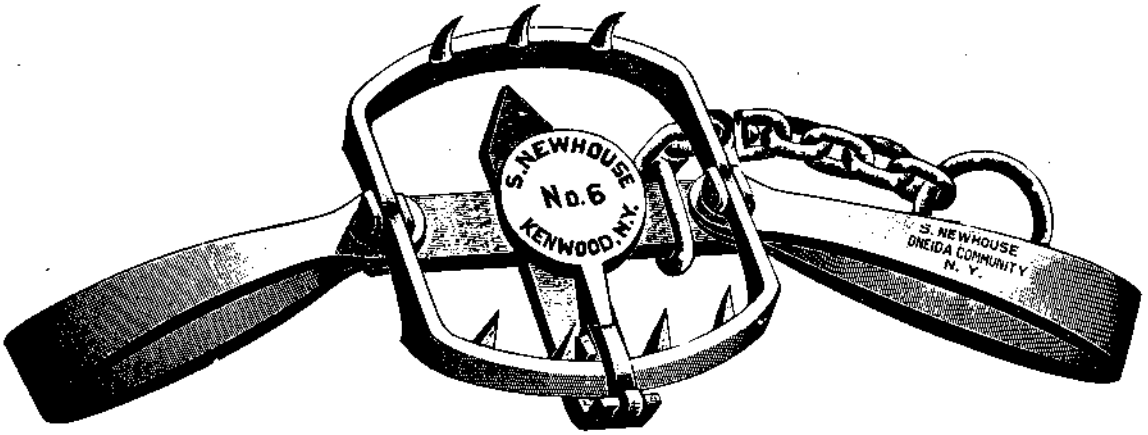
WITH OFFSET JAWS



Spread of Jaws, 11¾ inches.

To meet the views of certain hunters whose judgment we respect, we designed a style of jaw for the No. 5 trap, making an offset of three-fourths of an inch, so as to allow the springs to come up higher when the Bear's leg is in the trap. This gives the spring a better grip. Customers wishing this style will please specify "No. 15."

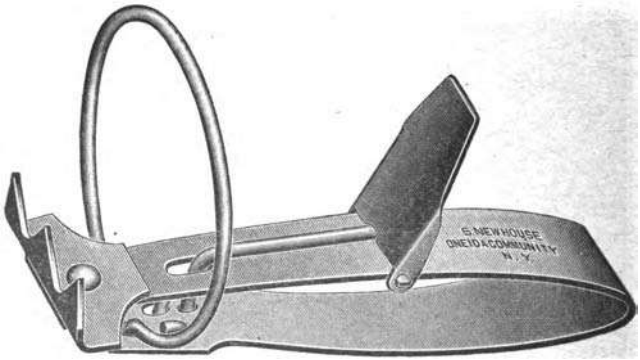
NO. 6 NEWHOUSE GRIZZLY BEAR TRAP



Spread of Jaws, 16 inches. Weight, complete, 42 pounds

This is the strongest trap made. We have never heard of anything getting out of it when once caught. It is used to catch Lions and Tigers as well as the Great Grizzly Bear of the Rocky Mountains.

NEWHOUSE GOPHER TRAPS

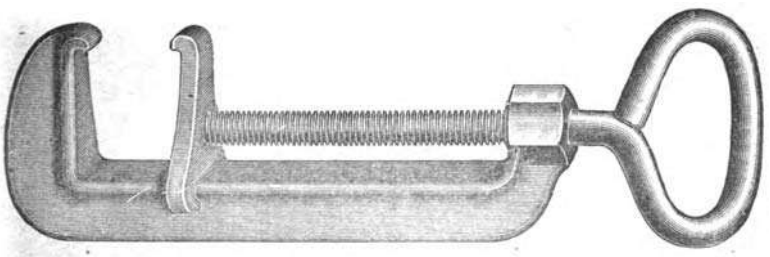


In making this trap we have adapted the Newhouse Steel Spring to the service of catching Gophers. This very important part of the trap is made exactly as are our regular Newhouse Game Trap Springs. It is lively and powerful, for it is carefully tempered. It is thoroughly tested and stamped with our name and is fully warranted.

The method of setting the Newhouse Gopher Trap is very simple and convenient, as will be seen from the illustration and adds materially to the satisfaction of the user. Packed in pasteboard boxes holding one dozen each.

THE NEWHOUSE CLAMPS

FOR SETTING TRAPS



Every trapper knows how difficult it is to set a large trap alone in the woods, especially in cold weather, when the fingers are stiff, and the difficulty is greatly increased when one has to work in a boat. One of these clamps applied to each spring will, by a few turns of the thumbscrews, bend the springs to their places, so that the pan may be adjusted without difficulty. No. 4 Clamp can be used on any trap smaller than No. 4½. No. 5 and 6 are strong clamps, carefully made and especially adapted to setting the large traps, Nos. 4½ to 6. They dispense with the inconvenient and dangerous use of levers. With them one can easily set these powerful traps. These clamps are also useful about camp for other purposes.

Price List of Newhouse Traps

No.		With Chains Per Doz
0	Rat or Gopher	$ 4 25
1	Muskrat	5 00
81	Web Jaw, Skunk or Mink	5 50
91	Double Jaw, Muskrat, Skunk or Mink	6 00
91½	Double Jaw, Muskrat, Skunk or Mink	9 00
1½	Mink	7 50
2	Fox	10 50
3	Otter	14 00
4	Beaver or Wolf	16 50
2½	Otter with Teeth	16 50
3½	Otter, Extra Large, with teeth	18 50
21½	Same as 2½, but with smooth jaw	13 00
14	Beaver, with offset jaws, with teeth	17 50
4½	Wolf	40 00
50	Small Bear	85 00
150	Small Bear, offset jaws, with teeth	85 00
5	Black Bear	120 00
15	Black Bear, offset jaws, with teeth	120 00
6	Grizzly Bear	280 00
	Gopher, per gross	25 00

TRAPPERS' BOOKS

Mink Trapping--Tells all about trapping this valuable fur bearer—land, water, blind sets. About 200 pages, 50 illustrations, cloth bound, price, postpaid 60 cents.

Fox Trapping--Contains methods of best trappers in America. About 200 pages, 50 illustrations, cloth bound, price postpaid 60 cents.

Wolf and Coyote Trapping--Is an up-to-date Wolf Hunter's Guide, containing successful methods of experienced wolfers. Contains 252 pages, 44 illustrations, cloth bound, price postpaid 60 cents.

Science of Trapping--Describes fur-bearers, their nature, habits and distribution, with practical methods of capture. Contains 245 pages, 40 illustrations, cloth bound, price postpaid 60 cents.

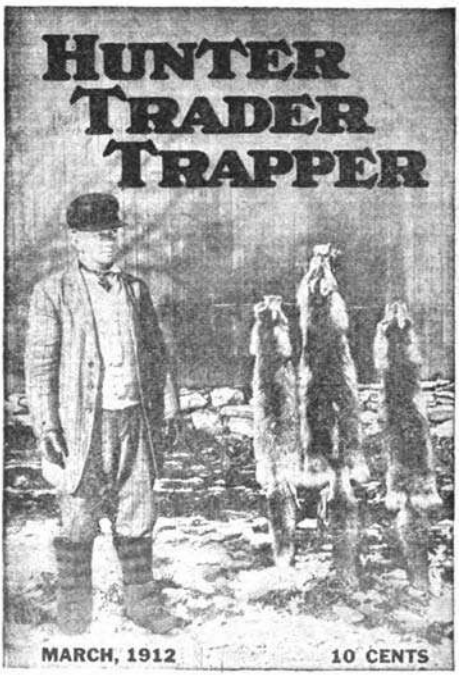
Steel Traps—Describes the various makes and tells how to use them; also chapters on care of pelts, etc. Contains 333 pages, 130 illustrations, cloth bound, price postpaid 60 cents.

Deadfalls and Snares—Tells how to build pole, log, stone deadfalls; also snares. Contains 232 pages, 84 drawings and illustrations, cloth bound; price postpaid 60 cents.

Fur Farming—A book of information on raising fur-bearing animals, telling all about enclosures, breeding, feeding, habits, care, etc. Contains 237 pages, 35 illustrations, cloth bound, price postpaid 60 cents.

A. R. HARDING, Publisher, Columbus, O.

TRAPPER'S MAGAZINE



THE HUNTER TRADER-TRAPPER is the oldest, largest and best magazine of its kind in the world. The Editor wants you to read a copy. He knows you will like it for he has had about 30 years experience with traps, guns, dogs, furs, etc., so that the magazine is up-to-date, illustrated, 128—200 pages, issued monthly about Steel Traps, Deadfalls, Snares, Baits, Scents, Trapping Secrets, Skinning and Stretching Furs, Raw Fur Prices London Sale Reports, Fur Farming, Ginseng, Coon and Fox Hunts, Big Game Hunting, Training Night Hunting Dogs, etc. The Editor has also written many books on Hunting, Trapping, Fur Farming, Ginseng Growing, Camping, Fishing, etc. To show you what a great magazine it is a copy together with 32 page booklet giving description of books and magazines sent for 10 cents.

HARDING, Publisher, Columbus, O.

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