

## TRAPPING AND TAXIDERMY.

Every one who camps out has more or less desire to gratify the instinct for hunting and many wish to preserve the trophies of their skill. The best traps to catch dangerous animals or those which are sought for their fur only, are the ordinary steel traps, which are made of various sizes and can be bought at most hardware stores. Another murderous trap is the figure-four trap, which every boy knows how to make. Traps for catching animals alive by means of bait and a swinging door opening only inward, are made of wire and wood and may be easily constructed by the ingenious.

### TAXIDERMY.

#### I. *Skinning and Preparing.*

Taxidermy is the art of arranging or manipulating the skins of animals; practically, the removal and preservation of skins, which are either placed, unmounted, in cabinets, for examination and study, or subjected to the more complex arrangement of stuffing, mounting, and adjusting, to counterfeit as near as possible nature's likeness, and to express the characteristic habits of the individual.

Taxidermy calls for peculiar abilities. To be eminent in the art one must possess such faculties as will naturally place him higher. He must have the artistic faculty. It is not enough that he perform the simple mechanical manipulations; there are higher possibilities. An eye for modelling is requisite. After the skin is preserved and ready for mounting, the more the operator is possessed of the faculty that makes the sculptor, the nearer he will succeed in modelling skins that express the characteristic habits of position.

It is quite within the reach of the amateur operator to become skilled in the various manipulations required, and an ordinary amount of mechanical ability will prove sufficient for very pleasing results. Select a large bird or small quadruped for practice—a hen, we will say. The tools required are readily suggested and easily procured. Any convenient knife, something after the shape of a paper-cutter or scalpel; a pair of stout, short-bladed shears; a lighter pair; forceps, which are exactly like those used by surgeons for dissecting; and a longer pair, with handles. One might add to them a large skinning-knife, a pair of tow pliers, and a large and a small file.

Having the bird in hand, proceed to plug with cotton all holes made by shot, and the natural openings, to prevent blood or injecta from soiling the plumage. In the field, when specimens are reserved for mounting, they should be placed in a cone of paper, head downward, the tail being nearly covered by folding a portion over it.—We now place the bird upon the table, and separate the feathers, when they are sparsely set, in a line with the breast-bone. Make an incision through the skin only; have at hand a dish of oatmeal or plaster of Paris to apply freely to grease or blood, that the feathers may not be soiled. The edges of the incision are apt to curl inwards; by treating them thoroughly with the meal they will not do this.

The incision having been completed from the lower end of the breast-bone to the vent, careful manipulation with the forceps and fingers, and at times with the back of the knife, will suffice to remove the skin on both sides as low down as convenient. Place the thumb and forefinger of your right hand over the skin of the breast, press downward, and you will expose the whole breast to the neck. Now thrust a stout hook through the breast, beneath the "merry-thought," or in any position to sustain a strong pull; suspend the hooked body from above, as you can then the more conveniently handle it. Now sever the neck. Lay hold of a wing, pushing down, at the same time opening a place under the wing by aid of your fingers, in which place your scissors, and cut off at the shoulder.

Having cut off both wings, much care is requisite in separating the skin from the back. Here is the most delicate work; use great care as the loins are reached. Now take hold of a leg at the lower joint and press the skin down carefully with the fingers; insert the scissors at the joint (the knees, properly), and sever.

Carefully force down the skin to the base of the tail and cut off; the oil sac and adhering flesh should be removed also. The legs may now be stripped of all flesh and fat—indeed, all fat should be carefully left on all parts of the body, so that the skin may be as free as possible from it. The wings may now be stripped, care being taken to use the fingers in forcing down the skin. Remove the flesh from the bones of the wings and legs. Do not separate the shafts of the feathers—which are now seen adhering to the bone. In large birds the wing may be conveniently opened from the outside; an incision made on the under side will allow room to remove the flesh.

Having now removed the body, and properly cleaned the wing and leg bones, we may very easily strip the skin down from the neck. Before going this,

introduce the hook into the severed end of the neck, and suspend the skin, head downward, from above. The skin will leave the neck very readily, but as soon as the skull is reached manœuvre carefully. Patient manipulating with the fingers will remove the skin from nearly all birds' heads. Owls and a few other birds will require a slit made in the neck at this point, which may be sewed up before the skin is turned. The ear openings are first encountered; the membrane which covers them should be carefully pushed off the skull by the finger-nail, or a blunt stick; little cutting is required. Then the eyes: carefully push the skin away until the eye-socket is completely exposed. The membrane which holds the skin in place around the eyes should be separated so skillfully as to leave the eyelids of the skin perfect in their borders. Push the skin farther down towards the bill, and then remove the eyes and all flesh that can be separated from the skull. Continuing the skinning to the base of the bill, the under jaw should be denuded of its flesh; the tongue and all soft parts in this region removed. The base of the skull should now be cut through, removing a part of the roof of the mouth; the brain is now entirely removed, and all other soft parts.

The preserving process is now in order. Have a wide-mouthed bottle of pure arsenic, which should be plainly labelled POISON!—and kept securely stopped, and away from all other articles. With a common painter's "sash tool" or brush apply the dry arsenic freely to every fleshy part that can be reached. Begin with the head. Apply the arsenic to the eye-sockets very freely, to the interior of the skull, and then fill these parts with cotton. The mouth and jaws will require a thorough poisoning. Apply the poison freely to every other part, working it well into the wing portions and into the legs. Arsenic is not deleterious, used in a proper manner; it is deadly poison taken into the stomach. The worst that happens to those who use great quantities, or handle it with abraded or cut hands, is a slight soreness in the more tender parts, as under the nails; this is avoided very considerably by oiling the hands, or washing them in glycerine. The arsenic soaps are prized by some, but we much prefer the dry powder, as being more convenient and more efficient.

The legs of the bird and the bill should be varnished, to preserve them from the attacks of insects.

The skin is now ready to turn into its proper shape, when the feathers must be smoothed into place, and if the skin is to be only used for examination or study, it may be filled out with cotton. Before this is done the wing bones should be tied, on the inside, to each other, leaving a space between the ends of about an inch—or sufficient to allow the wings to assume a natural position. The leg bones should be wrapped with cotton. To make a neat cabinet specimen, a piece of pine wood is wrapped with tow or cotton, and the upper end passed on to the skull; the lower end projects a little to allow the specimen to be handled without disturbing the plumage. The skin is now neatly brought into shape and sewed.

White feathers that are soiled may be cleansed by washing in soap and water, and repeatedly dried off by sprinkling with plaster of Paris.

To skin and preserve a quadruped the processes are so similar that any one having sufficient skill to do the one may successfully cope with the other.

Our specimen is now nearly filled with a temporary body, the skin having been thoroughly poisoned and preserved, and made pretty surely proof against the attack of insects, and not subject to decomposition; this indefinitely, if proper manipulation is observed.

In this condition it is useful for study, and is in the required state for the cabinet. Should the specimen, however, at any time, be selected to "set up," it will be necessary to further prosecute the study from one of the manuals on the subject.

## II. *Insect Taxidermy.*

At the Museum of Natural History one may see beautiful work of this kind, each species of insect being illustrated by a prepared specimen of the various phases in which it appears, from the egg to the perfect form. The plant on which the insect feeds is arranged with the specimens, together with the nest that each makes. The worms are emptied of their contents and preserved with much care, showing the various stages; many of them are of brilliant colors, and retain a very natural appearance. The cocoons and the silken or other products are also shown. In some instances spiders' nests prove to be made up of tough and beautiful silk.

The art is within the reach of the young amateur, and a tolerable exercise of ingenuity will produce very interesting results. The principal manipulation is with the worms or larvæ. You wish to preserve, for example, one of the great green worms that you find eating your grape-vine. Make an incision across the posterior portion, just sufficient to include the end of the alimentary canal; press the contents of the worm out through the opening, gently, and with special care in the case of the worms that have hairy or other appendages. Though seemingly a hazardous thing to do (as respects the integrity of the specimen), the most delicate hairy caterpillars may be very successfully emptied of their contents. Indeed, they are by this process so cleaned internally that, practically, they are skinned, and you have the skin only now to deal with.

Select a good straw, of size proportioned to the specimen; this is to be used as a blow pipe, and should, therefore, be a whole one, and several inches in length.

Introduce the straw carefully within the cut end of the worm, and tie the end around the straw with fine silk. If the operation of squeezing has been successful, it remains to inflate the body for preservation. Prepare a dish of live embers, and over these hold the specimen—using great care in the degree of heat applied. While holding the worm in this way, keep it inflated. The form which the insect is to assume for the cabinet should be considered while this drying process is going on. Some light wooden frame, such as will be readily suggested to the operator, will often be of service to hold the specimen in the proper position. Some worms may require to be curved, or put into a shape characteristic of them while living. Attention to these points will contribute greatly to the value and pleasing appearance of the specimen. The straw, after the drying, is cut off near the body, as it is convenient to allow a small portion to project outside, so that the specimen may be pinned to the cabinet through it, thus avoiding the injury that results from passing the pin through the body.

The specimen is now complete, unless we choose to adopt some method of poisoning it. Corrosive sublimate, which is sometimes used, is likely to injure the colors. A strong arsenical solution may be applied with a brush, safely, as regards the colors. Caterpillars prepared in this manner preserve their color and form nearly perfect, the hairs and other appendages retaining a remarkably natural appearance, which, of course, enhances greatly the beauty and usefulness of an entomological cabinet.

An extended field is open to any one who may practise this branch of taxidermy.

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## WRESTLING.

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IN the judgment of a large number of athletes wrestling is considered superior to any other form of exercise, by reason of the intense personal antagonism in which one man is pitted against another man. Dr. J. K. Shell, a recognized authority on wrestling, says, "That a man's muscle, brawn, endurance, perception, co-ordination, reasoning and quick adaptability are in direct opposition to similar functions and attributes of his antagonist." In wrestling more than in any other exercise, we have the pushing of weight against weight—the lifting of a live resisting weight; the continually applied *positive* forces and continuous *negative* resistance thus bringing into action almost every known muscle.

The desire to engage in wrestling seems to be instinctive in healthy men and boys. As an exercise it is an ideal one, with the constantly changing positions; the meeting of complex situations *instantly* thus developing a quickness of hand and eye, keeping a man ever upon the alert; speed and accuracy of movement as well as the ability to relax as the occasion allows or demands. Wrestling as well as boxing is a practical system of self-defence, cultivating both courage and self-reliance. Moreover, the heart and lungs as well as the abdominal organs receive great benefit by the very active movements in wrestling. Whereas, sparring and fencing may seemingly be quicker games, depending upon sight, quick control, and coördination, yet both of these games are in a measure one-sided and unsymmetrical. There is much to commend in all these exercises, boxing, fencing, and wrestling, yet the latter seems to develop a man better than boxing,