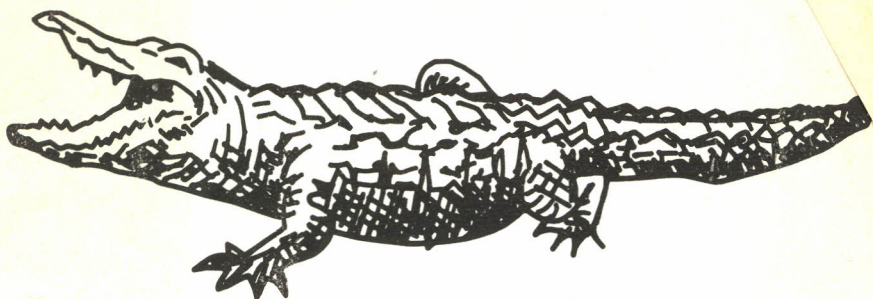


Preparation of  
Reptile Skins  
CROCODILE  
LIZARD  
SNAKES

By K. W. T. PRINCE





## PREPARATION OF REPTILE SKINS

**R**EPTILE skins, such as crocodile, alligator, lizard and snake, make very attractive and durable leather. Unfortunately, owing to faulty preparation, reptile skins often reach the tanners in too bad a condition to tan. The usual blemishes are cuts, gouge marks, bad shape, scale slip and putrefaction. Damage due to delayed flaying or dragging over rough ground is also common. So is damage due to overdrying or over-exposure to the sun, to distortion and overextension, or to the action of beetles after the skins have been dried.

If first-class material is to be obtained, the correct methods must be used to catch and to collect reptile skins.

## PREPARATION OF SNAKES AND LIZARDS

The catching and killing of snakes and lizards must be done without damage to the skins. Spearing a python and battering it to death with sticks and stones will not secure a perfect skin.

Flaying should start immediately before decomposition can take place, and proper ripping lines should be used before the removal of skins begins. Fleshing and scraping off any loose meat, fat or tissue and removing blood must start immediately after the skin has been taken off.

Lizards and snakes are opened down the belly, from tip of the chin to the end of the tail; they are not opened on the back. Only iguana and chameleons should be opened along the back; and their legs are cut along the centre line on the lower side so as to get the full spread.



## DRYING

Lizards or snakeskins can be dried either on a frame wire mesh or on a board or plank. The frames are prepared from light poles without the use of rails. They are held together by bark or twine, so that they can be easily adjusted to the size of the skin. Tiny holes are made on the edge of the skin at intervals of less than 4 inches to take string. The skin is stretched in the frame, while care is taken not to apply too much tension. Drying on a plank can be done in the following way.

The skin, flesh side up, is nailed to the board or plank with aluminium nails. These are  $\frac{3}{4}$  to  $1\frac{1}{4}$  inches long, and they are allowed to remain projecting above the skin. Then the skin is raised from the board and eased up to the head of each nail. This makes a clear space of about  $\frac{1}{2}$  inch under the skin, and it allows the air to circulate beneath.

Care must be taken that a direct sun does not scorch the skin. On all occasions, therefore, it is better to dry in the shade.

## SALTING

Very good results are obtained when salting is used in place of air-drying. Only fine salt should be used for salting lizard and snake skins, for the crystals of coarse salt can cause damage by piercing into the corium.

If the skin is to be used within a week, one salting is sufficient. When it is necessary to preserve skins for a longer period, however, a further application of salt is sometimes advisable before drying out.

Salting should start immediately after the meat has been scraped from the skin; and the salt is rubbed evenly into the flesh side. The skins are then kept flat, so that the brine can drain off easily. Any excess salt can be removed after 24 hours, and this avoids blood contamination, if the skins were badly washed. The skins can be dried after the first salt has been taken off. They are then said to be "dry salted."

The second salting of wet stock starts the next day. First, the old salt is shaken out. If it has formed a crust, this can be broken by gently rubbing the skin. New clean, fine salt is evenly rubbed into the surface again, and the skin is rolled, flesh side inwards, from the tail to head, so that a neat bundle is formed. Throughout the salting it is essential to keep the stock in a wet condition by covering it with wet bagging.

Wet salted lizard and python skins are best shipped in wooden casks.

Dried goods in bales must be protected against beetles. Sprinkling with naphthalene has been used for many years. The use of modern insecticides in the form of DDT or gammexane powders, however assures a full protection.

## CROCODILES

Few workers realize that crocodile skins must be treated with greater care than lamb skins. Prolonged and direct exposure to the sun is injurious to sheep or goat skins, but even a brief exposure rapidly damages crocodile skins.

Crocodile bellies are valuable. Yet many factors make them susceptible to damage. For this reason, a brief description of the methods used to obtain the best raw material is included.

Various methods are employed for capturing crocodiles. They depend on the local conditions and on the skill of the hunter. Whether shooting or netting, harpooning or noosing, drowning with a weight or poisoning, blinding with a torch or pole-axing, trapping or baiting on a hook is the chosen method, a number of rules must be observed.

1. The belly part of the skin must suffer no damage. Wounds caused by spears, harpoons or bullets, or any other injurious which occur during the killing and securing of the animal, must be restricted, if possible, to the head and back.

2. Ideally, the crocodile should be removed from the water immediately. The carcass should not be left in the water for more than eight hours and certainly not until it "blows" and floats to the surface; for the skins from these carcasses, even though they show no substantial damage during flaying, may be useless to the tanner.

3. The carcass should be dragged out of the water up-side-down, so that the back, and not the belly, comes into contact with the ground.

4. No time should be wasted flaying, fleshing and salting. From the moment the carcass has been landed until the skin is salted, speed is essential. This is not only because there is a danger of putrefaction, but also because the skin dries out and hardens rapidly and will resist the absorption of salt.



5. The skin should never be exposed to direct sunlight; for the sun dries too rapidly, and the scales take on an oily transparent appearance. This condition interferes with tanning. Only the belly part of the crocodile can be converted into leather, for the back is covered with very hard bony scales and it is horny. The backs, however, are sometimes used for decorating such articles as handbags and cigarette cases.

## SKINNING

The hunter should aim at obtaining a properly shaped belly skin—from the snout to the tip of the tail including the legs. (Figure 1)

The basic incisions, which are called “ripping lines,” should be made this way:

**Head:** Separate the skin on the neck from the body under the hard disc on the top of neck. Cut downwards inside the jaw, near the jawbone and along the lips until the two cuts meet at the front. (See A on Figure II)

**Body:** Make two long incisions from the back of the head and along the body. These cuts should start at the initial cut and end at the tail fin. Two rows of scutes should be left on each side (See B on Figure II). This is important, because crocodile skins are sold by the width across the belly (Figure III).

**Legs:** Each leg should be opened in the following way. Hold the leg firmly at the “wrist” and pull it from the body; make an incision in the middle of the top of the leg from the main ripping line over the point of the elbow to the “wrist” (See C on Figure II); cut around the “wrist” as near as possible to the foot (see D on Figure II). This produces a piece of skin which has light coloured scales surrounded by an even dark edge. It is most important, when opening up the legs, to cut through the skin over the point of the elbow; otherwise a “pocket” is formed. This defect lowers the price on grading.

**Tail:** It is possible to get the skin off the tail by working downwards from the main ripping line. It is better, however, to gain access by cutting out a triangle; the line between the hind legs is the base of the triangle, and the tip of the tail is its apex. Remove the triangle, and this will facilitate access to the tailpiece. On large crocodiles, the last 6 to 8 inches of the skin from the tail can be pulled off. On smaller specimens, however, the skin must be separated with a knife right to the tip.

FIGURE 1

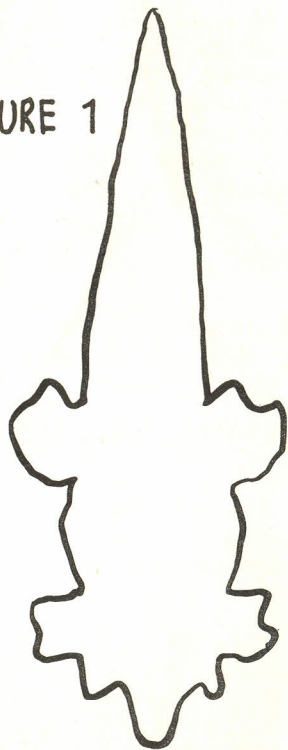
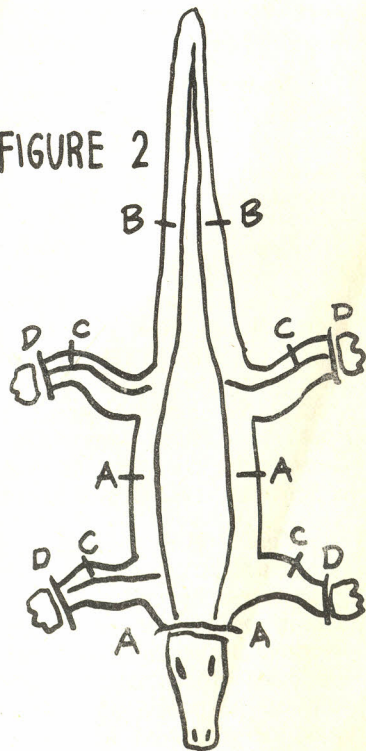


FIGURE 2





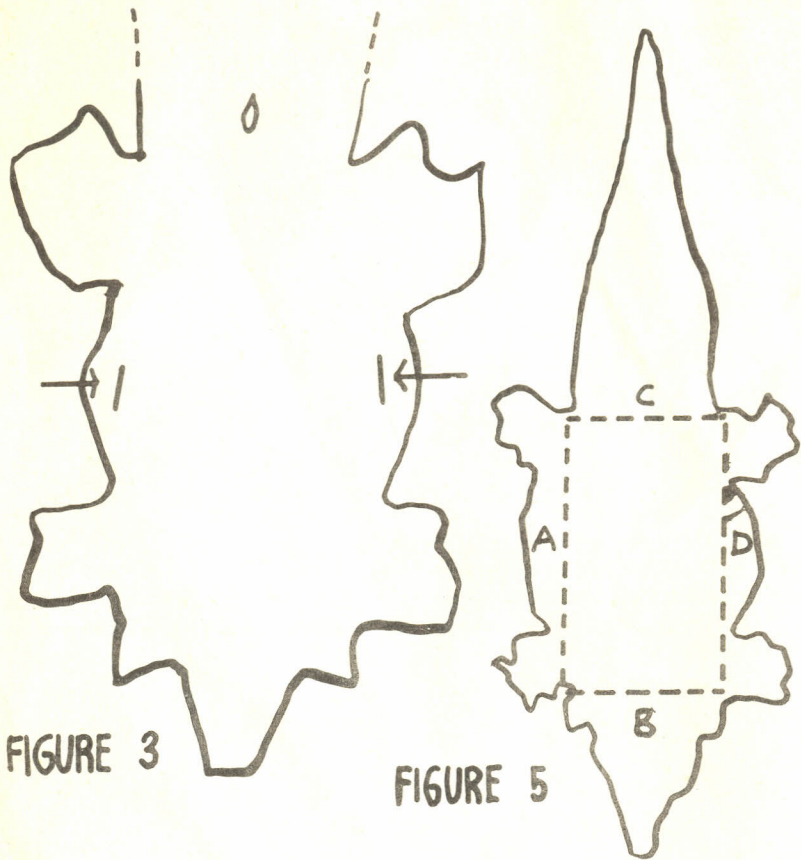


FIGURE 3

FIGURE 5

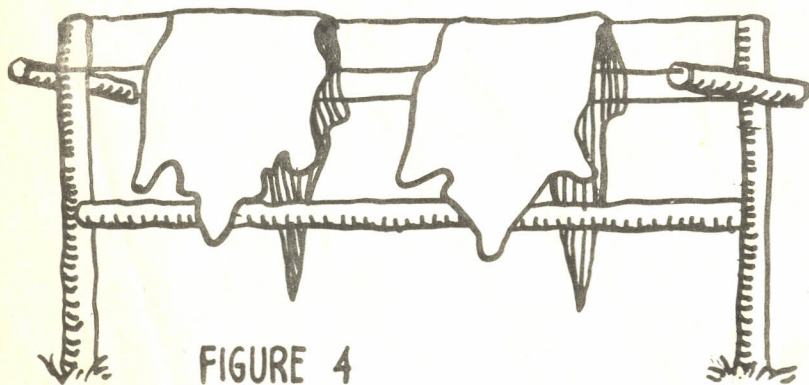


FIGURE 4

When flaying, the skin should be pulled away from the body with one hand; for the knife is used only to cut through the connecting tissue. This eliminates damage by cuts and scores.

## FLESHING

As soon as the skin has been separated from the carcass, it should be placed on a completely flat surface. Any surplus meat, fat or tissue should be scraped or cut off.

## WASHING

Blood and dirt interfere with the salting. The skin, therefore, should be thoroughly washed — or, preferably, scrubbed with a brush — while water from above is poured over it.

## FIRST SALTING

Salting is the most important and intricate operation, and it requires the greatest care. Only fine, clean, dry salt, free from dirt and blood, should be used; for coarse salt does not facilitate penetration. The salt is rubbed very thoroughly and evenly into the wet skin, on the flesh side only.

## DRAINING

By putting the skin in the shade and by draining off the brine, a great part of the skin moisture can be removed immediately after the first salting. The skin can be put over poles or wire, with flesh side uppermost, until dripping ceases. Great care must be taken that no sunlight beats directly on the skin (Figure IV). If, however, a second salting is anticipated, no drying effect whatever should be allowed to take place.

## SECOND SALTING

The draining should not take more than one or two hours. The second salting can then begin. This is a repetition of the process used for the first salting; and the same precautions are taken.



## TRANSPORT

After these two preliminary operations, the skins are taken to a storehouse for final treatment. For transportation, they should be rolled, scales inwards, and there should be a layer of salt between each skin.

## CURING

In the curing process, the old salt is completely shaken off. It may be necessary, however, to examine the flesh, and any superfluous salt should be scraped off. On no account should the skin be placed on earth; it should be placed on a concrete floor or wooden platform. This concrete floor or platform is covered with a layer of 1 to 2 inches of salt, and the first skin is placed, scale side downwards, on the salt; the flesh side is covered with 2 inches of salt. Further layers of skins are added in the same way — that is, a layer of skins, flesh up, covered with a layer of salt. In this way a "pack" not more than 2 feet high is made. If this height is exceeded, damage through pressure may result.

It takes about three weeks to cure the skin and to prepare them for shipment. As the bottom layer of skins cures more quickly, it is advisable to alter their positions after ten days. This is done by placing the top skin on the floor beside the first pack and by building a new pack with the skins in reverse order. The same salt can be used, provided no red coloring is observed. This should not occur if a preservative has been used.

## PACKING FOR SHIPMENT

The skins are first removed from the pack, and the salt is shaken off without beating; for beating may damage them.

Each skin is now evenly covered with a little fresh salt. Rubbing is not necessary because cured skins absorb very little additional salt. Each skin is then folded, as shown in the diagram in figure V. First, the sides are folded along the lines A and D; then the head is folded in along the line B, and finally the tail along the line C. Sufficient salt should be placed in all the folds of the skin.

The skins can now be packed in clean sacks. They are placed tightly, one on top of the other, until the sack is three-quarters full. The sack is then closed and placed in another sack, which is sewn up. In this way, a double thickness of sacking gives the necessary protection against drying out.

Although this method gives good results, crating, in spite of its higher costs, is to be preferred. Care should be taken then no nails penetrate the crate, which should be well lined with sisal-craft or any other suitable material. The rectangular folded (not rolled) skins are packed very firmly so that there is no possibility on any movement which might cause damage by friction. They should be so packed that no space is left, either in the corners, or at the top, before the lid is nailed down. The crate should be strengthened with three or four bands of hoop iron.

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Nairobi 1954. Leather Trade Review 1953.





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