

## Indian Hides and Skins.

By

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One of the most noticeable features of modern industrial development is the great care that is taken to place valuable by-products on the market to the best advantage of the manufacturer.

In India one very valuable by-product of agriculture that the agriculturalist as a rule takes no interest in is the hides and skins of animals that have died from disease or accident.

In the leather trade the skins of larger domestic animals, for example, cattle and buffalos are known as hides whilst those of smaller ones e. g., goat and sheep are called skins. Under the old Indian village system I understand that the death of any domestic animal automatically caused a change in ownership from the original owner to the village scavenger, this being one of the latter's perquisites for the duties performed by him. On this account there was no direct inducement to the owner of livestock to improve the quality of or to prevent damage to the hides and skins of his animals.

Some years ago in speaking to the Society I pointed out the great economic loss to the country due to the branding of cattle. As I am interested in leather manufacture, I naturally looked at this subject from the Leather Manufacturer's point of view and showed how a badly branded hide was worth several rupees less than the unbranded one and thus proved to my own satisfaction that branding, except when done to cure lameness etc., was an economic loss to country. During the discussion that followed a large landowner put his point of view before the meeting, which showed that the conclusion I had arrived at, was in some cases at any rate far from being correct. He pointed out that after all the value of a hide is only a small proportion of the value of a living animal suitable for draught or for milk production. He went on to state that some of the village scavengers, whose income depends chiefly on hides from dead animals were not beyond increasing their income by the judicious use of poison. Naturally

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an animal with a valuable hide was more likely to fall a victim than one whose hide was of less value. He was quite sure that in his case at any rate very heavy branding had a wonderful effect in reducing the deaths of his valuable animals from causes other than old age and accident.

In the case of certain other damages to hides, I do not think there is any doubt that the interest of the breeder and the tanner are identical, especially in the case of damages due to the hides by insects. I will only give a passing reference to the damage done by the warble fly which in many parts of the world does immense damage not only to the hide but also to the animal either by reduction of milk production or by slowing down the rate of growth. It has been definitely shown that it is possible and practicable to get rid of warble entirely by carefully removing the larva from the back of all cattle. In Denmark where anti-warble laws have been passed the number of badly warbled hides has been reduced from 35 to under 15% in the course of two years. Now practically all the warbled hides in that country come from one province where the law has not yet been enforced. In the case of a fairly large island off the coast of Ireland, where the fly was prevalent it has entirely disappeared since an anti-warble campaign was undertaken. We are fortunately, I believe, entirely free from this pest in South India, although it is quite common in some parts of Northern India. Many South Indian animals suffer greatly from various types of biting insects. Of these ticks are one of the most common. This insect does not damage the hide as visibly as does the warble but nevertheless a badly ticked hide has almost always to be classed amongst the poor selections as it is usually very poor in substance and in what is known in the leather trade as "life". That ticks not only irritate animals but cause them to give much less milk or to be able to do much less work has been proved often and I think you will agree with me when I show you a photograph of the same animal when covered with ticks and after two months' treatment by which it was kept free from this insect. There was no difference in the food given to the animal. These photographs are taken from Bulletin 498 published officially by the United States Department of Agriculture. The weight of the animal originally was 730 lb. but afterwards 1015 lb.

It is also undoubted that ticks carry many cattle diseases and that at times many cattle are lost on this account.

I think you will agree with me that any action taken to keep down or entirely get rid of tick would be of very great value to owners of stock as well as the leather manufacturers who finally get the hides or skins.

Even under the old village system of indirect payment the cattle owner does obtain a certain proportion of the value of the hides in the form of labour and I therefore thought when approached by your Secretary that a short paper on Indian Hides and Skins might be of interest to your Society. I am persuaded that anything that can be done to improve the character and quality of Indian Hides and Skins will in the long run benefit India and the Indian owner of cattle.

The collection of hides and skins for export either in the raw or tanned state is a well organised industry, but in addition to this there is a local demand all over India for leather, the chief demand being for leather for well buckets. It is impossible to say how many hides are used annually for this purpose and estimates made by different people vary very greatly. In a paper read a few months ago to the Light Leather Federation in England the number was estimated at one million per annum for the whole of India, whereas Sir Alfred Chatterton writing in 1905 estimated that South India alone used this number. When we consider that over 250 millions of India's population are agriculturists, the first estimate seems exceedingly small and I should think that Chatterton's figures are much nearer the truth. The hides used for well buckets in most parts of India are tanned by village tanners but in South India are often obtained from the larger tanners, who manufacture leather on large scale for export. One of these tanners told me some years ago that he sold over 50,000 tanned hides in the course of the year locally for this purpose.

Anything that can be done to make well bucket leather last longer is of direct interest to agriculture. Oil grease is the most suitable dressing for leather and most users of *kavalais* occasionally give the leather a coat of oil to preserve it. However, few of them know that the oil should be put on the leather whilst it is wet, and that the leather should then be hung to dry in the shade so that the oil dries in as the water dries out. If the leather is first dried and the oil then applied the result is not nearly as beneficial as by the reverse process. Ordinary barktanned leather does not stand high temperature when wet and many *kavalai* trunks are damaged by being hung to dry in the sun or by being thro w

in the wet condition on the hot metal bucket. Dry leather will stand a very much greater temperature than wet. Users of boots should never put them whilst wet in too hot a place. Any heat that the hand cannot comfortably stand will damage wet leather.

The export trade of India in hides and skins has always been divided into two portions. The larger portion is interested in the export of raw hides and skins, the other—chiefly confined to Madras Presidency and neighbouring states—in exporting leather. Mr. C. W. E. Cotton writing in the *Hand Book of Commercial Information for India* states that before the War “in round figures out of every 160 hides exported only 17 were exported tanned and of every 100 skins only 20”. I estimate that from 1923 to 1926 the proportion for each 100 hides was 45 tanned and for skins about 50. Since 1919 the Indian Tanner has had a small amount of protection due to an export duty on raw hides and skins (now reckoned at 5%) but whether he will continue to have this help is very doubtful as last year a proposal to abolish this duty was only beaten by the casting vote of the President of the Legislative Assembly. Whatever be the reason Madras exported last year practically 14,000 tons of tanned hides as against an average of 7,500 tons for the 10 pre-war years and as at that time Madras tanned hides were plastered with a mixture of flour and grease which added from 5 to 10% to their weight I estimate that the actual quantity of leather is just about double the pre-war average. In tanned skins the gain is only 5,500 tons to 6,400 tons or only 16% but considering that practically all the sheep skins available are tanned, and that we cannot as yet manufacture glaze goat in India, for which there is a great demand, it is unlikely that the percentage will increase much further. The total value of the leather exported from Madras last year was over 8 crores, which was with the exception of the years during the war and immediately after, when Madras was being called upon to make good the world wastage of leather due to war conditions, by far the largest it has ever been.

At the present time the whole world is suffering from a shortage of leather. In many trades a shortage leads first to higher prices, which then cause a greater production and thus bring back supplies to normal condition. In the leather trade higher prices do not cause greater production as the raw material is a by-product and consequently does not follow the same rules as primary products.

In conclusion I shall show a table giving the average total exports of raw and tanned hides and skins for the years 1923 to 1926 and show in each case the proportion of the trade that is done from the Madras Presidency. From this it will be seen that Madras exports of raw hides and skins are practically negligible except in the case of raw goat. On the other hand exports of leather from Madras amount to about 85% of the total exported from India.

Madras has chiefly two factors to thank for this trade:— (1) the bark of *avaram* shrub which gives a leather extraordinarily easy to dress for many different uses (2) labour that is skilled in tanning processes. *Avaram* bark is still almost exclusively used in the tanning of skins but for the tanning of hides, it is now largely supplemented by other less costly tanning materials. During the last few years imports of *Wattle* bark from Africa have increased very quickly and last year reached the large amount of 8,800 tons which is sufficient to tan about 6,000 tons of leather. At the same time the quantity of indigenous bark used is still well above the prewar average and I estimate that over 43,000 tons of indigenous bark was necessary to keep the South Indian Tanneries working as against an average of 39,000 for the 10 prewar years.

### Exports of Hides and Skins from India.

Class.	RAW.		Value Lakhs of Rupees.	RAW.
	Weight tons.	Numbers thousands.		Proportion from Madras.
Buff: hides.	4600	460	37	·1%
Cow "	23300	4500	260	·001%
Buff: calf.	300	210	3	Nil.
Cow "	200	200	3	Nil.
Goat skins.	17700	15000	372	12%
Sheep "	450	300	6	22%
Tanned.				
Buff: hides.	750	160	14	80%
Cow "	11100	3300	273	85%
Buff: Calf.	250	350	6·5	90%
Cow "	650	1100	24	92%
Goat skins.	2500	6000	160	80%
Sheep "	3300	9000	1·88	90%