

S. D. CASTLE.
Treating Fur.

No. 213,735.

Patented April 1, 1879.

Fig. 1.

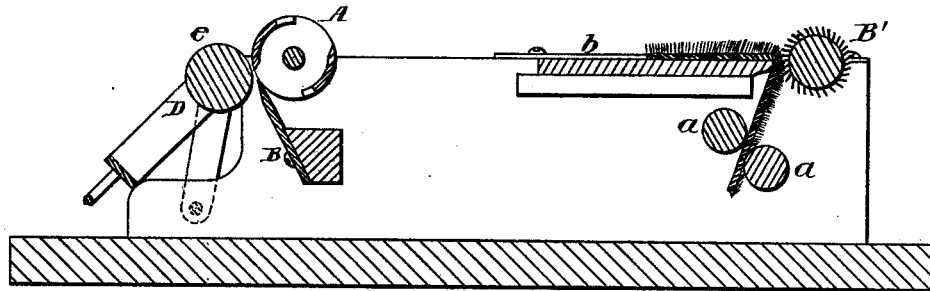


Fig. 2.

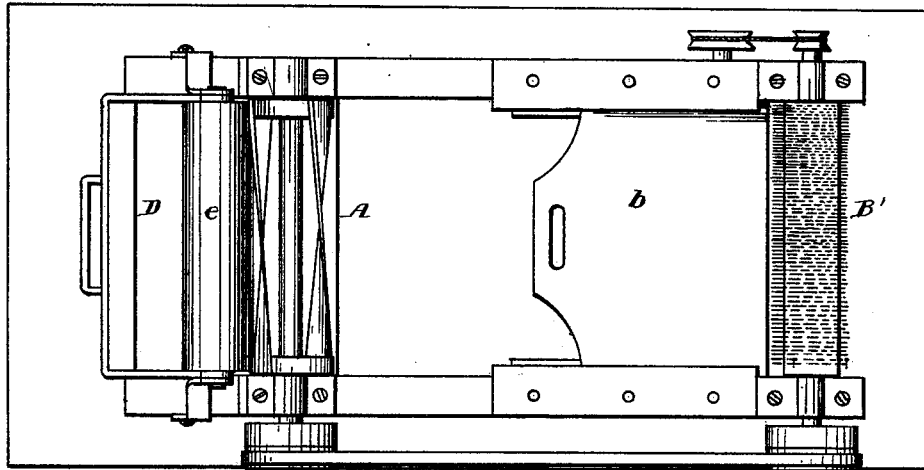


Fig. 3.

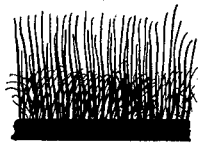


Fig. 4.

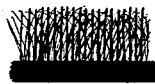


Fig. 5.



Attest:
Courtney A. Cooper
William Paxton

Inventor:
S. D. Castle
By his attorney
Charles E. Foster

UNITED STATES PATENT OFFICE.

SAMUEL D. CASTLE, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN TREATING FURS.

Specification forming part of Letters Patent No. **213,735**, dated April 1, 1879; application filed February 24, 1879.

To all whom it may concern:

Be it known that I, SAMUEL D. CASTLE, of Bridgeport, Fairfield county, Connecticut, have invented Improvements in Treating Furs, of which the following is the specification:

My invention consists in an improved mode of converting pelts into dressed furs, whereby I avoid the expense of ordinary means, consisting in removing the long or "master" hairs, and avoid reducing the body of hair on the fur-surface.

In the drawings forming a part of this specification, Figure 1 is a section of the apparatus, showing the shearing and combing devices; Fig. 2, a plan view; Figs. 3 to 5, diagrams illustrating the process of treating the pelts.

In the pelts of various animals the fine hair or fur in its natural condition lies closely bent and packed to the surface of the skin, while the long or master hairs project beyond the fur and constitute the main hair-face of the pelt.

Heretofore it has been common to remove the long hairs by first cutting away the inner face or back of the skin until the roots of hairs are exposed, and then picking such hairs out. This is not only an expensive process, but the removal of the hairs diminishes the thickness or body of the wearing or hair face.

In order to retain the entire body of hair upon the face of the pelt, and at the same time secure a face of fine fur, I submit the pelt, after the skin has been tanned and dressed as usual, to the action of a revolving spiral or other shaped cutter, A, Fig. 1, operating with a stationary blade, B, between which and the edges of the spiral knives the master hairs are cut and the fur sheared to a nearly uniform surface.

Owing to the stiffness and greater thickness of the master hairs, they stand out rigidly from the hide between the cutting-edges, and are sheared closely off; but the fine fur in its natural condition is bent and packed down, as shown in Fig. 3, and also bends when submitted to the cutters. I take care, therefore, to cut the master hairs as close as possible without more than shaving the face of this packed mass of fur, so that when the pelt has been submitted to the cutters it is in the condition illustrated in Fig. 4. I now pass the pelt between feed-rolls *a a*, which draw it over the edge of a blade, *b*, and opposite a rapidly-revolving card, *B'*, the teeth of which penetrate

the mass of packed fur, and comb and straighten the hairs of the same, so that they will extend beyond and conceal the shorter master hairs, as illustrated in Fig. 5. As the fine hairs thus combed out and brought to the surface are of unequal length, the pelt may be again submitted to the shearing-machine, by which the face is shaved to a uniform level, but without cutting to the master hairs. The whole may be, if necessary, again combed.

In order to regulate the extent of the shear, the pelt is passed over a roller, *e*, (or rounded-edged plate,) carried by a swinging or adjustable frame, D, arranged in juxtaposition to the cutters A B, the said frame being controlled by the attendant as the pelt is operated upon; and, if desired, the roller *e* may be driven by a belt or suitable gearing to feed the pelt past the cutters. By this means I secure a furred skin in which the exposed wearing-surface is mostly fine fur, while I do not diminish the body of hair upon the pelt, which will therefore wear better, is more durable, and affords a better covering than those treated by removing the master hairs in the usual manner.

A further advantage of this process is the utilization of coarse pelts which it would not be practicable to treat in the ordinary manner.

I claim—

1. The within-described mode of treating pelts, consisting in first shearing the face to cut short the master hairs, and then combing out the fine hair or fur, substantially as set forth.

2. The mode of treating pelts by subjecting the same to the action of a revolving card, as specified.

3. The combination, in an apparatus for treating pelts, of the cutters and an adjustable frame, D, arranged to operate therewith, substantially as set forth.

4. The combination, in an apparatus for treating pelts, of the revolving card B and adjustable plate *b*, or its equivalent, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL D. CASTLE.

Witnesses:

H. E. BOWSER,
AMOS FULLER.