

(No Model.)

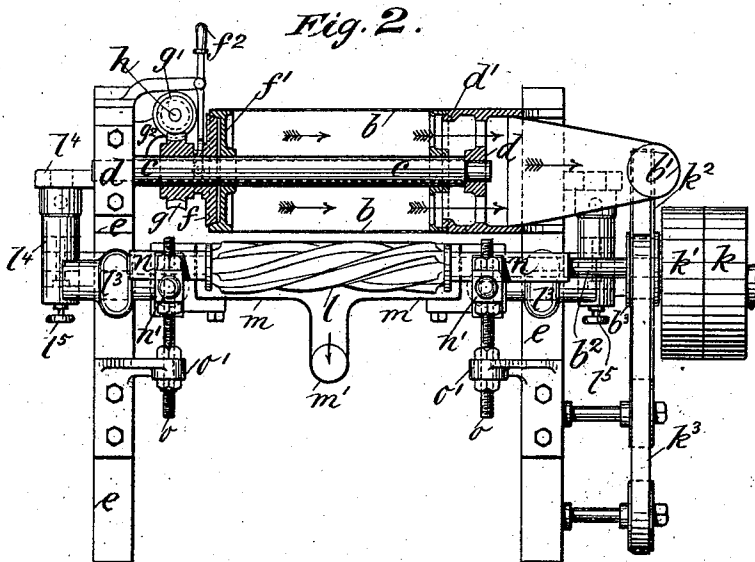
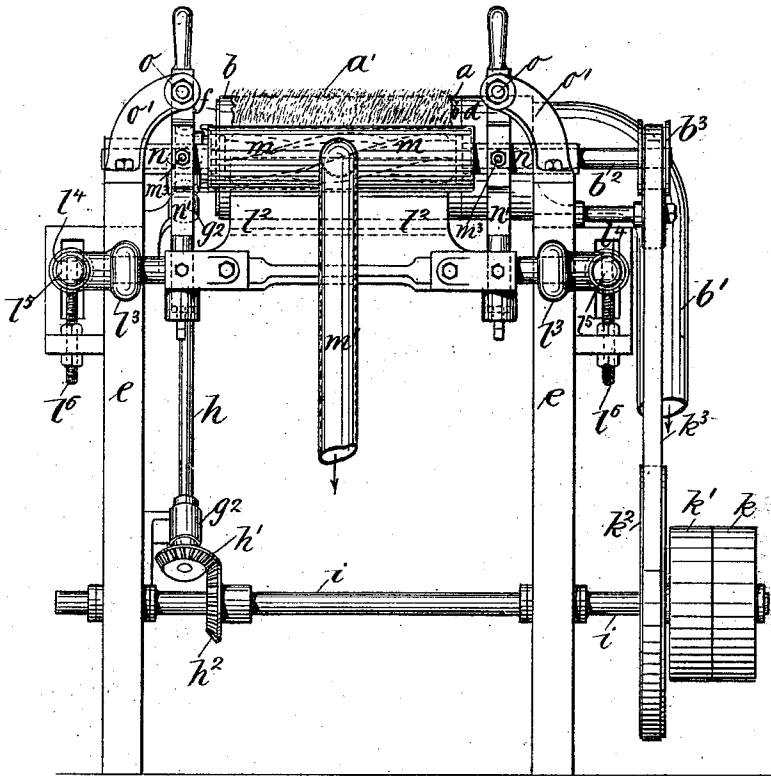
2 Sheets—Sheet 1.

B. DUNKERLEY.
MACHINE FOR DRESSING FUR.

No. 506,192.

Fig. 1.

Patented Oct. 3, 1893.



Witnesses:

E. B. Bolton
E. K. Sturtevant

Inventor:

Benjamin Dunkerley

By

Richard R.
his Attorneys.

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Fig. 3.

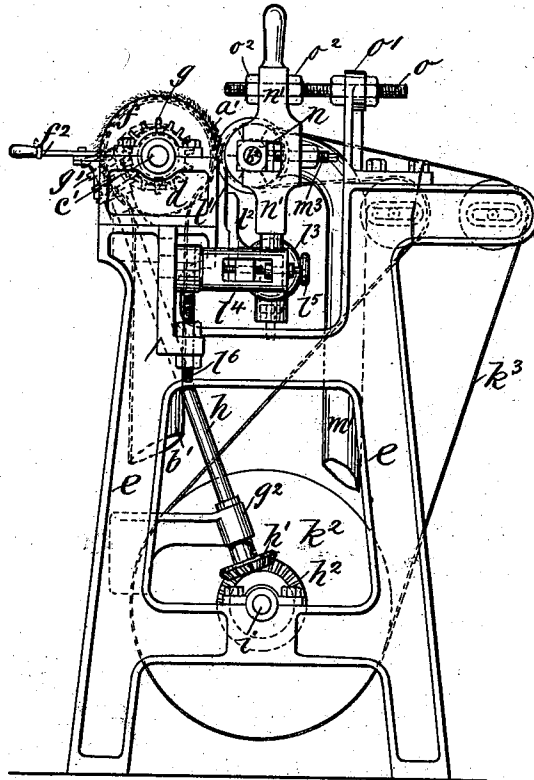
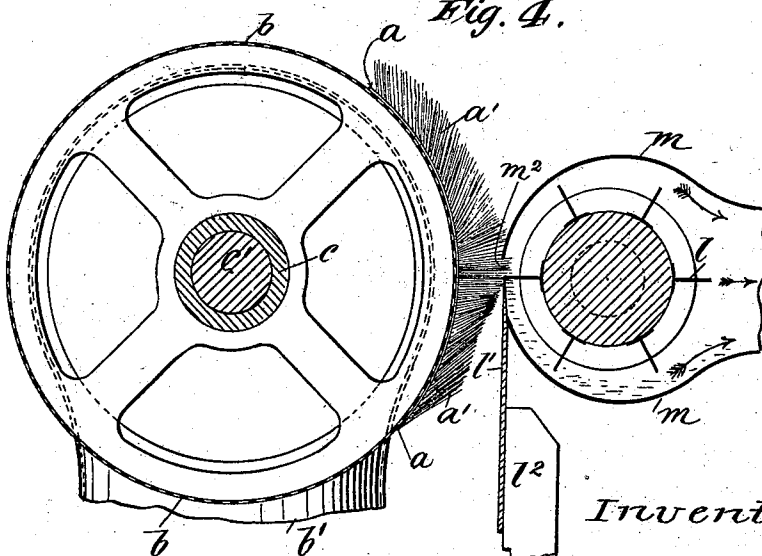


Fig. 4.



Witnesses:

E. R. Bolton

E. H. Sturtevant

Inventor:

Benjamin Dunkerley

By

Charles R. [Signature]
his Attorneys.

UNITED STATES PATENT OFFICE.

BENJAMIN DUNKERLEY, OF GLENORCHY, TASMANIA, ASSIGNOR OF ONE-FOURTH TO JOSEPH DAVENPORT KAIN, OF STOCKPORT, ENGLAND.

MACHINE FOR DRESSING FUR.

SPECIFICATION forming part of Letters Patent No. 506,192, dated October 3, 1893.

Application filed March 6, 1893. Serial No. 464,718. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN DUNKERLEY, a subject of the Queen of Great Britain, and a resident of Glenorchy, Tasmania, Australia, have invented a new and useful Machine for Dressing Fur, (for which I have obtained provisional protection in Great Britain, No. 18,308, dated October 13, 1892,) of which the following is a specification.

My invention has for its object the construction of a machine adapted to cut the hair from the fur of skins, in lieu of by hand-work whereby a great amount of injurious and tedious labor is saved and loss of fur obviated.

The cutting parts of the apparatus are rendered adjustable and thus the machine is adapted for cutting more or less of the hair from the skin, thus removing it either partially or entirely.

To this end my invention consists, first, in subjecting the hair of the fur to be dressed, suitably mounted on a movable support, to the action of an exhauster and thereby draw the hair over a bed or stationary knife blade arranged in conjunction with a rotary or other suitable knife or shear blade.

My invention consists, secondly, in placing the skins, the fur of which is to be dressed, on a perforated hollow surface or support and subjecting its interior and inner side of the skins to the action of an exhauster whereby the same are caused to adhere securely to the said surface or support, which latter may form a portion of or a whole circle, or be flat and moved either in a continuous, intermittent or reciprocatory manner or the said perforated surface or support may be stationary and the aforesaid rotary or other suitable knife or shear blade rendered relatively movable.

I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a back view, Fig. 2 a plan partly in section and Fig. 3 an end view of a complete machine constructed in accordance with one form of my invention. Fig. 4 is a vertical section enlarged of the perforated hollow surface or support, bed or stationary knife blade and rotary knife.

Similar letters refer to similar parts throughout the several views.

In carrying out my invention, by preference I place the skins *a*, the fur of which is to be dressed, on a perforated rotary cylinder *b*, the interior of which, by a suitable pipe *b'* I bring into communication with an air exhauster (not shown) which serves to draw the skin *a* tightly against the periphery of the rotary cylinder *b* and thus mount it on the same securely without the aid of nails or other fastenings. The cylinder *b* is suitably fixed on a hollow shaft *c* arranged to rotate on a spindle *c'* mounted stationary in bearings *d*, carried by a standard or frame *e* and may be arranged to be brought in and out of rotation by means of a cone friction coupling *f, f'*, or its equivalent, actuated by a hand lever *f²*. One end of the cylinder *b* is arranged to rotate in or on a rim *d'* formed on the respective bearing *d*, the opposite end of the rim *d'* having attached a pipe *b'* leading to an air exhauster. The part *f* of the cone friction coupling *f, f'*, runs loose on the hollow shaft *c* and has secured on its boss a worm wheel *g* arranged in gear with a worm *g'* fixed on the upper end of a shaft *h* mounted in suitable bearings *g²* on the frame or standard *e* and having at its lower end a bevel wheel *h'* gearing into another bevel wheel *h²* fixed on the driving shaft *i*, which latter carries at the opposite end a loose and two fast pulleys *k, k²*, and *k³*, respectively.

In connection with the rotary cylinder *b* I employ a shearing cylinder *l* having on its axis *b²* a pulley *b³* to which rotary motion is imparted from the pulley *k²*, on the driving shaft *i*, by means of a belt *k³*. The shearing cylinder *l* is arranged inside a suitable casing *m*, which by means of a suitable pipe *m'*, I also bring in communication with an air exhauster (not shown). The casing *m* on its side opposite to the cylinder *b* has a slot or opening *m²*, see Fig. 4, which permits the said exhauster to draw the hair of the fur *a'* over a bed or stationary knife blade *l'* and thus facilitate an exact and uniform cutting off of the hair from the fur by the rotary knife *l*. The bed or stationary knife blade *l'* is attached to a stock *l²*, carried by sockets *l³*, rendered laterally adjustable in a bracket *l⁴* by

means of the screw l^5 and the latter bracket l^4 being vertically adjustable by the screw l^6 . The ends of the shearing cylinder l are mounted in blocks n carried by brackets n' attached to screwed studs o projecting from brackets o' , secured to the standard or frame e , the blocks n being rendered laterally adjustable by the screws m^3 and the brackets n' by the nuts o^2 , whereby the length of hair to be cut off the fur a' can be altered and the wear of the bed or stationary knife blade l' and shearing cylinder l compensated for as may be required. The exhauster pipes b' and m' may be brought into communication with one exhauster only or with separate exhausters of any suitable construction employed at the machine itself or a distance away from the same as may be found most convenient, and the perforated hollow surface or support b may be made in size as may be required for different sizes or kinds of skins a .

It will be evident that the means for drawing the hair of the fur to be dressed over a bed or stationary blade while being cut and the cutting arrangement described may be employed apart from the means described for mounting the skins without departing from the nature of my invention.

The working of the invention is as follows:—

30 Assuming the male part f of the cone friction coupling is out of contact with the female part f' thereof the interior of the cylinder b and the hair and fur are exposed to the action of the exhausters as described, the driving shaft i is set in rotation by placing the strap onto the fast pulley k and thus transmits motion by means of the bevel wheels h^2, h' , shaft h , worm g to the worm wheel g' and the male part f of the cone friction coupling as well as to the shearing cylinder l by the pulleys k, k' and k^2 , and strap k^3 . The skin is then placed on the cylinder b and thus exposed to the action of the exhauster, which instantly draws it tight onto the periphery of the cylinder, after which the male part f of the cone friction coupling $f f'$ is brought into contact with the female part f' by means of the lever f^2 and thus the cylinder b is set in rotation. The

hair of the fur arriving opposite the slot or opening m^2 is then drawn over the bed or stationary knife blade l' by the exhaust created in the casing m and the projecting portion or hair cut from the fur by the shearing cylinder l . After the cylinder b has made one or more revolutions its rotation may be interrupted by throwing the cone friction coupling f, f' , out of contact with the lever f^2 which permits the removal of the fur now dressed, or the latter may be effected during the rotation of the cylinder b .

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In combination in a fur dressing machine, the cutting device and means arranged adjacent thereto and adapted to hold the skin and present its fur to the action of the knife, the said means consisting in the hollow cylinder having its perforated periphery revolving past the cutting knife and the exhaust pipe connected to the interior of the cylinder, substantially as described.

2. In combination in a fur dressing machine the cutting devices, the hollow perforated cylinder adjacent thereto, the means for rotating the same, the bearing at the end of the cylinder having the rim d' for supporting the end of the cylinder, the exhaust pipe connected with said rim, and means for producing a current of air toward the cutting device substantially as described.

3. In combination, the rotary cylinder, for holding the fur, the rotary shearing cylinder, the casing inclosing said shearing cylinder, the exhaust pipe connected therewith, the means for adjusting the shearing cylinder to and from the holding cylinder, the knife l^2 arranged to act in conjunction with the shearing cylinder and the means for adjusting said knife laterally and vertically, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

BENJAMIN DUNKERLEY.

Witnesses:

ALFRED BOSSHARDT,
STANLEY E. BRAMALL.