Jan. 16, 1940. S. HASKIN 2,187,543

MACHINE FOR BEATING AND DRESSING FURS AND THE LIKE

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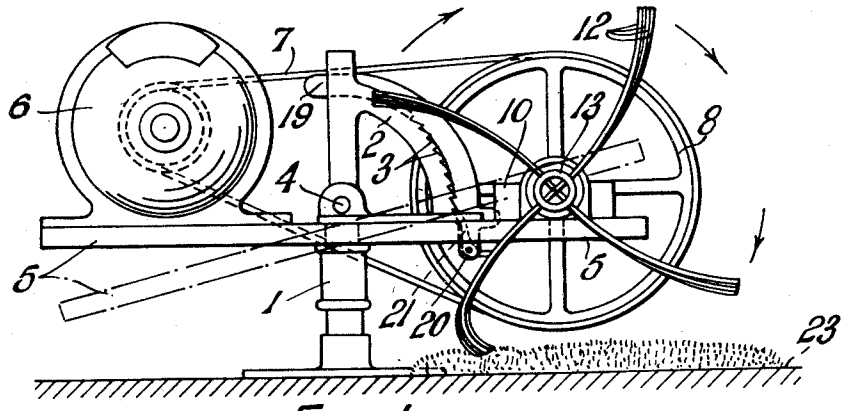


FIG. 1.

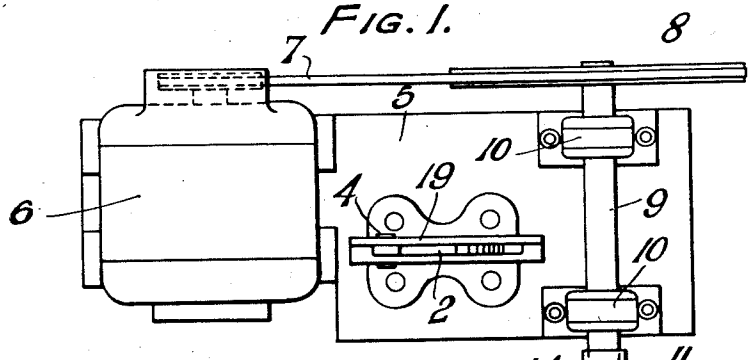


FIG. 2.

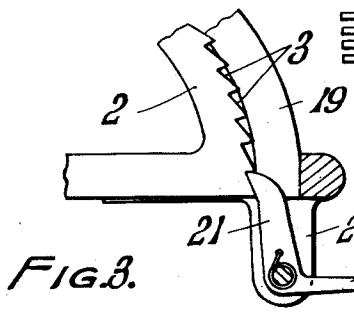


FIG. 3.

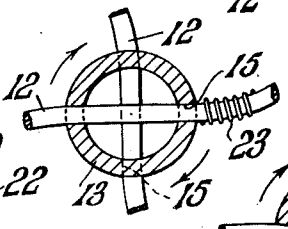


FIG. 4.

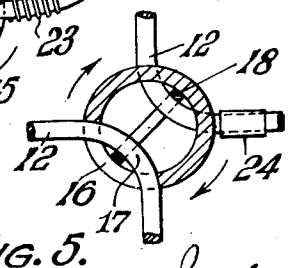


FIG. 5.

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MACHINE FOR BEATING AND DRESSING FURS AND THE LIKE

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Application December 23, 1937, Serial No. 181,448
In Australia December 24, 1936

4 Claims. (Cl. 149—24)

This invention relates to an improved machine for beating and dressing furs, pelts, fabrics and the like to improve the appearance thereof by bringing up the nap or surface, and also to remove loose or broken hairs, dust, larvae of moths and other foreign materials.

While furs are being handled, cleaned, sewn or otherwise made up the surface of the fur often loses its proper finished appearance and it is customary to comb or brush the furs or beat them with light canes in order to regain the desired appearance.

The present invention provides a simple yet efficient form of machine for the purpose by which furs or the like can be subjected to a mild beating action to bring up the nap or surface and generally improve their appearance. The machine also enables loose or broken hairs, dust and other foreign materials in the fur to be expeditiously and effectively removed without damage to the fur.

The machine is characterized by having a number of leather, rubber or like flexible thongs inserted through a series of holes or slots in the end of a shaft or tube. The shaft or tube is rotated by a suitable gearing from an electric motor or the like, and the furs or other articles are treated by being placed beneath the thongs so that they are struck by the outer ends of the latter with a beating and combing action as the thongs rotate with the shaft or tube.

The severity of the beating action is preferably capable of regulation by making either the shaft or the support for the furs adjustable relatively one to the other so that the length of the thongs allowed to strike the furs can be varied as desired.

In the accompanying drawing to which reference is now made—

Figure 1 is a side elevation of one representative construction of the improved machine according to the invention.

Figure 2 is a plan view.

Figure 3 is a detail view of the adjustment means.

Figure 4 is a cross-section showing one convenient means for attaching the thongs to the shaft or tube.

Figure 5 shows a modified means of attaching the thongs.

The machine as illustrated in these views consists of a supporting stand 1 of any approved shape having a quadrant 2 preferably constructed integrally therewith. The quadrant has a series of ratchet teeth 3.

Pivotally mounted on a pin 4 carried by the stand is a frame 5 supporting an electric motor 6. The motor drives through a chain or belt 7 a wheel 8 mounted on the end of a shaft 9. The shaft is supported in bearings 10 on the frame and its end 11 projects beyond the frame and supports the thongs 12.

The thongs may be fitted directly to the end of the shaft itself or they may be fitted to a tube 13 which is detachably secured to the end of the shaft by any approved means such as a screw 14. The thongs are formed from relatively light strips of leather or rubber or like flexible material.

In the embodiment shown in Figure 4, the thongs are inserted diametrically through the tube in the holes 15 and each strip of thong material extends to an equal distance on each side of the tube so that it forms two thongs. This arrangement enables the thongs to be retained in the holes 15 without any additional securing means as the centrifugal force acting on one thong during the rotation of the shaft is substantially balanced by that acting on the other connected thong.

The holes 15 in the tube or the shaft are arranged alternately in different planes so as to distribute the thongs throughout the complete circle, and any desired number of holes and thongs may be used as found convenient.

In the arrangement shown in Figure 5, the thongs are fitted in slots 16 in the tube or shaft instead of the holes 15. Each strip of material forms two thongs but the thongs do not pass diametrically through the tube. Instead they are looped or bent centrally at 17 to fit into the slots 16 and are held therein by means of a U-shaped wire fastener 18. Other approved means may be employed for directly attaching the thongs to the tube or shaft.

The frame 5 has an upstanding bracket member 19 which receives the quadrant 2 and moves slidably thereagainst when the frame is pivotally adjusted. The bracket for the quadrant 19 has lugs 20 at its lower end supporting a pivoted spring-pressed pawl 21 which engages the teeth 3 of the quadrant 2. The pawl has a finger piece 22 for convenient operation in pivotally adjusting the frame 5.

The furs or pelts to be treated may be placed on a table, plate or other convenient support 23 or could be held by hand. The beating and combing action of the thongs causes the individual hairs or fibres of the fur to be separated and the nap or surface of the fur raised. Any loose

or broken hairs, dust and other foreign materials in the fur are also removed. The beating action of the thongs is not sufficiently severe to damage the fur and it is found to greatly improve the appearance.

The severity of the beating action may be regulated by pivotally adjusting the frame 5 on the pin 4, as shown in dotted lines in Figure 1, so that the length of the thongs allowed to strike the fur can be varied as desired. The quadrant 2 and pawl 21 enable the frame to be secured at any selected adjusted position.

The method of fitting the thongs by inserting them through the holes 15 or slots 16 is found to be particularly advantageous as the thongs can be quickly removed and replaced and no special securing means are required.

The thickness of the thongs used can vary according to the class of fur or material to be dressed or treated.

The tube 13 carrying the thongs may, if desired, be conveniently detached from the end of the shaft 9 and a rotary brush or the like fitted thereon for special use. In some cases the tube 13 may be arranged at some distance from the shaft 9 and connected thereto by a flexible driving member so that the beating thongs can be moved over a large fur or otherwise used in positions where the machine as a whole is not accessible.

The thongs are preferably provided adjacent the tube 13, or the shaft on which they are mounted, with means for preventing said thongs from hanging loosely together when the machine is not in operation, so as to eliminate the tendency of said thongs to become entangled with one another or to flap laterally and become entangled in adjacent machinery when the machine is first started. Such means may consist, for example, of a wire 23 wound helically round each thong as shown in Figure 4, or a length of tube or sleeve like element 24 as shown in Figure 5.

Various other modifications can be made within the scope and principles of the invention.

What I claim and desire to secure by Letters Patent is:

1. In a machine for beating and dressing furs or the like including a support for the furs, a shaft and means for rotating said shaft; a plurality of holes in the sides of said shaft, a plurality of flexible thongs, each of said thongs being doubled to provide two thong ends, the doubled bight of each thong being inserted in a hole of said shaft with both free ends of said thong extending out of said hole on the same side of said shaft, means inwardly of said shaft securing said bights therein, and portions of said thong ends being adapted to strike the furs on said support upon the rotation of said shaft.

2. In a machine for beating and dressing furs or the like including a support for the furs, a shaft and means for rotating said shaft; a plurality of flexible thongs carried by a portion of said shaft, each of said thongs being doubled to provide two thong ends, means securing the bight of said doubled thong to said shaft, and portions of said thong ends being adapted to strike the furs on said support upon the rotation of said shaft, said last named means comprising slots in said shaft portion to receive the bights of said thongs, and means inwardly of said shaft and engaging said bights to retain the same in said slots.

3. A machine for beating and dressing furs and the like comprising a stand, a frame pivotally supported intermediate its ends on said stand, a shaft revolvably supported on one end of said frame, a motor on the other end of said frame, means for driving the shaft from the motor, a plurality of thongs fitted to one end of the shaft, and means for securing the frame in pivotally adjusted position on the stand.

4. The structure of claim 3, said stand being provided with a quadrant having teeth, a slot in said frame receiving said quadrant when said frame is pivoted, and a pawl carried by said frame adjacent said slot to engage said teeth and hold the frame in an adjusted position.

SIMON HASKIN.