COMBINED MOISTENING, COMBING AND IRONING MACHINE FOR FURS

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This invention relates to new and useful improvements in a combined machine for moistening, combing and ironing sheep skins and the like.

An object of this invention is to provide a machine of the character described comprising a frame and a table with a blanket vertically movably mounted on the frame for supporting skins to be processed and means for lifting and lowering the blanket for engaging and disengaging the skins being treated against an ironing drum, in combination with a moistening and carding drum, rotatably mounted in front of the ironing drum.

Another object of this invention is to provide means for rotating the moistening and carding drum concomitantly with the rotation of the ironing drum.

Another object of this invention is to provide means for causing reciprocating motion of the moistening and carding drum while the said drums rotate in opposite directions.

Another object of this invention is to provide a gas burner inside the ironing drum in combination with a thermostatically controlled means for regulating the flame temperature in said drum.

With the above and other objects in view, the invention will be hereinafter more particularly described, and the combination and arrangement of parts will be shown in the accompanying drawings and pointed out in the claims which form part of this specification.

Reference will now be had to the drawings, wherein like numerals of reference designate corresponding parts throughout the several views, in which:

Figure 1 is a front elevational view of the invention.

Figure 2 is a fragmentary enlarged vertical cross-sectional view, the section being taken as on line 2—2 in Figure 1.

Figure 3 is a side elevation of the combined machine shown in Figure 1, the drive gears being removed.

Figure 4 is a fragmentary portion of the iron drum and a cylindrical extension member, on an enlarged scale.

Figure 5 is a plan view of the machine.

Figure 6 is an end view of the ironing and stretching drum.

Figure 7 is a view of a fragmentary portion of the cylindrical surface of the ironing and stretching drum developed into a plane.

Figure 8 is a side elevation of a housing for mounting the moistening and carding drum.

Figure 9 is an end view of the moistening and carding drum, partly broken away to show details of automatic brush cleaning means.

Figure 10 is a cross-sectional view of the burner and a thermostat for controlling the supply of gas to a valve and to the burner.

Figure 11 is a cross-sectional view of a cam lever.

In the illustrated embodiment of the invention the numeral 10 indicates a combined machine for moistening, combing and ironing sheep skins and the like, comprising a frame 11 having a table 12 in which a blanket 13 is vertically movably mounted.

An ironing drum 14 having hollow shafts or trunnions 15 at each end is rotatably mounted in bearings 16 directly above the rear portion of the table 12. Within the ironing drum 14 is a stationary gas burner 17 having gas supplied thereto through a gas supply pipe 18 passing through one of the hollow trunnions 15. The pipe 18 is of smaller outer diameter than the inner diameter of the hollow trunnions so as to be spaced therefrom and so that the pipe 18 may remain stationary while the trunnions rotate.

The frame 11 comprises a pair of spaced parallel side walls 20, 20' which have low front portions 21 and high rear portions 22 which overhang the front portions 21. A pair of parallel bridge members 23 are mounted across the low portions 21 and connected to the side walls 20, 20' in unitary relation. The bridge members have inclined sides extending upwardly from the outer faces of the side walls 20, 20' and terminating in brackets 24 on which the table has been fixed by screws (not shown).

The rear portion of the table 12 is formed with a large cut-out or rectangular opening 27 in which the blanket 13 is mounted. A stationary bar 28 extends across the rear of the cut-out 27. The blanket 13 is slidably mounted on the bar 28. The blanket 13 has a rear portion 12 extending downwardly and connected to a bar 28. The bar 28 is connected by a plurality of springs 30 with a bar 31. In practice, the table 12 is preferably positioned in downwardly sloping direction toward the rear of the machine.

Two bars 35 extend in spaced-apart relation across the front of the cut-out portion 27 and are secured to a pair of arms 36. The arms 36 extend transversely along the sides of the cut-out 27 and are pivotally supported at their rear ends on pins 37 to portions of the rear bridge member 23. The front end of the blanket 13 is slidably mounted on an intermediate bar 35 and
is fixedly held by bars 35 and 38 fixed to the front ends of the arms 36. A pair of elongated threaded members 32 threaded in the rear bridge member 33 have their upper ends in engagement with a bar 31. The threaded members 32 have heads 33 at their lower ends by which they may be gripped and turned. By adjusting the threaded members 32 the tension of the springs 30 may be regulated to hold the blanket 13 in taut position. The blanket 13 is made from sheet felt material or a suitable cloth and reinforced and stiffened by wire mesh belting 39 of the same width as the blanket 13. The blanket 13 and the wire mesh belting 38 are jointly secured at their front end portions to the bars 35 and 38. The wire mesh belting extends over the two bars 35 and over the bar 28 and is attached at its rear end to the bar 29. The wire mesh belting 39 assists in tautly supporting the blanket 13.

The means for lifting and lowering the blanket 13 include a link 40 which is pivotally connected by a pin 41 to a bracket 42 secured to a bar 43. The bar 43 is mounted on the front ends of the cross arms 36. The link 40 extends downwardly and rearwardly and pivotally connects with a lever 44. The front end of the lever 44 terminates in a pedal 45 by means of which the front end of the lever may be depressed.

The lever 44 is pivotally supported intermediate its ends on a pin 46 in lugs 47 extending from a bracket 48. The bracket 48 is secured to the side walls 20, 20' of the frame 11. A spring 50 is connected between the bottom end of the link 40 and a stationary rod 51 in the frame and serves to maintain the blanket 13 in its lowered position. When the pedal 45 is depressed, the blanket 13 will move upwardly into engagement with the drum 14.

As best shown in Figure 3, the bearings 16 are secured to overhanging portions 22 of the frame 11. The outer end of one of the trunnions 15 carries a pair of pulleys 82, 53, the pulley 52 being keyed to the trunnion and the pulley 53 being freely rotatably mounted on the trunnion. A belt 54 engages one of the pulleys. A shifting mechanism 55, well known in the art, provides means for shifting the belt from one pulley to the other.

The drum 14 has hollow cylindrical extension members 56 serving as dust and flame shields for preventing the flame from the burner 17 from reaching skins placed on the blanket 13. The shields 56 also prevent dust from the skins entering the drum 14 and being burned. As shown in Figure 4, the hollow cylindrical members 55 are attached to the ends of the drum 14 by screws 56 (Fig. 4) which engage bosses 57 formed on the ends of the drum 14.

As shown in Figures 5 to 7 inclusive, the ironing drum has a plurality of substantially V-shaped beating grooves 60, the spines being positioned in offset relation with the middle of the drum so as to cover the entire circumference of the drum with the grooves and provide continuous action on the sheep skins. As shown in Figure 6, the beating grooves 60 are of triangular cross-section. Each groove is defined by a radially positioned wall 61 and by a wall 62 positioned at an acute angle with the said radial wall. The radially disposed walls of the said grooves function to raise and stretch the hairs of the fur being treated.

A moistening and carding drum 64 is fixed to a shaft 65 rotatably mounted in bearings 66. The shaft 65 is hollow throughout its length, the hollow portion being indicated by the numeral 65'. A drive gear 67 fixed to one of the trunnions 15 is in intermeshing relation with a gear 68 fixed to the shaft 65. The gears serve for imparting rotation to the drums 14 and 64 in opposite directions.

The diameter of the gear 67 is larger than the diameter of the gear 68, and the peripheral speed of the drum 14 is slightly greater than the peripheral speed of the drum 64, so that there will be a constant rearward pull of the sheepskin.

Each bearing 66 forms an integral extension of an elongated housing 69 pivotally mounted on a trunnion 15. As best shown in Figure 8, each housing 69 has a front end bearing 68 for the shaft 65, and a centrally positioned bearing 70 for one of the trunnions, and an elongated arcuate opening 71 providing clearance passage therethrough for a tie rod 72 of the frame 11. The opening 71 also serves to receive upper and lower coil springs 73 on opposite sides of the tie rod. A link 78 pivoted to the housing 69 by a pin 76 and to the lever 44 by a pin 77, serves for lowering the blanked 13 concomitantly with the raising of the blanket 13 by the pedal 45.

The means for reciprocating the drum 64 comprises a lever 80 mounted on a pivot 81 secured in a bracket 82. The bracket 82 extends from the outer face of the side wall 20' and may be fixed to said side wall by means of bolts 83. At the far end of the lever 80 is a roller 84 mounted on a roller stud 85. The roller 84 fits in a raceway groove 86 of a cam 87 which is fixed to one of the trunnions 15. The cam raceway 86 is inclined to the axis of the trunnion (Figure 1) and when the cam is rotated it causes the lever 80 to vibrate.

At the front end of the lever 80 is a roller 88 mounted on a roller stud 89 which is adapted to ride in a groove 90 in a disk 91 fixed to the shaft 65. The groove 90 is in right-angular relation with the shaft 65. Rotation of the cam 87 causes vibratory motion to be imparted to the lever 80 and to the shaft 65.

As shown in Figure 9, the moistening and carding or combing drum 64 is mounted centrally on the shaft 65 which is hollow and is connected through a liquid-tight packed joint to a source of chemical solution supply (not shown). Feed pipes 99 are connected to the hollow shaft 65 and pass through apertures in flanges 98 which are bolted to the drum 64. The flanges 98 support elongated layers of liquid absorbing fabric such as felt 97. A combing brush 98 is fixed to the outer surface of the drum 64 and carries bristles 99 which extend through apertures in a radially movable frame 100. The frame 100 has apertures 101 through which liquid from the te 97 may pass radially outwardly into contact with a sheepskin on the table 12 when forcibly brought in contact with the sheepskin.

The frame 100 has laterally extending cylindrical projections terminating in heads 102. The cylindrical projections pass through apertures in the drum and the heads 102 are positioned inside the drum. The heads limit the outward movement of the frame to substantially the outer ends of the bristles 99. Coil springs 103 mounted on the cylindrical projections resiliently force the frame 100 outwardly and thus automatically remove hairs collected on the comb and maintain the comb in clean condition.

There is a number of brushes 98 and an equal number of frames 100 spaced around the periphery of the drum 64. During operation, the
pressure of the sheep skin against the frames forces the frames radially inwardly against respective layers of wet felt and resulting in a contact manner such as by wooling.

It is to be noted that the sides of the frames 106 are not sheet surfaces and that the cylindrical projections terminating in heads 102 may be made integral with the frames 106 in any suitable manner such as by welding.

It is also to be noted that the bristles 98 are positioned all around the boundaries of the felt 91 and that the bristles do not cover the felt. The felt is bodily and marginally intact and that the chemical solution passes through the felt solely through the usual interstices in its fibrous body.

As best shown in Figure 10, the burner 17 is fixedly mounted upon an end portion of the fuel supply pipe 18. The gas pipe 18 is in practice connected with a supply of gas or fuel oil and controlled by a thermostat 105 having an expansion system such as mercury which is arranged to interrupt the gas supply when the required temperature is attained. A perforated pipe 105 mounted at the central portion of the burner 17 serves to receive the thermostat and a flexible extension 107 which is connected to a thermostatically controlled valve wherein the expansion causes a gas passage in the valve to be shut off.

The thermostat valve assembly 108, shown diagrammatically in Figure 10, comprises a casing 109 having a gas inlet 110 and a gas outlet 111 at its lower elevation. A valve 112 has an integral collar 113 against which a coil spring 114 reacts and raises the valve off its seat to permit gas to flow from the inlet 110 to the outlet 111. The flexible extension 107 is a tube of small diameter which is connected to the lower portion of the valve casing and feeds into an opening 115 above the valve stem. When the temperature in the burner rises above a predetermined temperature, the expanded mercury in the thermostat 105 fills the opening 115 and presses the valve 112 against its seat and shuts off the gas supply. When the temperature drops, the mercury is forced into the thermostat 105, permits the valve to rise and admit an increased flow of gas into the burner.

In practice, the valve 112 rests slightly above the seat to permit a pilot light to be constantly burning in the burner.

It is to be noted that the moistening and carding drum 64 has a plurality of brushes 86 which are longitudinally positioned along the surface of the drum and in angular relation therewith so as to extend around the entire circumference of the drum and be adapted to grip a fur skin at all points of the drum's circumference.

A conduit 116 is mounted on the frame of the machine and extends partly over the drum 14 as shown in Figure 3, and is adapted to be connected with a suction fan (not shown), for sucking in and carrying away dust from the fur skins.

Operation of invention

The drums 14 and 64 are set in rotation by shifting the belt 54 to the fixed pulley 52. A sheep skin or pelt to be processed is placed on the table 12 with its rear end portion beneath the drum 14 and resting on the blanket 13. The blanket 13 is then raised by pressing down the pedal 45. The rear end portion of the sheep skin is gripped by the radial walls 61 of the beating grooves 60 in the drum 14 which raise the hairs of the skin and move the skin rearwardly. The brushes on the drum 64 sweep and comb the sheep skin in a direction tending the operator. When the sheep skin reaches a position in which its front end is almost beneath the drum 14, the pedal 45 is released. The blanket 13 moves downwardly and permits disengagement of the sheep skin from the drums. The operator then pulls the sheep skin back to its original position in front of the drum 14. The pedal 45 is again depressed, and the above operation is repeated a number of times. The sheep skin is then turned around so that its front/face ends rearwardly and the ironing and beating and combing process is repeated.

It is to be noted that by means of this combined machine for moistening, carding or combing, and ironing sheep skins and the like, it is possible to treat the wool of sheep skin or the like to resemble the hair of a fur skin. So that the brushes 98 do not require any cleaning during the operation of the machine, also that by means of a Sylphon 116 and a dial 117 it is possible to regulate the operation of the thermostat valve so that the temperature in the ironing drum may be maintained at a predetermined degree.

The Sylphon member 116 is an extensible container having a cavity therein. The expanded mercury enters said cavity simultaneously with its entering the opening 115 above the valve stem. The numeral 117 indicates a dial or dial casing on the upper surface of which carries indicia indicating temperature conditions in the drum. The dial casing is in threaded engagement with the valve casing 105. By threading the member 117 downwardly, the Sylphon member is compressed, thereby reducing the volume of the cavity therein and causing a quicker action against the valve 112.

By causing upward or downward movements of the member 117 and thereby regulating the length of the expanded mercury in the member 116 and the volume of the cavity in the said member it is possible to predetermine the temperature at which the expanded mercury will shut off the gas supply to the burner.

It has been found that the color of dyed sheep skin varies with the intensity of the heat in the ironing and stretching drum. The importance of the automatic provision of heat control and the resulting absolute uniformity in the colors of the processed sheep skins is thus clearly evident.

Referring to Figure 3, it will be seen that the moistening and combing drum 64 has its lower surface at a higher elevation above the table 12 and that the sheep skin being treated first contacts the ironing and stretching drum 14 and then contacts the moistening and combing drum.

It is to be noted that 1 have made the link 40 of two relatively slidable members one having a cylindrical extension 119 and the other having an elongated aperture 120 to receive said extension. A coil spring 121 is mounted on the extension intermediate the said two members.

When the pedal is lowered and the blanket 13 comes into contact with the drum 14, the spring 121 is compressed to permit the link 75 to continue its upward motion for lowering the drum 64. It will thus be noted that the pedal 45 operates both links 40 and 75, the link 75 serving to raise the platform 12 and blanket 13, and the link 75 serving to comcomitantly lower the moistening and combing drum 64.
It is to be noted that while I have shown a gas burner for heating the interior of the ironing drum, that I may apply electric resistances within the said drum and heat the drum by means of an electric current.

In accordance with the patent statutes I have described and illustrated the preferred embodiment of my invention, but it will be understood that various changes and modifications can be made therein without departing from the spirit of the invention as defined by the appended claims.

I claim:

1. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having a cut out portion, a blanket vertically movably mounted in said cut out portion, an ironing and stretching drum rotatably mounted above said table, a moisturizing and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for positively rotating said drums in the opposite directions, means for reciprocating said moisturizing and carding drum concomitantly with the rotation thereof, and means for raising and lowering said blanket into or out of contact with said drums.

2. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having a cut out portion, a blanket vertically movably mounted in said cut out portion, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for positively rotating said drums in the opposite directions, means for reciprocating said moistening and carding drum concomitantly with the rotation thereof, and means for raising and lowering said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

3. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for rotating said drums in opposite directions, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

4. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

5. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

6. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

7. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

8. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

9. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

10. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

11. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

12. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.

13. A machine for treating sheep skins and the like, comprising a frame, a table mounted on said frame and having an opening at its rear portion, a blanket vertically movably mounted in said opening, an ironing and stretching drum rotatably mounted above said table, heating means within said drum, a moistening and carding drum rotatably mounted in spaced-apart relation in front of said ironing and stretching drum, means for reciprocating said moistening and carding drums concomitantly with the rotation thereof, and means for raising said blanket into or out of contact with said drums, resilient means mounted in said frame and operatively associated with said moistening and carding drum, said resilient means being tensioned when said moistening and carding drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and carding drum to its original position.
about the axis of said ironing and stretching drum, said moistening and combing drum having a hollow shaft and means for feeding a liquid through said hollow shaft and radially outwardly through apertures in the periphery of said drum, means for moving said central portion of said platform into contact with the lower portion of said ironing and stretching drum prior to contacting the lower portion of said moistening and combing drum.

9. In a machine for treating sheep skins and the like, comprising a frame having a fixed platform with a central opening and a pliable blanket vertically movably mounted in said central opening, said blanket being reinforced and tautly supported by wire mesh belting, said wire mesh belting being movably mounted over bars extending transversely of said opening, a rotatably mounted ironing and stretching drum, a rotatably mounted moistening and combing drum, said drums having unequal circumferences and being driven by intermeshing gears of sizes causing said ironing and stretching drum to rotate in an opposite direction to said moistening and combing drum at a peripheral speed slightly greater than said moistening and combing drum, means for pivotally mounting said moistening and combing drum for swinging motion about the axis of said ironing and stretching drum, said moistening and combing drum having a hollow shaft and apertures extending radially in the periphery thereof for feeding a liquid outwardly at the periphery of said drum, means for moving said blanket into contact with the lower portion of said ironing and stretching drum prior to contacting the lower portion of said moistening and combing drum and resilient means mounted in said frame and operatively associated with said moistening and combing drum, said resilient means being tensioned when said moistening and combing drum is in pressure contact with said blanket, said resilient means serving to restore said moistening and combing drum to its original position.

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