

CUT FUR IS BLOWN, MIXED AND CLEANED.

In the blowing department the fur is automatically fed into large machines in which the fibres are torn apart by revolving cylinders bearing thousands of steel teeth or pickers. The fur rises and passes through the several compartments of the machine, while the hair, being heavier, falls to the bottom.

THE PRIMARY FORM.

Now begins the transformation of the fur into the hat body. At one end of the forming machine the blended fur is weighed in a quantity dependent upon the character of the hat to be made. It is fed into the machine and projected into a chamber containing a minutely perforated copper cone about three feet high. As this cone revolves, the myriads of mist-like fur particles are drawn by suction to its damp outside, forming a thin covering of felt. The cone and felt, protected by flannel wrappings and a metal covering, are immersed in hot water, after which the formed body is removed.

When the bodies leave the cones they are extremely delicate, and to prepare them for their subsequent rough handling they are placed in a machine containing cylinders bearing hard rubber rings which kneed the bodies, causing the fur fibres to knit more closely.

SYSTEMATIC SHRINKING.

One of the most interesting and important branches of hat-making is sizing. It consists of systematically shrinking the bodies to proper size, considerable skill and close attention being necessary in the process.

Drying then follows.

It is really a fine art to distribute the shrinking fur properly in the body, so that it is lightest in the tip gradually increasing in thickness down to the brim.

DYEING.

If they are to be colored the bodies are now sent to the coloring department when they are placed in dye-baths of different combinations of anthracene or alizarin dyes suited to the different mixtures of furs. Stiff hats remain in the baths more than two hours and soft hats about three after which they are thoroughly rinsed and dried. They are then ready for the stiffening department.

HOW INDIA HELPS.

In this department, if the body is intended for a soft hat, the brim is dipped in a preparation of shellac, water and other ingredients and run between steel rollers, tip end first. This forces the stiffening into the felt and expels any surplus. In the case of stiff hats, the shellac—dissolved in alcohol—is applied to the brim by an automatic machine, being brushed into the crown by hand. After it has set, the bodies are placed in steam, to soften the shellac and promote penetration, and are then dried.

About one hundred and fifty thousand pounds of the finest shellac produced in India and more than forty thousand gallons of alcohol are consumed annually.

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FINISHING STIFF HATS



PULLING OUT CROWNS AND BRIMS