## Producing a Woolly Finish on Cotton Fabrics

Result Accomplished in One Machine

By JOSEPH KLÜTGENS

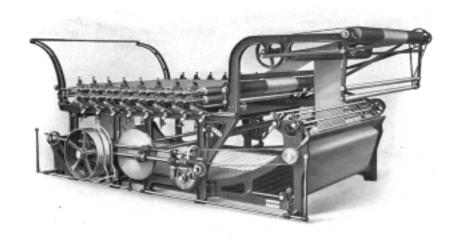
The new type of machine shown in the accompanying illustration, was designed to remove harshness in certain kinds of cotton fabrics, made chiefly with hard twisted yarns, without spoiling the face of the goods. The yarns are, at the same time, made softer and fluffier, so that a wool-like handle is imparted. This can be noted by feeling the two samples.

This machine, built by a German concern, produces a softer and bulkier cloth in one single continue process, by means of a constant beetling between pairs of rolls provided with round studs projecting from the surface

by springs, on a pair of counter pressure rolls below, and both pairs of rolls can be set by levers about 1 inch apart, if this should be desired.

Up to 150 yards per minute can be run and the output of the machine is high when a large number of runs are given. The high speed does not cause uneven tension, because each pair of rolls (or workers) is driven directly and at the same circumferential speed as the feed rolls.

The high speed makes it necessary to have a special type of scray of great capacity, which is adjusted according to the speed. The cloth must be folded absolutely



These rolls are under pressure and the cloth is fed between them in a straight line without being curved or bent, so that the cloth passes over the points of the studs at a tangent. The latter penetrate the fabric to a certain depth, and are readily adjusted. They tend to open up the yarns, as well as the fabric, so that the cloth becomes softer and fuller, and acquires an agreeable woolly handle.

Each upper pair of stud rollers is pressed,

evenly, for the least irregularity would cause it to be pulled sideways before it reaches the rolls.

An even and accurate feed is obtained by the use of a rod and chain conveyor, together with a patented double action folding device.

In addition to the plaiting attachment for the return delivery, an ordinary take-off arrangement is also provided for folding the finished goods behind the scray.

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Before processing.



After processing.