

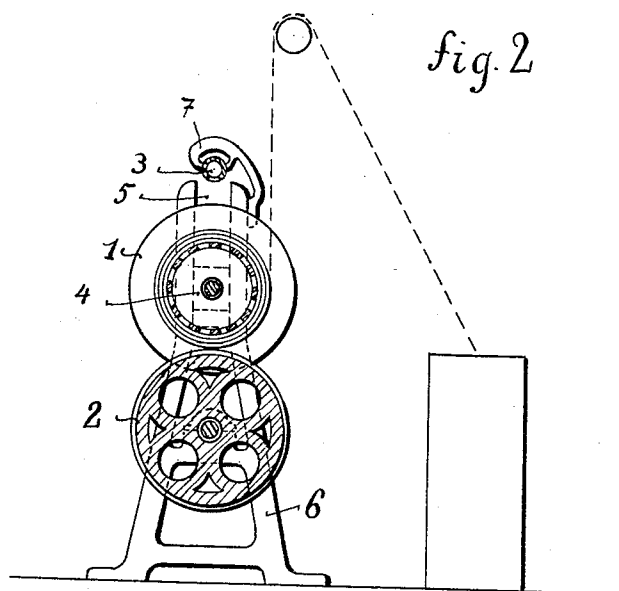
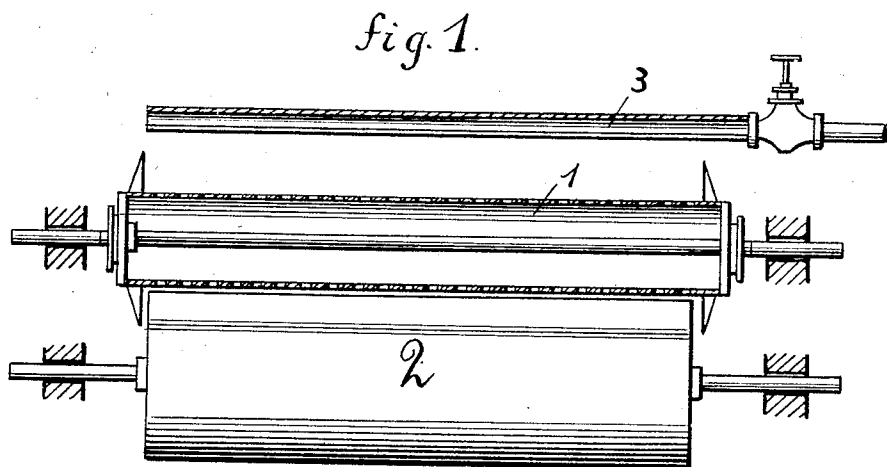
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B. THIES

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DYEING OR BLEACHING CARDING BANDS

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UNITED STATES PATENT OFFICE

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DYEING OR BLEACHING CARDING BANDS

Application filed October 11, 1928, Serial No. 311,889, and in Germany July 15, 1926.

The present invention relates to a process of changing the color of carding bands by dyeing or bleaching.

Hitherto the dyeing of carding bands has been affected by the felting.

By the process according to the present invention there is retained in the fibres of the carding band the elements of wax, fat and the like required for the subsequent spinning.

Under the present invention the dry carding band is wound under pressure round a perforated warp beam and cold-wetted, and then dyed or bleached on the said warp beam.

The treatment of the material to be dyed on a perforated holding device as such is known, but not when used with pressure and cold wetting.

In order to carry out the process according to this invention, it is an advantage to use the usual friction drum arrangement for the winding of the carding band on the warp beam and to provide over the warp beam lying under pressure on the friction drum a delivery pipe for the cold wetting fluid.

The carding band uniformly winds itself firmly round the warp beam, an ordinary beam holding an amount of about 70-80 kilos.

After the aforesaid winding and wetting the art of dyeing or bleaching is carried out.

The warp beams, with the cotton warp dyed or bleached upon them can be delivered to the spinning mill or shed with about 55% of moisture content, whereby the drying can go on uninterruptedly.

The accompanying drawing illustrates an example of apparatus for winding up and cold-wetting by sprinkling at the same time.

Fig. 1 is a side view, partly in section, and Fig. 2 is a cross section. The warp material is wound up round the warp beam 1 which rests on a supporting roller or drum 2 and is driven therefrom by friction. While the winding up is in progress a cold wetting is effected by fluid brought through the perforated pipe 3, so that the material, during the running on the warp beam 1, is compressed by its weight against the drum or roller 2 and obtains through the pipe 3 a cold-wetting.

The warp-beam 1 is carried in a bearing block 4 slidably mounted in a slot 5 provided in a stand or frame 6. The drum 2 is mounted in the stand 6. The pipe 3 is carried by a bracket-like part 7 attached to the top of the stand 6.

The finished wound material moistened by the wetting is delivered together with the beam to the dyeing or bleaching station and the act of dyeing or bleaching can be carried out at once. No previous boiling is required.

What I claim is:

1. The process of changing the color of carding bands consisting in winding under pressure the dry carding band round a perforated warp beam, subjecting the carding band to a cold-wetting on the beam during said winding operation and then dyeing the material while on the warp beam.

2. The process of changing the color of carding bands consisting in forming a hollow roll of dry carding band under pressure, subjecting the carding band on the roll to a cold wetting during said winding operation and then changing the color of the material while rolled.

3. In changing the color of carding bands wherein the band is wound on a perforated warp beam, the process comprising winding dry carding band under pressure, subjecting the carding band to a cold wetting on the beam during said winding operation and then bleaching the material while so wound.

4. The process of preparing carding bands for changing the color thereof consisting in winding the carding band in the dry condition upon a perforated warp beam under pressure and continuously applying a wetting liquid to said band on said beam during the winding thereof.

In testimony whereof, I affix my signature.
BERNHARD THIES.