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UNITED STATES PATENT OFFICE

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PROCESS FOR THE MANUFACTURE OF TEXTILE YARNS

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The present invention relates to a new or improved process for the manufacture of textile yarns of the type wherein synthetically produced fibres are combined with natural bast fibres.

The object of the invention is to produce a yarn, having the visible and tangible characteristics of artificial silk, from synthetically produced fibres and natural vegetable bast fibres, wherein the fibres may be blended and spun on the machines commonly employed in the industry in a manner more fully set forth in the sequel. It has been found essential for this purpose that the bast fibres employed should have an ultimate fibrile or filament length of 2½ inches or more, such as is the case with fibres obtained from plants of the genus Bœhmeria; and it is proposed therefore to combine or blend certain of the artificial silk fibres or similar synthetically produced fibres, lustrous or otherwise (such as a viscose, cellulose acetate, cuprammonium or chardonnet) in the form of waste of suitably cut lengths with natural bast fibres the ultimate fibriles of which have a length of 2½ inches or over. The blending is carried out after the vegetable fibres have been resolved into their ultimate fibriles. For it has been found from practical tests that only after the bast fibres have been resolved into their ultimate fibriles or filaments, before blending with the artificial silk fibres, can the blend be satisfactorily worked up into yarn. The vegetable fibres are resolved by any of the known methods such as by use of acid or alkaline and bleaching agents.

The combed bast fibre is then blended in any desired proportion with any of the artificial silk fibres above mentioned in the form of a sliver or a top, the blending being carried out in the usual way and the blend recombed if necessary.

Alternatively the bast fibre before or after resolution may be blended with the artificial silk fibre or any similar synthetically produced fibre and the mixture opened by carding or garnetting.

The mixed combed top thus produced is then spun on any suitable spinning machines preferably on a cap or a ring spinning frame.

Owing to the superior strength of their bast fibre component the yarns thus produced have extremely satisfactory durability and both dry and wet strength.

I claim:—

1. A process for the manufacture of textile yarns, consisting in resolving natural bast fibres embodying ultimate filaments of a length of at least two and one-half inches into such ultimate filaments, blending the ultimate filaments with synthetically produced fibres, and then spinning the blend.

2. A process for the manufacture of textile yarns, consisting in resolving natural bast fibres embodying ultimate filaments of a length of at least two and one-half inches into such ultimate filaments, opening the filaments out and combing them, blending the combed, ultimate filaments with synthetically produced fibres, and then spinning the blend.

3. A process for the manufacture of textile yarns, consisting in resolving natural bast fibres embodying ultimate filaments of a length of at least two and one-half inches into such ultimate filaments, opening the filaments out and combing them, blending the combed ultimate filaments with synthetically produced fibres, combing the blend, and then spinning the blended, combed tops so produced.

In testimony whereof I affix my signature.

DINSHAW RATTONJI NANJI.