UNITED STATES PATENT OFFICE.

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MANUFACTURE OF COVERS FOR ROLLERS USED IN TEXTILE MACHINERY.

1,044,956. Specification of Letters Patent. Patented Nov. 19, 1912.

No Drawing. Application filed April 21, 1911. Serial No. 622,486.

To all whom it may concern:

Be it known that we, ROBERT WARWICK, WALTER WARWICK, and ANDREW REASON, all subjects of the King of Great Britain, residing, respectively, at 412 Wigan road, Deane, Bolton, in the county of Lancaster, England, Nowvosjee Wadia & Sons, Home street, Fort, Bombay, India, and Cleveland, Deane, Bolton, in the county of Lancaster, England, have invented certain new and useful Improvements in the Manufacture of Covers for Rollers Used in Textile Machinery, of which the following is a specification.

This invention relates to the manufacture of covers for drawing and other rollers used in textile machinery, comprising a foundation or backing of fibrous or other material woven or otherwise manufactured in the form of a seamless tube upon a core or mandrel or subsequently placed thereon, the said foundation or backing while on the core or mandrel being dipped into or otherwise treated with an elastic composition.

The composition we employ is composed of the following ingredients, in approximately the proportions mentioned:—10 parts of adhesive material such as glue or gelatin, 10 parts of glycerin, 20 parts of an inert powdered material such as china clay, 10 parts of casein, 2 parts of tungstate of soda or borax (for the purpose of melting or dissolving the casein), 10 parts of powdered antimony or other metallic ore, a vegetable dye in proportions giving the desired color, and an oily or fatty material keeping the composition soft and consisting of either 5 parts of wool fat (lanolin); 5 parts of linseed oil, 5 parts of Venice or other turpentine, or 3 parts of ichthyol oil.

Each layer or coating or the whole body of the composition that has been deposited upon the foundation or backing is subjected to bathing, or spraying, or to the application in the form of a vapor of a 10 per cent. solution or thereabout of formalin, after which the same may be finished with a coat or covering of dissolved casein of 5 per cent. strength or thereabout if required. After the above mentioned operations have been effected, the core or mandrel is extracted, thus leaving a perfectly cylindrical and even tube or cover, which is drawn over the roller to be covered in any suitable manner. After the cover has been drawn over the roller it is treated with a 5 per cent. solution or thereabout of formalin, bichromate of potash, alum, or chrome alum for a period that is determined in accordance with the degree of hardness to be imparted to the cover.

What we claim and desire to secure by Letters Patent of the United States is:—

1. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture an adhesive material, glycerin, an inert powdered material, casein, a casein solvent and an oily softening material.

2. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture an adhesive material, glycerin, an inert powdered material, casein, tungstate of soda and an oily softening material.

3. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture an adhesive material, glycerin, an inert powdered material, casein, a casein solvent, powdered metallic ore and an oily suftening material.

4. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture an adhesive material, glycerin, an inert powdered material, casein, a casein solvent, powdered antimony ore and an oily softening material.

5. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture an adhesive material, glycerin, an inert powdered material, casein, a casein solvent and wool fat.

6. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture glue, glycerin, an inert powdered material, casein, a casein solvent and an oily softening material.

7. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture an adhesive material, glycerin, china clay, casein, a casein solvent and an oily softening material.

8. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture an adhesive material, glycerin, an inert powdered material, casein, a casein solvent, powdered metallic ore, a vegetable dye and an oily softening material.

9. An elastic composition for covering

rollers for textile machinery, comprising in intimate mixture glue, glycerin, china clay, casein, tungstate of soda, powdered antimony ore and wool fat.

10. An elastic composition for covering rollers for textile machinery, comprising in intimate mixture the following ingredients in approximately the proportions stated: glue 10 parts, glycerin 10 parts, china clay 20 parts, casein 10 parts, tungstate of soda 2 parts, powdered antimony ore 10 parts and wool fat 5 parts.

In testimony whereof we affix our signatures in presence of two witnesses.

ROBERT WARWICK.
WALTER WARWICK.
ANDREW REASON.

Witnesses:
RICHD. NELSON,
O. B. EVANS.