

UNITED STATES PATENT OFFICE.

JOANNY BOYEUX, OF VILLEURBANNE, FRANCE.

METHOD OF SIZING TEXTILE MATERIALS.

934,034.

No Drawing.

Specification of Letters Patent.

Patented Sept. 14, 1909.

Application filed January 23, 1907. Serial No. 353,739.

To all whom it may concern:

Be it known that I, JOANNY BOYEUX, a citizen of the French Republic, residing at Villeurbanne, Rhone, France, have invented certain new and useful Improvements in Methods of Sizing Textile Materials, of which the following is a specification.

This invention relates to improvements in process of dressing textile materials and consists in the impregnation of natural or artificial textile threads or filaments of any kind with a substance or artificial grease having like the natural grease of silk the property of giving body or strength to the thread, preventing it from entangling and facilitating the manipulations to which said threads or filaments are subjected to before and during weaving. This impregnation or coating of grease is advantageous for all textile substances but more particularly for raw silks such as Canton, Bengal, Tusseh and fancy silks and the like, it is also suitable for cottons and linens. The grease or substance is formed from a special preparation on a base of linseed oil and is perfectly adherent and at the same time supple and elastic and is advantageous to the threads while they are submitted to the usual operations preparatory to and during weaving. The impregnating or coating substance is permanent and is not rendered sticky by the action of alkaline solutions. The linseed oil boiled or raw is applied in the form of a mixture with any volatile liquid such as commercial benzin for example to which is added a certain quantity of bees-wax and in certain cases a little resinous substance. The proportions of these substances vary according to the nature of the material to be treated, as will be seen by the following examples, for which the methods of application are described.

1. For raw silks the solution is composed of commercial benzin 1 kilogram, boiled linseed oil 450 gr., beeswax 15 gr. This solution is preferably heated in a water bath to about 30 degrees C. so as to liquefy the wax and to render the oil more penetrating. The threads or filaments of raw material are immersed in the solution without being unraveled or undone, unless they are in a close mass in which case they are loosened a little. After sufficient time has been allowed for soaking the filaments are then

subjected to a straining process to remove the surplus liquid, are then laid or spread out still without being undone on tables or the like in a chamber heated to a temperature of 30 degrees C. where they remain about 30 hours. At the end of this time the benzin being evaporated the filaments remain impregnated by the oil and wax. These dry filaments have now the properties described in a high degree.

The above process applicable to threads or filaments of silk as described is also applicable to raw or other silks on bobbins, reels, spindles, or in warps or separate threads. It is also applicable to textile substances before spinning.

This preparation gives the silk to which it is applied an added weight or bulk of about 5%.

2. For textile substances other than raw silk the same composition is employed but the proportions of the substances used vary according to the added weight or bulk it is desired to give to the threads or finished fabric. For Tusseh for instance it is convenient to give an addition of 12 to 15%, for cotton 15 to 30% for this purpose it is only necessary to increase the quantities of oil and wax in proportion to the weight or bulk required. Further one can add to each kilogram of oil mastic in solution 20 grams or good resin 30 grams. The manipulation is the same as for raw silks with the exception that after the soaking, the filaments are undone, laid on rods and warmed and dried for 48 hours.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

The hereindescribed method of sizing textile threads, which consists in mixing linseed oil and wax with a volatile carrier, immersing the threads in the mixture for a length of time sufficient to enable the thread to become saturated with the mixture and thereafter removing the threads and evaporating the volatile solvent so as to leave the thread impregnated with oil and wax.

In witness whereof I have signed this specification in the presence of two witnesses.

JOANNY BOYEUX.

Witnesses:

GASTON JEANNIAUS,
MARIN VACHON.