

(No Model.)

G. JAQUITH.
CLOTHING FOR PULLEYS.

No. 293,469.

Patented Feb. 12, 1884.

Fig. 1

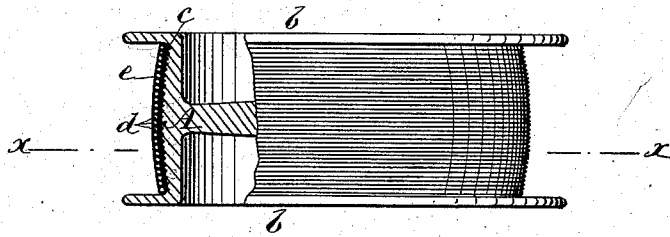


Fig. 2

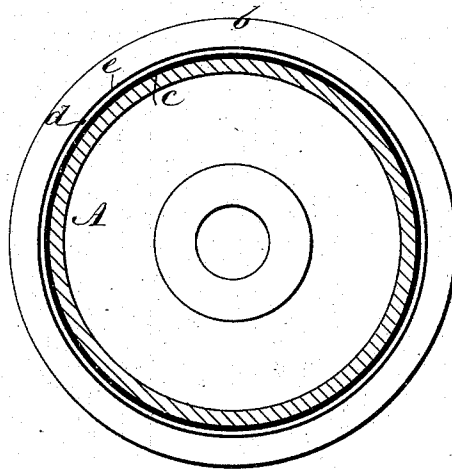
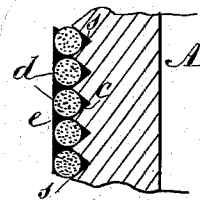


Fig. 3



WITNESSES:

C. Neveu
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UNITED STATES PATENT OFFICE.

GILMAN JAQUITH, OF MAYSVILLE, KENTUCKY, ASSIGNOR TO JANUARY & WOOD, OF SAME PLACE.

CLOTHING FOR PULLEYS.

SPECIFICATION forming part of Letters Patent No. 293,469, dated February 12, 1884.

Application filed July 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, GILMAN JAQUITH, of Maysville, in the county of Mason and State of Kentucky, have invented certain new and useful Improvements in Clothing for Pulleys, of which the following is a full, clear, and exact description.

This invention mainly has reference to small pulleys having rapid motions, including the small pulleys or whirls on bobbin and other spindles, when driven by flat bands or ribbons arranged to run between flanges or protuberances on the sides of the pulley.

The object of the invention is to produce increased friction on the driving-surface of the pulley and better bite or hold for the band, thereby preventing slipping of the band without having resort to tightening up the same. This result I accomplish by first cutting or forming a female thread around the driving-surface of the pulley, which may be of metal, then applying to said surface a composition coating in a heated or soft condition, preferably of pitch and glue or other like substances, next winding strong thread around such spirally-grooved and coated surface of the pulley, and afterward applying to the exterior of the thread-covering an outer thin coating of the composition, although this second coating may be omitted, if desired. This clothing, when dry or hard—that is, after the composition has set—will be found to have the desired effect, the thread combining with the composition to produce it, and the thread being prevented from getting loose or slipping, in part by the spirally-grooved surface of the pulley, within which the thread wedges, and in part by the composition.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a partly-sectional side view of a pulley having my improved clothing applied; Fig. 2, a section of the same on the line *xx* in Fig. 1; and Fig. 3, a sectional view, upon a larger scale, of a portion of the pulley, showing the spiral groove in the driving-surface thereof and the thread as wound thereon and therein, with composition holding the same.

A is the body of the pulley, which may be of metal, and have side flanges, *b b*, of any desired shape and construction. The exterior of its body, on which the driving-band runs, may either be straight, slightly convex, or concave, and has a V-shaped female thread or spiral groove, *s*, formed or cut therein and around it, said groove being of a width to correspond with the size of the thread. On this grooved surface I apply, by a brush, an adhesive composition, while hot or in a sufficiently soft condition to be so worked, and on or around this coating *c*, before the same has fully set, spirally wind within the female thread sewing or other strong thread or twine, forming a fine, close, circular or spiral rib-like covering, *d*, after which another thin coating, *e*, of the composition may be applied by brush to and around the exterior of the thread-covering; or this second coating may be altogether omitted, if desired.

The adhesive composition which I prefer to use for the coating or coatings, and which serves to bind or hold the thread, is made of pitch and glue in about equal proportions, more or less. When fully set, the clothing presents a pulley-surface that will have all the necessary friction and hold to prevent the band from slipping, and will be found both durable and cheap. The spiral groove around the pulley is an important factor in the construction, inasmuch as it not only directs and facilitates the close winding of the thread around the pulley, but, by the thread wedging within the same materially aids the composition in holding the thread to its place.

I do not abandon or dedicate to the public any patentable feature set forth herein and not hereinafter claimed, but reserve the right to claim the same either in a reissue of any patent that may be granted upon this application or in other applications for Letters Patent that I may make.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A clothing for whirls and pulleys, composed of an adhesive composition applied to the band-driving surface of the pulley, and a spirally-wound thread or twine covering around the same, arranged to enter a female

thread in the driving-surface of the pulley, substantially as specified.

2. A clothing for whirls and pulleys, consisting of a coating, *c*, composed of pitch and glue, and a covering, *d*, of thread or twine wound spirally around the same, and within a female thread cut in or formed around the driving-surface of the pulley, essentially as described.

10 3. A clothing for whirls and pulleys, consisting of an adhesive coating, *c*, applied to the band-driving surface of the pulley, having a female thread, *s*, in it, a covering, *d*, of

thread or twine wound spirally around the same and within said female thread or groove, 15 and an outer adhesive coating, *e*, substantially as specified.

4. A whirl or pulley having a spirally-grooved driving-surface and a clothing composed of an adhesive composition and spirally-wound thread or twine, essentially as shown and described.

GILMAN JAQUITH.

Witnesses:

A. GREGORY,
C. SEDGWICK.