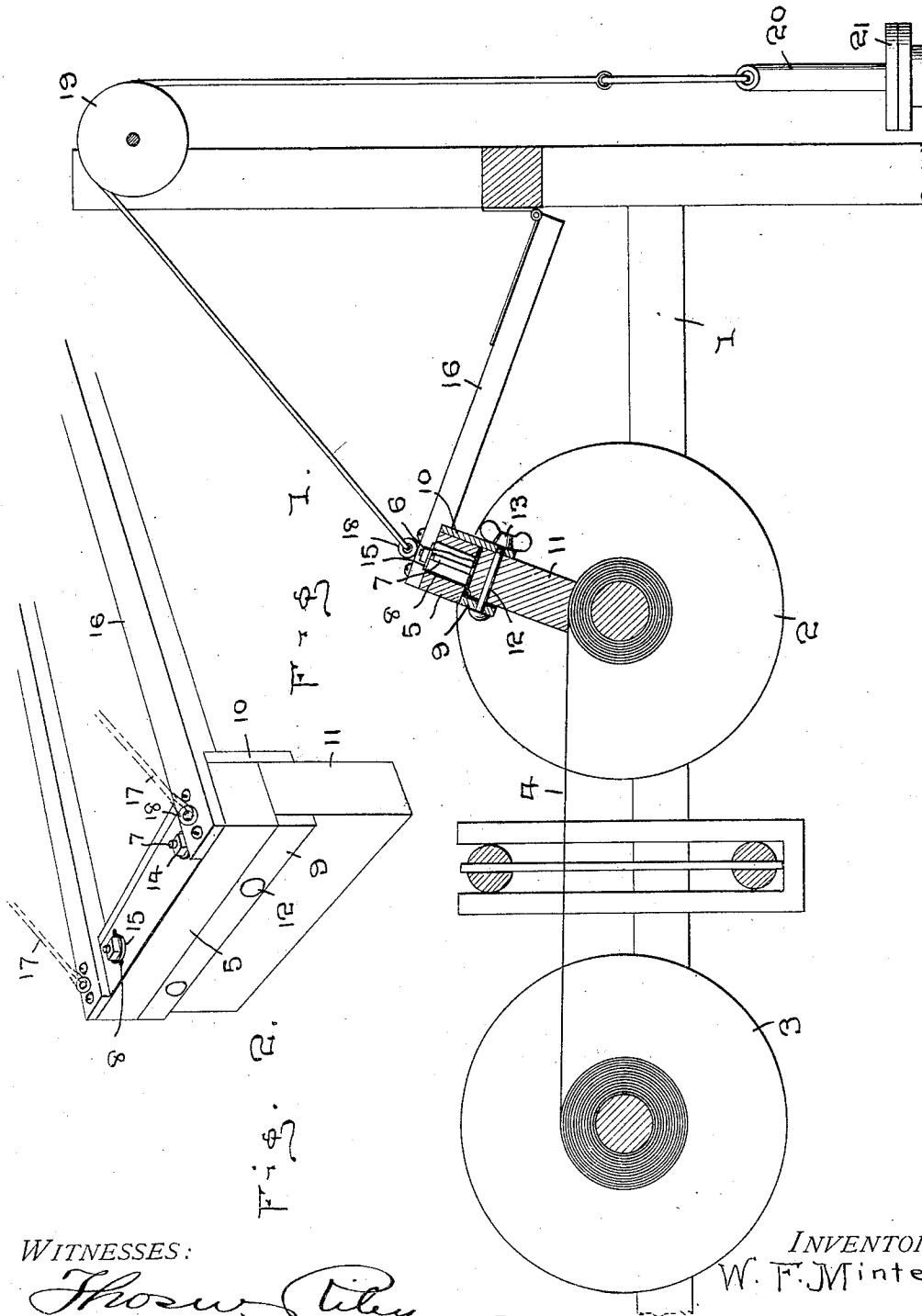


W. F. MINTEL.
 MEANS FOR APPLYING WAX TO LOOM WARP.
 APPLICATION FILED APR. 6, 1909.

940,607.

Patented Nov. 16, 1909.



WITNESSES:

Thos. W. Wiley
M. A. Newcomb

BY

W. J. Fitzgerald & Co
 Attorneys

INVENTOR
 W. F. Mintel

UNITED STATES PATENT OFFICE.

WILLIAM FRED MINTEL, OF PAWTUCKET, RHODE ISLAND.

MEANS FOR APPLYING WAX TO LOOM-WARP.

940,607.

Specification of Letters Patent.

Patented Nov. 16, 1909.

Application filed April 6, 1909. Serial No. 488,253.

To all whom it may concern:

Be it known that I, WILLIAM F. MINTEL, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful improvements in Means for Applying Wax to Loom-Warp; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in means for applying wax to loom warp and my object is to so construct the device as to apply the wax to the warp as it is being filled.

A further object is to provide means for gradually feeding the wax onto the warp and a still further object is to provide a suitable holding mechanism for the wax.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings forming part of this application, Figure 1 is a detail sectional view through a warp filling machine, showing my improved wax applying mechanism in use, and, Fig. 2 is a detail perspective view of the wax supporting mechanism.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates a frame for any suitable form of warp filling machine, said frame having drums 2 and 3, onto which the warp 4 is to be wound and in order to apply wax to the warp as it is being wound from one spool to the other, a holder 5 is provided, to the lower face of which is secured a plate 6, said plate being held in position on the holder by means of bolts 7, which bolts extend upwardly through oblong slots 8 in the holder 5. One edge of the plate 6 has hingedly secured thereto a bar 9, between which and a plate 10, depending from the opposite side of the holder, is to be introduced the edge of a cake of wax 11, said wax being held between the bar and plate by introducing clamping bolts 12 through the plate and bar and the interposed portion of the wax, one end of the bolts being provided with thumb nuts 13, whereby the nuts may be quickly applied or removed and by providing the slots 8 as shown, the bar 9 may be moved

away from the plate 10 to admit bars of wax of various thicknesses. The bolts 7 are of such length as to extend entirely through the holder 5 and have their free ends provided with nuts 14, whereby the plate 6 may be securely clamped in its adjusted position, a washer 15 being preferably introduced between the nut 14 and the face of the holder 5. The holder 5 has secured thereto arms 16, which arms are hingedly secured at their opposite ends to parts of the frame 1 and by regulating the length of said arms, the holder 5 will be so positioned as to bring the wax in engagement with the warp at a point substantially over the axle of the drum 2, thereby thoroughly waxing the warp as it is moved from one drum to the other.

As the block of wax is of considerable weight when first placed in engagement with the warp and would consequently over-supply the wax to the warp, I provide means for limiting the pressure of the block of wax on the warp by attaching cables 17 to eyes 18 adjacent the ends of the holder 5, which cables extend over sheaves 19 rotatably mounted on parts of the frame 1, the free ends of said cables having keepers 20 thereon, which are adapted to receive and retain weights 21 and it will be readily understood that by placing additional weights on the keepers when the block of wax is first placed in the holder and then remove the weights one at a time as the wax is consumed, the pressure of the block of wax on the warp will be uniform at all times and the wax evenly applied to the warp.

The block of wax is preferably formed of paraffin, but it will be readily understood that any other suitable form of waxing substance may be employed and while I have shown and described a mechanism for applying the wax to the warp while it is being filled, yet it will be readily understood that this attachment may be applied directly to the loom and the warp waxed as it is being operated upon by the loom. It will likewise be seen that in view of the simplicity of my improved wax holding device, it can be very cheaply manufactured and installed in connection with the various machines and the holder may be made in such manner as to be used in connection with wide and narrow warps.

What I claim is:

1. A device of the character described, comprising a warp filling frame, a holder,

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arms fixed to said holder and hinged to said warp filling frame, a plate applied to the lower surface of the holder and having hinged thereto a bar adapted to stand at right angles to said plate, an additional plate fixed to said holder and a nut-equipped bolt passing through said bar and one of said plates for the retention of a block of wax between said bar and plate, and means for suspending said holder in position.

2. A device of the character described, comprising a holder, a warp filling frame, arms hinged to said frame and secured to said holder, means for suspending said holder in position, said holder being provided with elongated openings, a plate applied to the lower surface of said holder,

bolts for the retention of said plate in position, and extending through said openings, said bolts themselves being provided with securing means, a bar pivotally secured to said plate, an additional plate fixed to said holder, and nut-equipped bolts extending through said bar and the last mentioned plate for the retention of a block of wax between said bar and plate.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM FRED MINTEL.

Witnesses:

JOSEPH K. SLOAN,
MITCHELL ADAMS.