May 22, 1923. 1,455,899

J. L. CABELINSKY

SEWING MACHINE SHAFTING GUARD

Filed Dec. 1, 1919 2 Sheets-Sheet 1

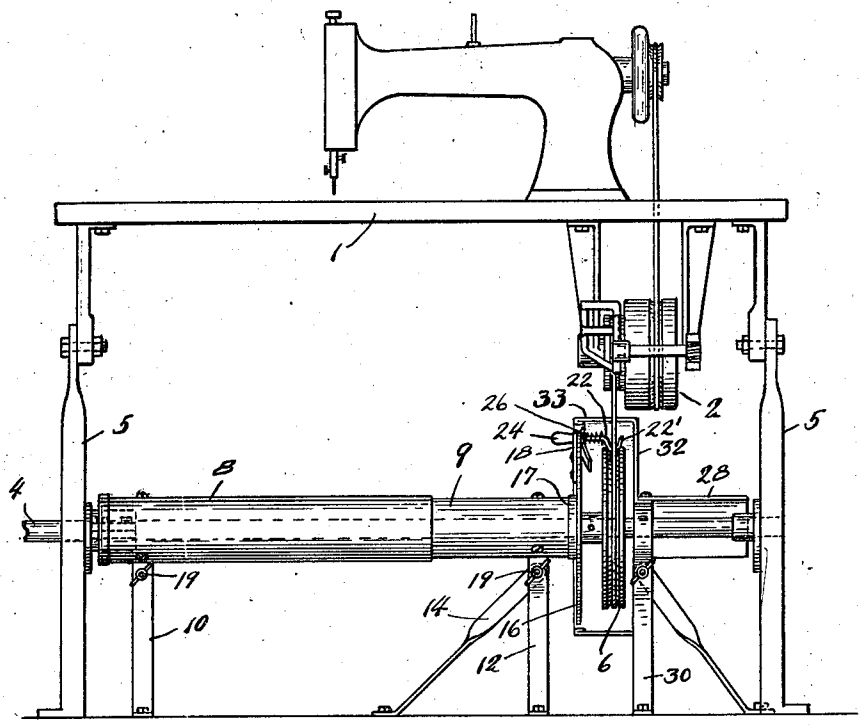


Fig. 1.

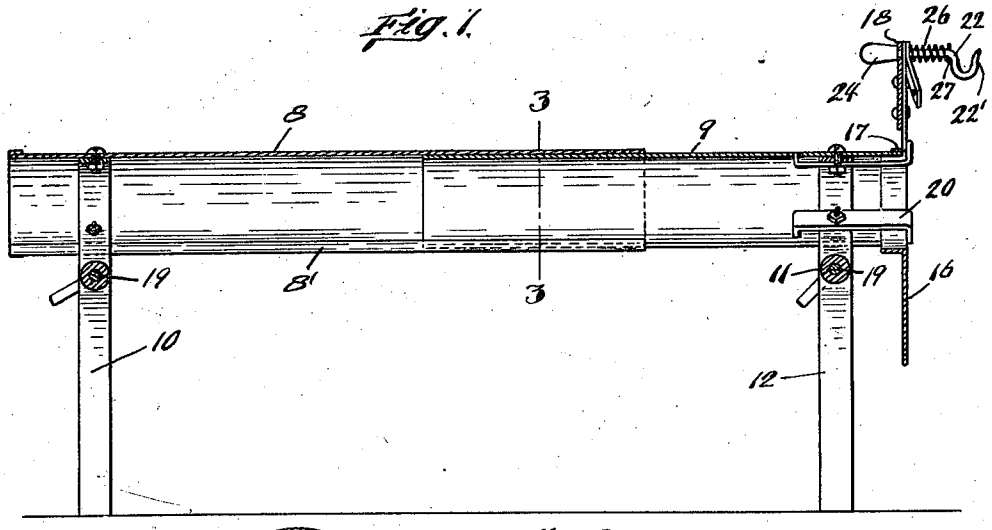


Fig. 2.

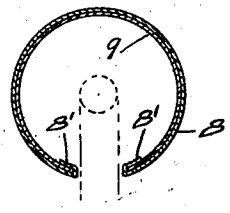


Fig. 3.

Inventor:
Julius L. Cabelinsky
by L. L. Harriman Atty

May 22, 1923. 1,455,899

J. L. CABELINSKY

SEWING MACHINE SHAFTING GUARD

Filed Dec. 1, 1919 2 Sheets-Sheet 2

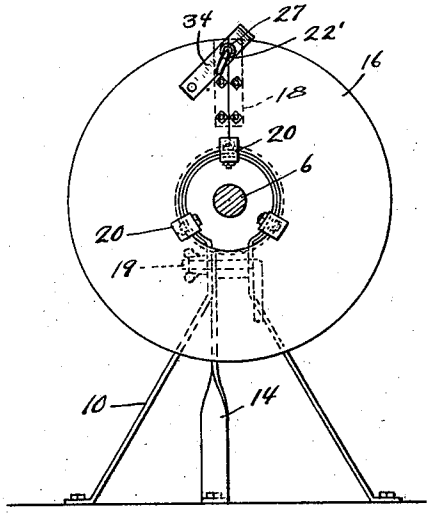


Fig. 4.

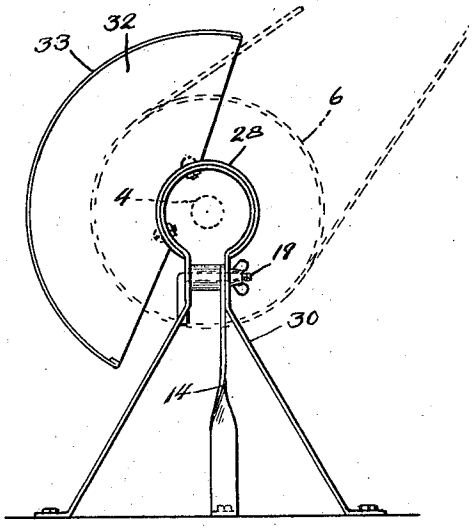


Fig. 5.

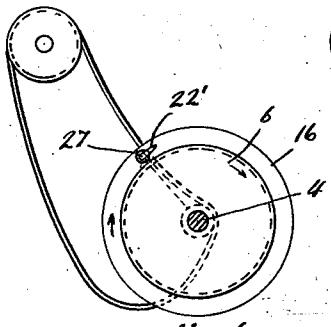


Fig. 6.

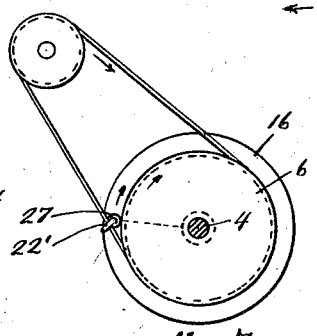


Fig. 7.

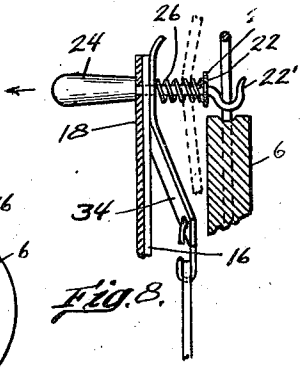


Fig. 8.

Inventor.
Julius L. Cabelinsky
by L. L. Kammer
Atty.

Patented May 22, 1923. 1,455,899

UNITED STATES PATENT OFFICE.

JULIUS L. CABELINSKY, OF ROXBURY, MASSACHUSETTS.

SEWING-MACHINE-SHAFTING GUARD.

Application filed December 1, 1919. Serial No. 341,782.

To all whom it may concern:

Be it known that I, JULIUS L. CABELINSKY, a citizen of the United States, and a resident of Roxbury, county of Suffolk, State of Massachusetts, have invented an Improvement in Sewing-Machine-Shafting Guards, of which the following is a specification.

This invention relates to shields for shafting, and more particularly, shafting which is supported beneath a sewing machine table to drive the machine supported thereon. While it is desirable to have both the shafting and the drive wheel suitably encased, it is also desirable and practically necessary that access to the drive wheel may be readily permitted, to enable the belt to be removed, replaced or otherwise adjusted. It is also practically necessary that the shielding means may be applied, removed and adjusted without disturbing the shafting, and even while the shafting is in motion.

The objects of my invention are to provide a form of shield which may be readily placed in position to encase the shafting, while being driven, which provides an effective shield for the drive wheel and may be readily adjusted to permit convenient access to the drive wheel when necessary, and which is provided with means permitting ready application and removal of the belt.

I accomplish these objects by the means shown in the accompanying drawing, in which:—

Fig. 1 is a front elevation of a sewing machine table, having an embodiment of my invention applied to the shafting thereof.

Fig. 2 is a central longitudinal section of the casing.

Fig. 3 is a transverse section at line 3—3 of Fig. 2.

Fig. 4 is an end view of the pulley shield at one side of the pulley.

Fig. 5 is an end view of the shield at the opposite side of the pulley.

Figs. 6, 7, and 8 are detail views of the belt shifting means.

In Fig. 1 of the drawing, a common form of sewing machine table 1 is indicated, having the usual clutch mechanism 2 which is driven from a line of shafting 4, journaled in the legs 5 of the table at a short distance from the floor, said shafting having a main pulley or drive wheel 6 thereon, which is belted to the clutch mechanism 2.

According to my invention, I provide a cylindrically shaped casing, composed of two telescopically arranged sheet metal sections, 8 and 9, both sections being bent into cylindrical form to extend throughout the greater portion of a circumference and having their longitudinal edges separated by a distance somewhat greater than the diameter of any shaft which the casing is to enclose, so that it may be readily placed in position to enclose the shaft, as indicated in Fig. 3. The outer casing 8 is provided with inturned flanges 8′ at each edge, and the edge portions of the casing 9 are enclosed within said flanges. As the casings extend circularly throughout more than a semi-circumference, the sliding joint therebetween is adapted to resist transverse bending or deflection to practically the same extent as if said sections were complete cylinders. Supports 10 and 12 are provided for said casings 8 and 9 respectively, said supports comprising strips of malleable iron bent in circular loop-form to fit within the casings, from edge to edge and to extend from these points divergently to the floor, to form legs, the intermediate portions thereof being secured by bolts, to said casings 8 and 9 respectively, adjacent the opposite ends thereof. In placing the casings in position about the shafting, said legs are sprung or bent upwards or from each other to raise or lower the casings, and hold their sides concentrically with the shafting, the legs being bolted to the floor in their adjusted positions.

One, or both of said pairs of legs may be provided with a brace 14 which is connected thereto by a bolt 19 passing therethrough adjacent the lower edge of the casing to which it is directly connected.

A wheel guard 16, composed of a flat circular disk of sheet metal is rotatably mounted in the end of the casing 9, said disk having a flange 17, which is adapted to fit within said casing and to turn freely therein. The external diameter of the disk is somewhat greater than that of the drive wheel and is provided with a single radial slit, which extends from its inner to its outer edge, so that it may be temporarily distorted, to permit it to be placed on the shaft, and a metal plate 18 is secured thereto across said slit to hold the disk in position with its flange within the casing 9. Angular clips 20 are secured to the inner side of said

casing, preferably by the bolts which hold the legs 12 therein, and extend through the disk and engage its outer side, as shown in Fig. 2, so that it is held between the end of the casing at one side and the out-turned ends of the clips at the other side.

A rod 22 is slidably mounted in the disk 16 perpendicularly thereto, and adjacent its edge, said rod having a belt-engaging hook 22′ on one end and a handle 24 on the opposite end, and having a spring 26 thereon which is interposed between the disk and a stop-washer 27 on the rod adjacent the hook, said spring thus normally acting to hold the handle against the opposite side of the disk therefrom.

A casing 28, similar in shape to the casing 8, is provided for the portion of the shaft at the opposite side of the pulley from the disk 16, said casing 28 being supported by a loop-shaped strap 30 identical to the straps 10 and 12, already described. A sector shaped shield 32 is mounted on the end of the casing 28 next the pulley, said shield having an arc shaped flange 33 on its edge, which overhangs the pulley 6 and disk 16 as indicated in Figs. 1 and 5.

In practice, a guard is also arranged in front of the pulley and clutch mechanism, which is adapted to be lowered to permit ready access thereto, but illustration thereof is omitted for the sake of clearness and as it forms no part of the present invention.

It will be apparent that the casing, being thus adapted to be easily adjusted in length and height, may be readily placed in position to enclose the shafting without disturbing the latter and, when secured in position, will be rigidly supported so that it will not be engaged by the shafting.

As it is occasionally necessary to pass the belt about the main pulley, before its ends can be connected, the rotatably mounted disk 16 may be conveniently employed for this purpose, and to this end said disk is provided with a small bracket 34, which may be conveniently mounted on the rod 22, said bracket having an aperture in its end, to which one end of the belt may be conveniently attached, as indicated in Fig. 8. By rotating the disk through one revolution, the belt end will be carried about the pulley, so that its ends may be secured together.

In case it is desired to remove the belt from the pulley, the hook 22′ is engaged with the belt at the side where it runs onto the pulley and then the rod is pulled to the left as the disk is turned. To replace the belt, the hook is engaged with the belt and guided onto the pulley as the disk is rotated to carry the disk beneath the pulley, all as indicated in Figs. 6, 7 and 8.

I claim:

1. A shafting guard comprising a cylindrically shaped casing open at one side to permit the same to be placed in position about the shafting, a pulley guard comprising a split sheet metal disk having a central aperture corresponding in diameter to the internal diameter of said casing, and rotatably mounted on said casing at one end, in register therewith, and belt-engaging means carried by said disk.

2. In combination with a line of shafting having a driving pulley thereon, a casing disposed about said shafting and extending into proximity to said pulley, a pulley shield rotatably mounted on said casing adjacent said pulley and a belt guide mounted on said pulley shield and arranged to be engaged with the pulley belt to guide it into position thereon.

In testimony whereof, I have signed my name to this specification.

JULIUS L. CABELINSKY.