

L. ONDERDONK.
GEAR CASING.
APPLICATION FILED JUNE 20, 1907.

1,030,677.

Patented June 25, 1912.

Fig. 1.

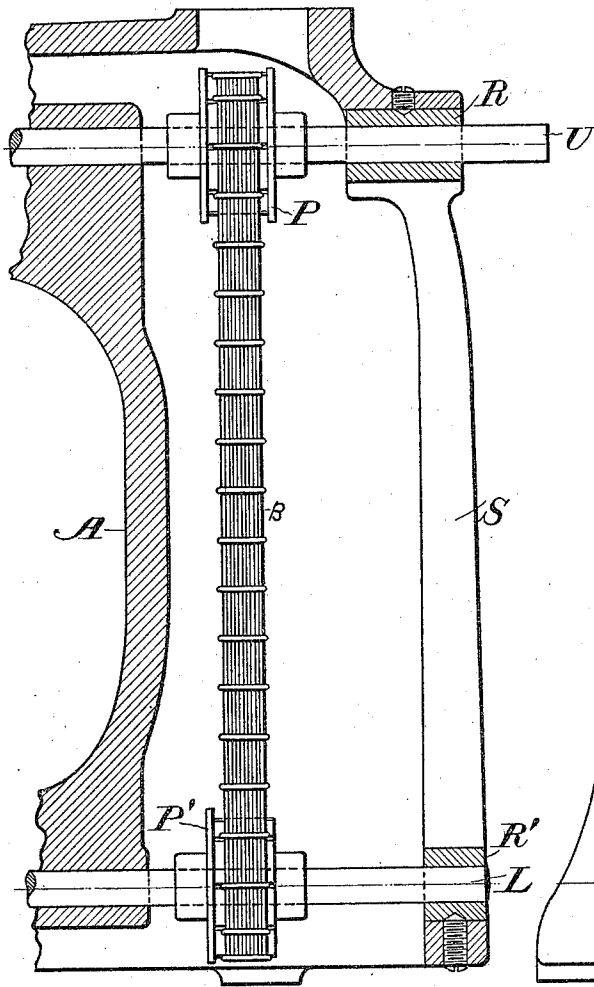


Fig. 2.

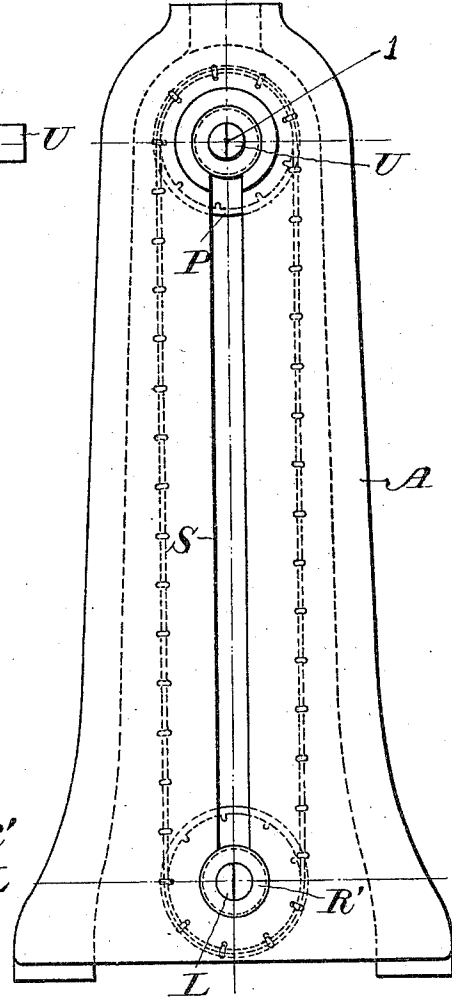


Fig. 3.

WITNESSES.

C. Walker
Mary W. Hammer

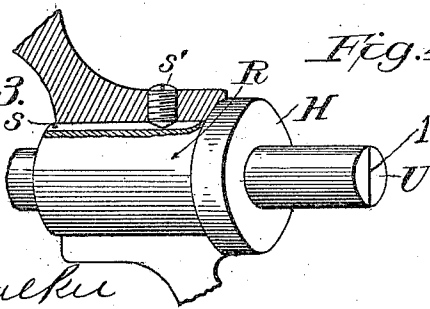
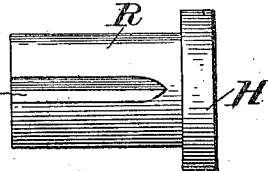


Fig. 4.



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LANSING ONDERDONK, OF NEW YORK, N. Y., ASSIGNOR TO UNION SPECIAL MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

GEAR-CASING.

1,030,677.

Specification of Letters Patent.

Patented June 25, 1912.

Application filed June 20, 1907. Serial No. 379,904.

To all whom it may concern:

Be it known that I, LANSING ONDERDONK, a citizen of the United States, residing at New York, in the county of New York, State of New York, have invented certain new and useful Improvements in Gear-Casings, of which the following is a description, reference being had to the accompanying drawing and to the letters and figures of reference marked thereon.

My invention relates to improvements in sewing machines, the object being to provide in a sewing machine having upper and lower parallel shafts driven one from the other, preferably by a belt, a construction whereby the driving connection may be readily removed and inserted with a minimum amount of trouble, and in a limited time, without the necessity of removing the machine from the table, or dismantling it in any respect.

A further object is to so arrange the parts that an inexperienced person may accomplish such insertion of the driving connection without danger of interfering with the timing of the parts.

The invention, therefore, consists in the matters hereinafter described and referred to in the appended claims.

The invention is illustrated in the accompanying drawings, in which,

Figure 1 is a sectional side view of so much of a sewing machine frame embodying my invention, as is necessary to a complete understanding of the same; Fig. 2 is an elevation; Fig. 3 is an enlarged sectional perspective of the upper right hand portion of Fig. 1; and Fig. 4 is a detail view of one of the removable bushings.

In these drawings, A represents as a whole the framework of a sewing machine, of which a portion is shown. This machine is provided with upper and lower shafts U and L, connected as herein shown by a driving belt B, trained over pulleys P, P', although other connections may be substituted. Space is provided in the framework for the location and operation of the driving connections. As heretofore constructed, these parts

are difficult of access for removal and insertion, and the main purpose of this invention is to remedy this defect. This is accomplished by providing a vertical slot S in the framework, extending between the two bushings R, R', in which the shafts U and L are respectively journaled at one end. By removing the bushings, the ends of the belt may be slipped over the shafts, and the slot S permits the belt to be readily inserted and removed. The belt when put through the slot is preferably placed first on the upper pulley P, which has two flanges, and then slid sidewise on the lower pulley P', which has only one flange.

As a convenient way of constructing the bushings, each has a head H, and a V-shaped slot s, into which passes a similarly pointed set screw s', thus securing the proper adjustment of the bushing, the corresponding shapes of the slot s and the point of the set screw giving a secure holding power, the head H permitting its removal and preventing too deep seating.

To prevent the possibility of an inexperienced operator throwing the parts out of timing in replacing a belt, I prefer after they have been once properly timed, to mark the shafts U and L with timing marks, lining up with certain marks on the bed of the machine, or I may place a vertical mark on the end of each shaft, so that the two stand in a vertical line, one with respect to the other as shown at 1 in Fig. 2 and on the end of the shaft U in Fig. 3.

It will be understood that I do not wish to be limited to the exact details of construction herein shown and described, as changes may be made without departing from the spirit of my invention.

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

1. A framework for machines having removable bushings for upper and lower shafts, and provided with a slot between the bushings.

2. In a machine having upper and lower

shafts, bearing bushings therefor, said machine having a slot extending between the bushings and suitable timing marks.

3. A framework for machines, having a
5 removable bushing for the driving shaft,
said bushing having a head and an elongated
recess in V shape, and a screw engaging
said recess for holding said bushing in said
frame.

In testimony whereof I affix my signa- 10
ture, in presence of two witnesses.

LANSING ONDERDONK.

Witnesses:

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JOHN H. HOWELL, Jr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
