

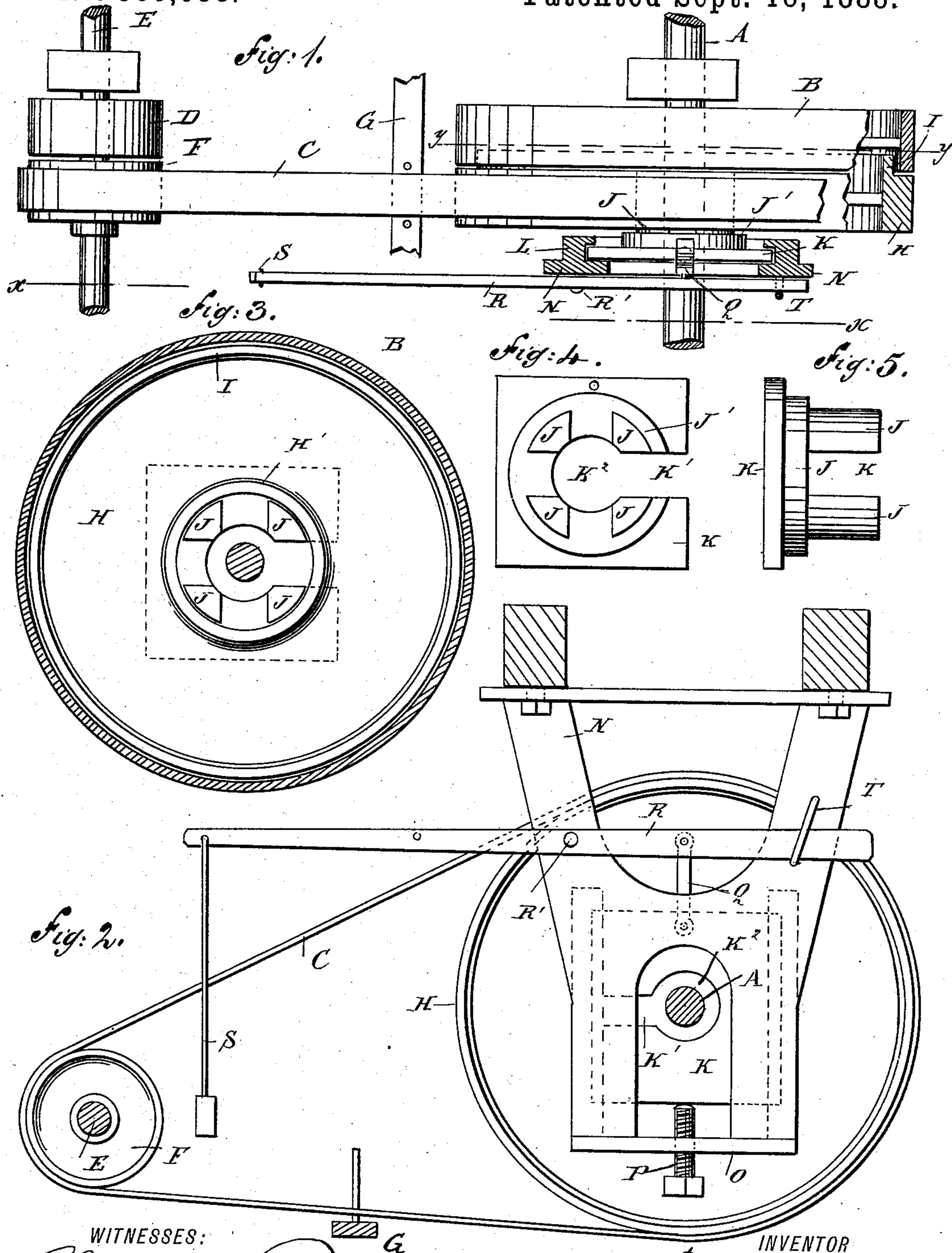
(No Model.)

B. F. & J. F. COMSTOCK.

BELT REST.

No. 389,688.

Patented Sept. 18, 1888.



WITNESSES:
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BELT-REST.

SPECIFICATION forming part of Letters Patent No. 389,688, dated September 18, 1888.

Application filed April 16, 1888. Serial No. 270,767. (No model.)

To all whom it may concern:

Be it known that we, BENJAMIN F. COMSTOCK and JAMES F. COMSTOCK, both of Canton, in the county of Fulton and State of Illinois, have invented a new and Improved Belt-
5 Rest, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved belt-rest, which supports
10 the belt and prevents it from moving when the machine to be driven is not in use.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed
15 out in the claims.

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

20 Figure 1 is a plan view of the improvement with parts in section. Fig. 2 is a sectional side elevation of the same on the line *xx* of Fig. 1. Fig. 3 is a sectional side elevation of the same on the line *yy* of Fig. 1. Fig. 4 is a
25 face view of the sliding block forming the pulley-bearing, and Fig. 5 is an edge elevation of the same.

On the line-shaft A is secured the usual driving-pulley, B, adapted to be connected by the
30 belt C with the driving-pulley D on the counter-shaft E. On the shaft E is also secured the loose pulley F, adapted to be connected by said belt C with the pulley H by means of the usual belt-shifter, G, said pulley H being lo-
35 cated alongside of the pulley B and provided with an inwardly-extending reduced flange, I, adapted to engage the inside of the rim of the pulley B.

The pulley H is mounted to rotate on the
40 sector-pins J, projecting from a collar, J', formed on the inside of the sliding block K, provided with a sidewise slot, K', terminating in a central opening, K², through which passes the line-shaft A. The said central opening,
45 K², is sufficiently large to permit an up-and-down movement of the sliding block K without its touching the line-shaft A. The block K is mounted to slide in the guideways L, formed in the hanger N, secured in any suit-
50 able manner to the ceiling or to the floor, according to the location of the line-shaft A.

The lower end of the hanger N is forked and straddles the line-shaft A, as is plainly shown in Fig. 2.

To the bottom of the hanger N is secured a
55 cross-piece, O, into which screws a set-screw, P, which serves to limit the downward sliding movement of the block K. The latter is pivotally connected at its upper end with a link, Q, connected with a lever, R, fulcrumed at R'
60 on the hanger N, and provided on one end with a downwardly-extending rod, S, which serves to move said lever R, which has its motion limited by the staple T, passing over the other end of the said lever, said staple T being se-
65 cured to the hanger N.

The operation is as follows: In the position shown in Figs. 1 and 2 the belt C passes over the loose pulley F and the pulley H, so that the belt is at rest, as the said pulley H has no
70 rotary motion and the pulley F is a loose pulley on the counter-shaft E. When the operator desires to shift the belt C from the said pulleys F and H to the fast pulley D on the counter shaft E, and to the fast pulley B on the
75 line-shaft A, he pulls the rod S downward, so that the lever R swings and causes an upward sliding motion of the block K, on which the pulley H is loosely mounted. The upward
80 sliding motion of the block K throws the annular flange I into contact with the inside of the rim of the pulley B, so that the rotary motion of the pulley B is transmitted to the loose pulley H. The belt C thus travels with
85 the pulley H, and the operator can now conveniently and easily shift the belt C by operating the belt-shifter G, so that the belt C passes over onto the pulleys B and D. As soon as the belt C is thus shifted onto the pulleys B
90 and D, the operator moves the rod S upward. Then the sliding block K moves downward until it rests on the set screw P and the pulley H is out of frictional contact with the pulley B. The pulley H then ceases to rotate and remains at rest on its sector-pins J until
95 the operator again desires to shift the belt C from the pulleys B and D to the pulleys F and H. The operation above described is then repeated—that is, the lever R is caused to swing so as to slide the block K upward in order to
100 throw the pulley H into frictional contact with the pulley B. As soon as the pulley H com-

mences to rotate, the belt-shifter G is operated so as to throw the belt C over to the pulleys H and F, in the usual manner.

5 The pulley H is mounted on the sector-pins J, so as to reduce the friction as much as possible to permit the pulley H to rotate easily on its bearings.

Having thus fully described our invention, we claim as new and desire to secure by Letters
10 Patent—

1. The combination, with the line-shaft and the fast pulley, of a hanger or frame, a box sliding thereon at right angles to the shaft, a loose pulley journaled on the said box and
15 having a reduced flange entering the fixed pulley, and means for sliding the box to throw said flange into and out of frictional contact with the inner face of the rim of the fast pulley, substantially as set forth.

20 2. In a belt-rest, the combination, with a hanger, of a block held to slide in the said

hanger, a lever pivotally connected with the said sliding block, and a pulley mounted to rotate loosely on the said sliding block and adapted to be thrown in frictional contact with
25 the driving-pulley on the shaft, substantially as shown and described.

3. In a belt-rest, the combination, with a hanger, of a block held to slide in the said hanger, a lever pivotally connected with the
30 said sliding block, a pulley mounted to rotate loosely on the said sliding block and adapted to be thrown in frictional contact with the driving-pulley on the shaft, and a set-screw
35 screwing in the hanger for regulating the movement of the sliding block, substantially as shown and described.

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