

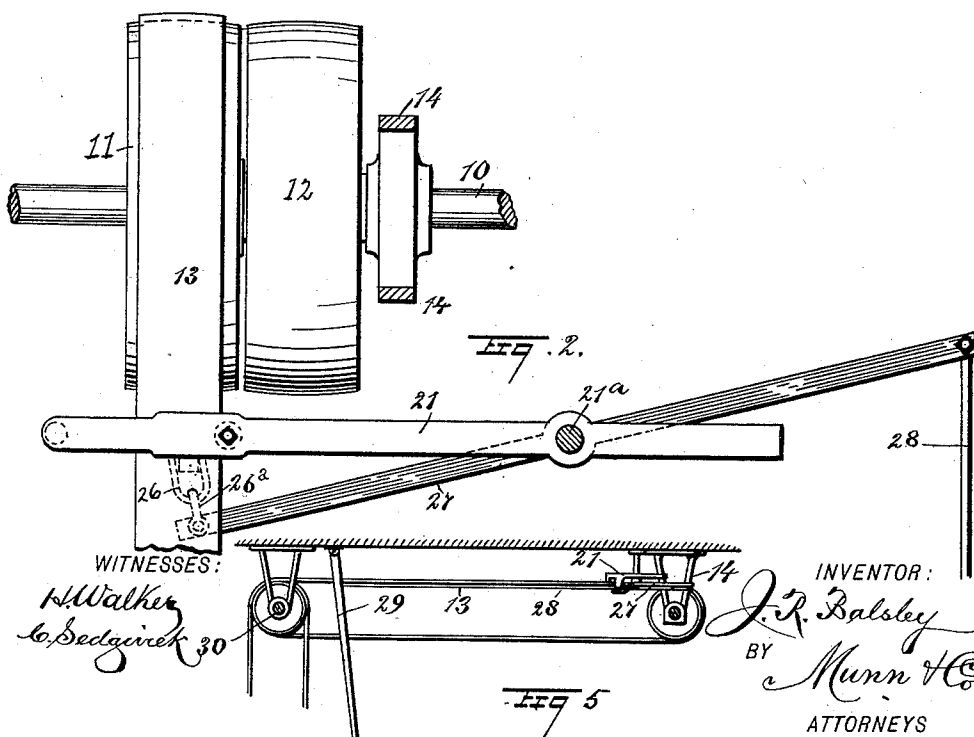
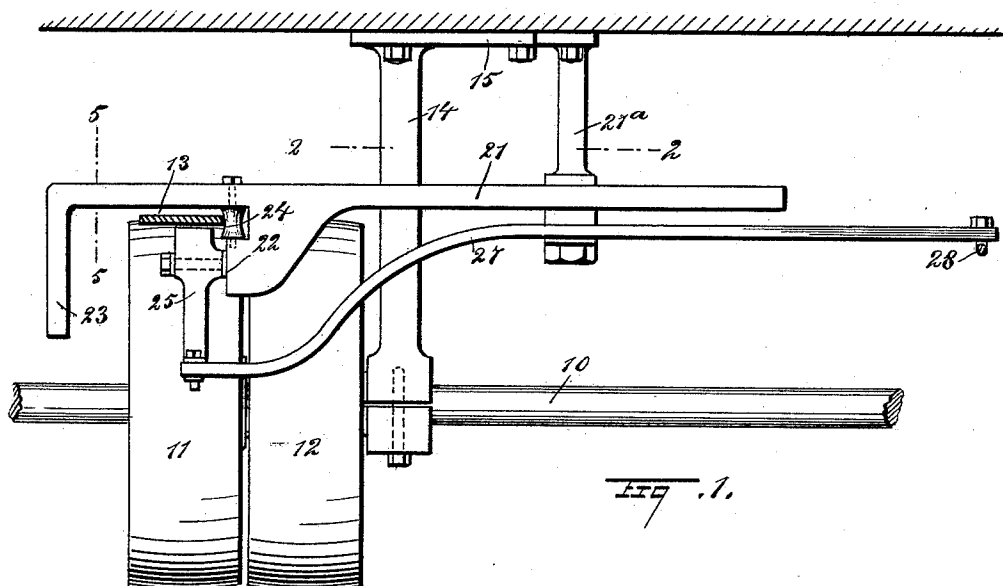
(No Model.)

2 Sheets—Sheet 1.

J. R. BALSLEY.
SHIPPER.

No. 465,123.

Patented Dec. 15, 1891.



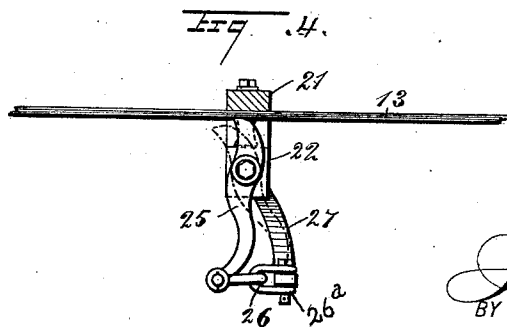
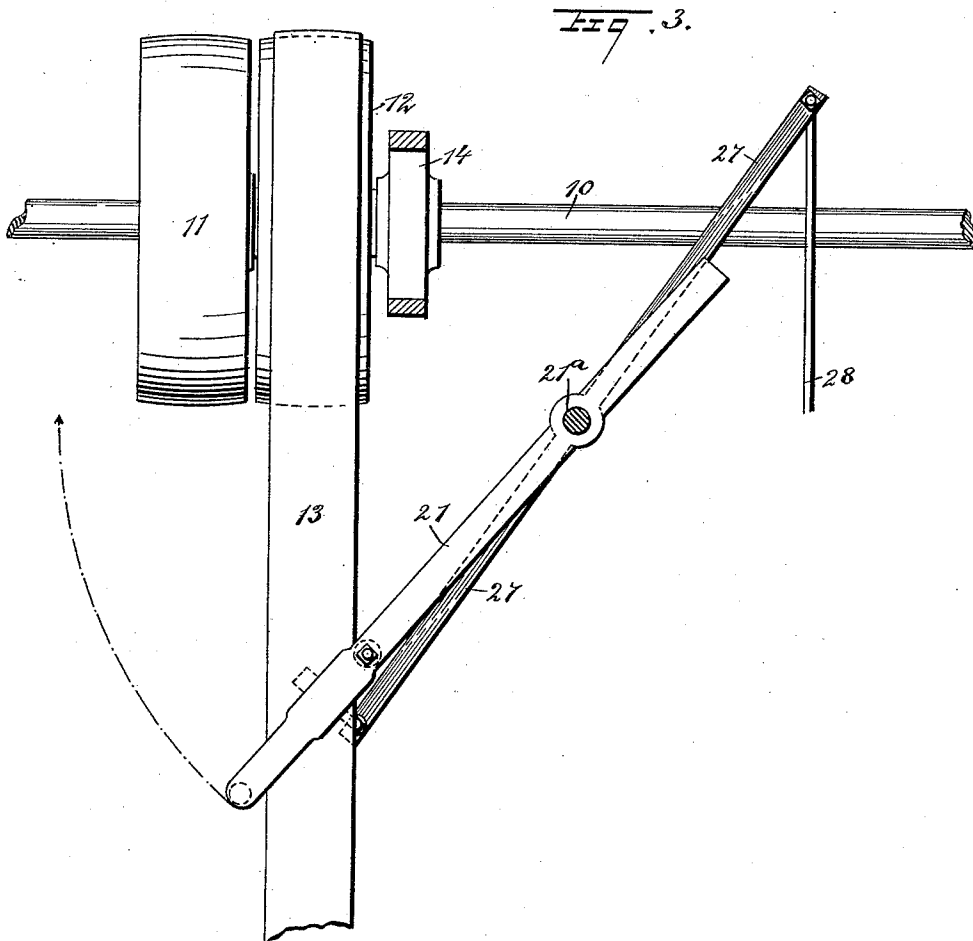
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2 Sheets—Sheet 2.

J. R. BALSLEY,
SHIPPER.

No. 465,123.

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WITNESSES:

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INVENTOR:

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ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES ROBINSON BALSLEY, OF CONNELLSVILLE, PENNSYLVANIA.

SHIPPER.

SPECIFICATION forming part of Letters Patent No. 465,123, dated December 15, 1891.

Application filed April 24, 1891. Serial No. 390,268. (No model.)

To all whom it may concern:

Be it known that I, JAMES ROBINSON BALSLEY, of Conneltsville, in the county of Fayette and State of Pennsylvania, have invented a new and Improved Shipper, of which the following is a full, clear, and exact description.

My invention relates to an improvement in a shipper; and the object of my invention is to produce a convenient shipper, by means of which the belt may be shifted from the tight to the loose pulley, or vice versa, and to construct the shipper in such a manner that it will start the belt in the right direction when it is shifted from the loose to the tight pulley.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

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

Figure 1 is a broken side elevation of the improvement applied, the belt being shown in section. Fig. 2 is a sectional plan on the line 2 2 in Fig. 1, showing the shipper in position to hold the belt upon the tight pulley. Fig. 3 is a similar view, but with the shipper in position to hold the belt upon the loose pulley. Fig. 4 is a cross-section on the line 5 5 in Fig. 1, showing the belt-clutch in detail. Fig. 5 is a broken side elevation showing the general arrangement of the driving-shaft, hanger, shipper, and driving-belt.

The driving-shaft 10 may be supported in any suitable hangers, and it is provided with a tight and loose pulley 11 and 12, the pulley 11 being secured to the shaft in the ordinary way; but the pulley 12 is preferably mounted independently of the shaft and on a hanger 14, provided with an arm 15, which is adapted to be secured to a support.

The shipper is arranged adjacent to the driving-shaft and to the pulleys 11 and 12, and consists of the following mechanism: An arm 21 is pivoted on a hanger 21^a, and is arranged so as to extend horizontally on a line with the upper portion of the driving-belt 13, and this arm is provided near one end with a depending shoulder 22 and at the extreme end it is bent downward opposite the shoulder,

as shown at 23, and the bolt 13 is arranged to run between the bent end and the shoulder. The shoulder 22 is recessed near its upper portion, and pivoted in the recess is a spool-pulley 24, which is adapted to contact with the belt 13 when the belt is shifted upon the tight pulley, and the spool will thus serve to prevent excessive friction. A dog 25 is pivoted on the shoulder 22, the shank of the dog extending downward and the upper end of it being rounded slightly and adapted to contact with the belt 13. The length of the dog is such between its pivoted end and the arm 21 that when the dog is thrown into a vertical position, as best shown in Fig. 5, its upper end will impinge upon the belt and clamp it tightly between the dog and the arm 21. The lower end of the dog is connected by a link 26 to a link 26^a, pivoted to a bent lever 27, which extends downward and outward and is pivoted to the lower end of the hanger 21^a. The outer end of the lever 27 is connected by a pull-rod 28 with a lever 29, which is pivoted at its upper end to the ceiling, and which extends downward to a point where it may be conveniently reached by the hand.

I have shown the lever 29 adjacent to a counter-shaft 30, and the lever may be made to extend to a point adjacent to a machine, so that the operator of the machine may conveniently grasp the lever. I do not confine myself, however, to any particular lever mechanism for operating the lever 27.

The operation of the shipper is as follows: If the belt 13 is on the loose pulley, as shown in Fig. 3, the shipper will be in the position indicated in the same figure, and to shift the belt from the loose to the tight pulley the rod 28 is pulled forward by means of the lever 29 and the outer end of the lever 27 will be drawn forward. This will swing the dog 25 so that it will clamp the belt 13 between it and the arm 21, and the lever and arm will both swing forward, as indicated by the arrow and broken lines in Fig. 3. The pulley 24 will crowd the belt over upon the tight pulley, and the movement of the arm 21 and lever 27 will start the belt forward, so that it will not be given so sudden a snap when it strikes the tight pulley, as would be the case if it were pushed directly upon the pulley. When the

belt is caught and carried forward by the tight pulley, the movement of the belt releases the dog, and the shipper is ready for the reverse movement. When the belt is to
5 be thrown from the tight pulley to the loose, the above operation is reversed, and the bent end 23 of the arm 21 does the shipping.

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

1. A shipper comprising a hanger, an arm pivoted thereon, said arm terminating at one end in a depending bend and having a shoulder opposite the bend, a dog pivoted on the
15 shoulder and adapted to impinge against the arm, a lever pivoted to the lower end of the dog and to the hanger, and means for operating the lever, substantially as described.

2. The combination of a swinging arm hav-

ing a bent end and a shoulder opposite said
20 end, a clamping device for the belt arranged upon the shoulder, and a pulley pivoted on the shoulder and adapted to contact with the belt, substantially as described.

3. A shipper comprising a hanger, an arm
25 pivoted thereon and provided with a bent end, a shoulder opposite said bent end, a pulley pivoted in the shoulder and adapted to contact with the belt, a dog pivoted on the shoulder and adapted to swing at right angles to
30 the arm, a lever pivoted to the lower end of the dog and to the hanger, and mechanism for operating the lever, substantially as described.

JAMES ROBINSON BALSLEY.

Witnesses:

THOMAS PORTER,
JOHN KURTZ.