(No Model.)

J. B. LIVSEY.

BELT SHIFTER FOR CARDING MACHINES.

No. 476,282. Patented June 7, 1892.

Fig. 1.

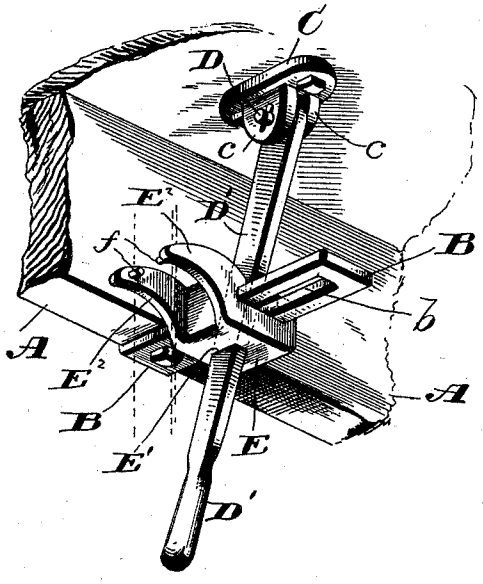
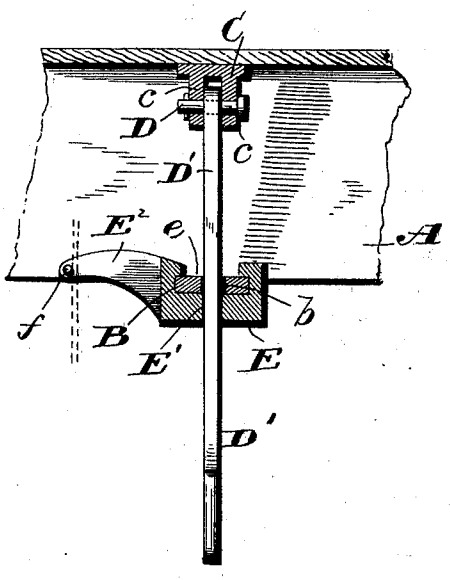


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN BUCKLEY LIVSEY, OF ALLENTON, RHODE ISLAND.

BELT-SHIFTER FOR CARDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 476,282, dated June 7, 1892.

Application filed March 28, 1892. Serial No. 426,721. (No model.)

To all whom it may concern:

Be it known that I, JOHN BUCKLEY LIVSEY, a citizen of the United States, residing at Allenton, in the county of Washington and State of Rhode Island, have invented certain new and useful Improvements in Belt-Shifters for Carding-Machines; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in belt-shifters, and is designed more particularly for use in connection with carding-machines.

It has for its objects, among others, to provide a simple and cheap belt-shifter by the use of which all danger of injury to the user is obviated, and in which the parts shall be simple, easily assembled or separated for the purpose of repairs or otherwise.

My improvement can be readily applied to any card, whether belted overhead or under the floor. If it is desired to grind the cylinder and run a cross-belt, all that is necessary to do is to remove the pin that serves as a pivot or fulcrum for the lever and raise the lever up out of its bearing, when the shipper can be easily removed from its slide. A reversal of the said operation will replace the shipper.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The novelty in the present instance resides in the peculiar combination and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view showing the application of my invention. Fig. 2 is a vertical cross-section through the shipper.

Like letters of reference indicate like parts in both views.

Referring now to the details of the drawings by letter, A designates some suitable support. It may be a beam or support overhead or some support beneath the floor, and from this projects and to it is secured a lateral arm B, which is provided with a longitudinal slot *b* of the required length.

C is a casting provided with ears *c*, and between these ears on a removable pivot or pin D is pivoted the lever D′, which works through the slot of the arm B, as shown.

E is a casting consisting of a body portion provided with transverse groove or recess *e*, the sides of which terminate in inwardly-extending flanges to prevent its displacement from the arm B, which is received between these flanges, the casting being fitted sufficiently loose upon the arm to permit of its being readily moved thereon when desired. The body portion has a slot E′, extending parallel with the slot in the arm B, and through this slot the lever passes after passing through the slot in the said arm. The body portion of this casting also has the jaws E^2, between which the belt is designed to be received, as indicated by dotted lines in Fig. 1, and the outer ends of these jaws carry the inwardly-extending pins *f*, to guide the belt and prevent its displacement. In assembling the parts the casting E or shipper is slipped over the free end of the arm B and the lever then passed through the slot in the casting and through the slot in the arm, and its end then inserted between the ears of the casting C, and the pin D then passed through the ears and through a hole in the end of the lever and held from displacement by a suitable key. The movement of the lever shifts the belt, as will be readily understood. When it is desired to remove the shipper or replace any of the parts, all that it is necessary to do is to remove the pivot-pin, raise the lever until its end is disengaged from the ears of the casting C, and then the casting E can be slipped from the arm B. It is deemed important that the shipper or casting E be not pivoted to or otherwise attached to the lever, whereby greater freedom of movement is provided, and when the lever is thrown into its position at either end of the slot in the arm it will automatically hold the parts in that position, owing to the inclination of the said lever.

It will be readily perceived how easily my improved shipper can be quickly and easily applied to any machine and how readily the parts can be separated when desired.

What I claim as new is—

1. The combination, with the arm having a slot, of the casting mounted to slide on said arm and a lever having a removable pivot and passed through the slot of the arm and through a slot in the casting, as set forth.

2. The combination, with the arm having a longitudinal slot, of the casting having a slot, jaws with pins and flanges embracing said arm, and a lever passed through the slots of the arm and casting and having a removable pivot, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN BUCKLEY LIVSEY.

Witnesses:

WALTER RIVERS RILEY,

ELISHA E. REYNOLDS.