No. 666,165. Patented Jan. 15, 1901.

J. & W. TITUS.

SUPPORTING MECHANISM FOR CARRIER BELTS.

(Application filed May 24, 1900.)

(No Model.)

Fig. 1.

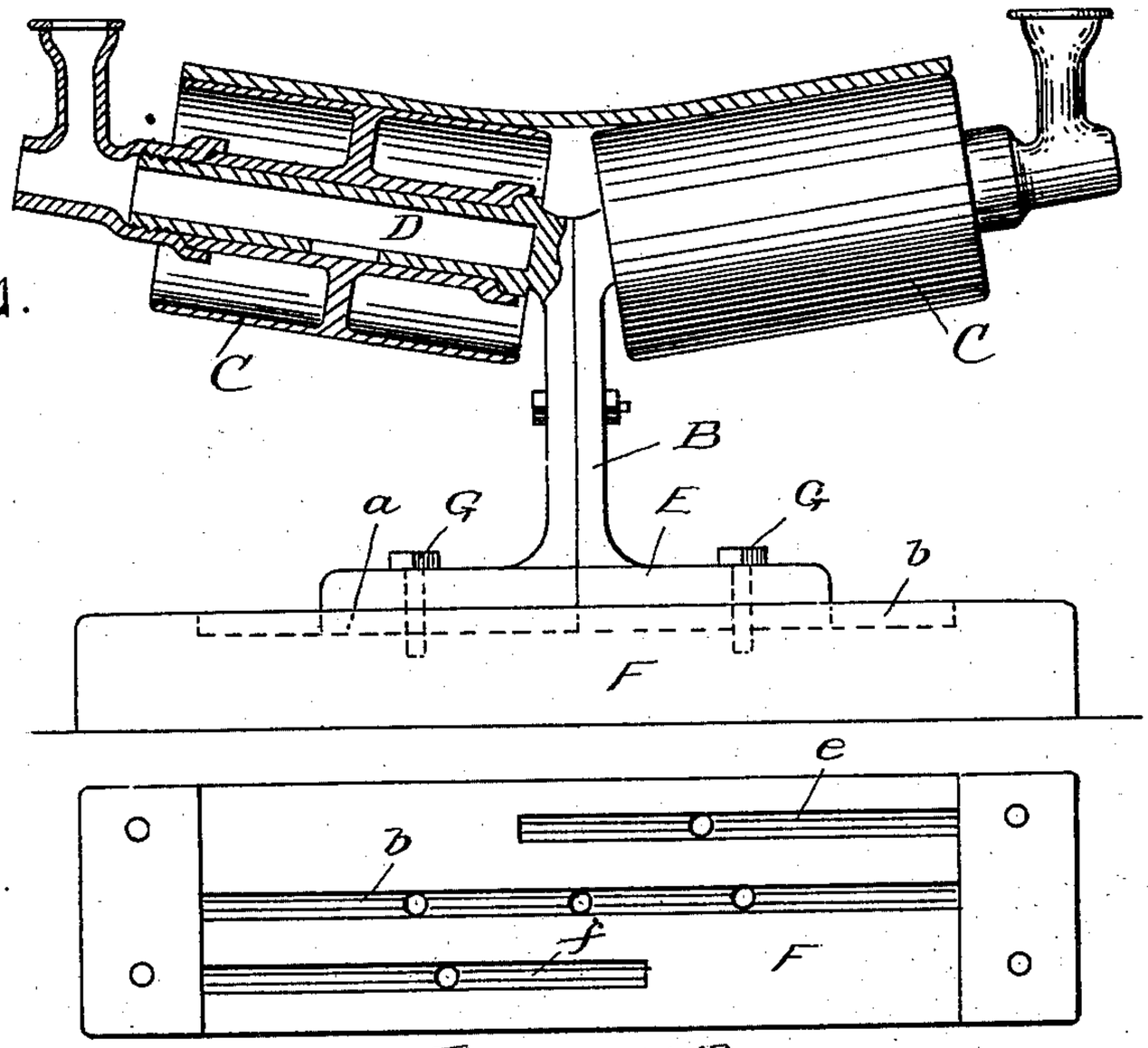


Fig. 2.

Fig. 4.

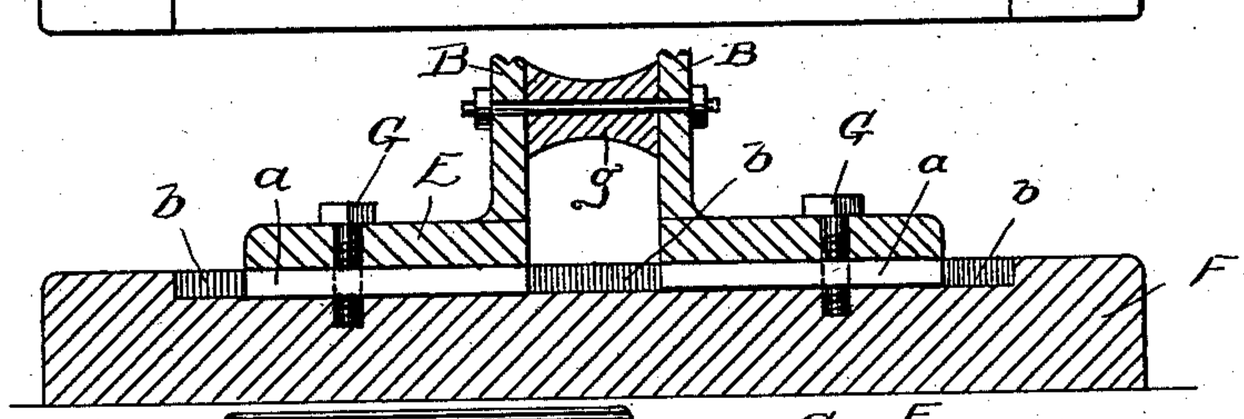


Fig. 5.

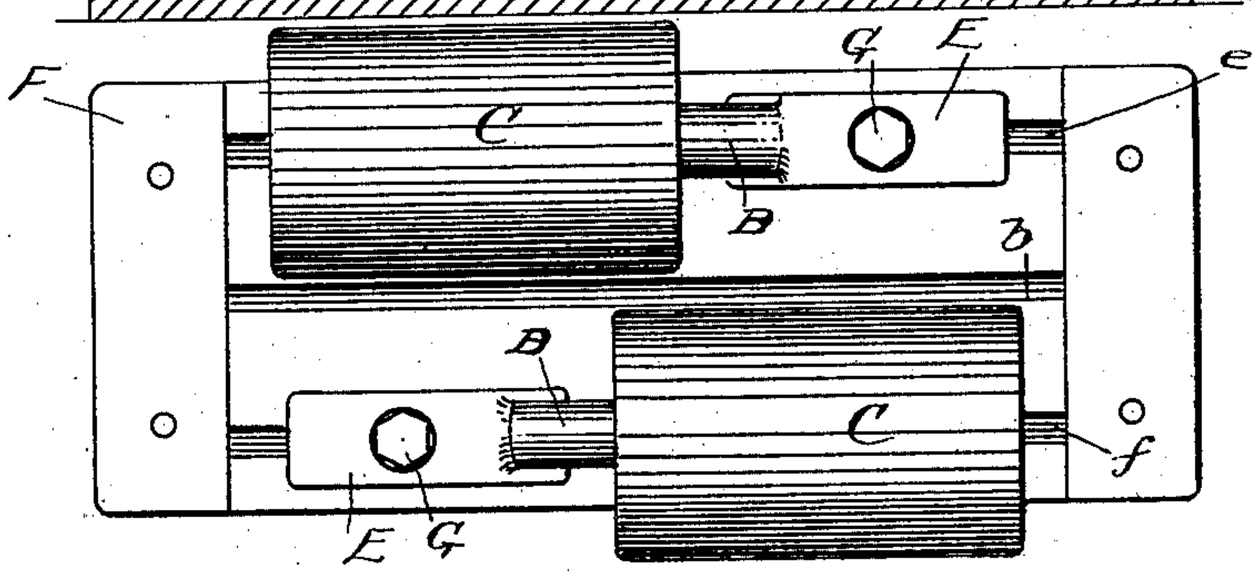
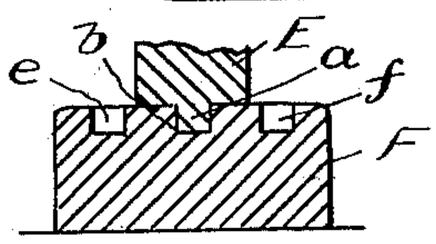


Fig. 3



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SUPPORTING MECHANISM FOR CARRIER-BELTS.

SPECIFICATION forming part of Letters Patent No. 666,165, dated January 15, 1901.

Application filed May 24, 1900. Serial No. 17,795. (No model.)

To all whom it may concern:

Be it known that we, JOHN TITUS, residing at Oyster Bay, and WILLIAM TITUS, residing in Old Westbury, in the town of North Hempstead, in the county of Nassau and State of New York, citizens of the United States, have invented certain new and useful Improvements in Supporting Mechanisms for Carrier-Belts, &c.; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side and partial sectional view illustrating an apparatus made according to our said invention. Fig. 2 is a plan view of a portion of said apparatus. Fig. 3 is a vertical transverse sectional view of a portion of said apparatus. Fig. 4 is a vertical longitudinal sectional view of said apparatus. Fig. 5 is a plan view showing a modified structure of said apparatus.

This invention relates to that class of apparatuses very commonly known as "conveyer or carrier belts" and which comprise in their structure endless belt or apron supports upon pulleys or rollers and serving by their operation to conduct sand, gravel, and other materials from one location to another. The rollers in such mechanisms are ordinarily inclined to afford a trough-like cross-section to the endless carrier or conveyer, and the adjustment of the rollers to bring and maintain the pulleys in proper relation with the belt to avoid a skew action of the latter upon the rollers has been found in practice to be very difficult. The object of our invention is to remedy this, and it comprises the new and useful combinations of parts hereinafter described, and particularized in the claims.

In practice the said combinations of parts are duplicated, as shown in Figs. 1 and 4, to insure the desired trough-like cross-section of the carrier-belt A, as shown in Fig. 1.

The description of one part of the apparatus shown in the drawings of course applies equally to the other.

B is the standard, which supports the roller C, having provided at its upper end the laterally-extended journal (shown at D, Fig. 1) and at its lower end a horizontal foot E. Upon the bottom of this foot E is a rib or tongue *a*. This rib or tongue is in the same plane with the axis of the journal, or practically so.

F is a base-block which is intended to be placed upon any suitable foundation and the upper surface of which is intended to receive the under surface of the foot of the roller-supporting standard B. In this upper surface of the base-block is provided a groove *b*, the cross-section of which corresponds to the cross-section of the tongue *a* of the foot of the standard. The said rib is placed in the said groove and is held fast therein by a bolt or set-screw G, which passes through the foot and into or through the base-block.

In putting up the structure the base-block is fixed upon its position, with the groove *b* alined in the requisite direction to the proposed line of travel of the belt, as at right angles thereto. The foot of the standard being then placed upon the base-block, with the rib *a* in the groove *b*, the journal D is brought directly into the position which insures the proper relation of the belt and to the line of travel thereof, and this without the exercise of any special care or skill. The foot of the roller-standard is made fast to the base-block by the bolt G. The whole is made firm and secure. The rib of the foot being fast in the groove of the base-block coöperates with the bolt in holding the standard firmly against lateral thrust. When, as frequently occurs in practice, it becomes desirable to replace the roller to inspect the wearing-surface of the journals or otherwise examine or repair a part, the foot may be readily detached from the base-block and the same or another standard made from the same or a like pattern substituted with the parts coming true to position without special skill or care.

The groove *b* is intended for use when the rollers of the duplicate apparatuses have their axes in the same vertical plane as in Figs. 1 and 2. In some cases, however, it is desired to have the rollers staggered, as shown in Fig. 5. To provide for this, the upper surface of the base-block is provided with multiple grooves *e f*, one of which—say *e*—may receive the rib of one of the duplicates of the apparatus, while the other, *f*, receives that of the

other of said duplicates, so that by this means the rollers of the duplicates may be readily changed from their alined position to a staggered position and conversely. It is of course to be observed that, as shown in Figs. 1 and 4, the base-blocks may be constructed to receive the two duplicate apparatuses. Instead of placing the two standards close together, as in Fig. 1, they may, when desired, be placed at same distance apart, with a brace *g* between to strengthen them, as in Fig. 4.

What we claim as our invention is—

1. In an apparatus of the class mentioned the combination of a standard having a laterally-extended journal and a foot which has on its under side a rib which is in the same plane with the journal, with a base-block which has on its upper side a groove which receives the said rib and a bolt for securing the foot to the base-block, substantially as herein set forth.

2. In an apparatus of the class mentioned the combination with a standard having a laterally-extended journal and a foot which has on its under side a rib which is in the same plane with the journal, of a base-block which has in its upper side multiple grooves, either of which may receive the rib of the foot, and a bolt for securing the foot to the base-block, whereby the position of the journal and of the pulley carried thereby may be changed without disturbing the base-block, substantially as herein set forth.

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