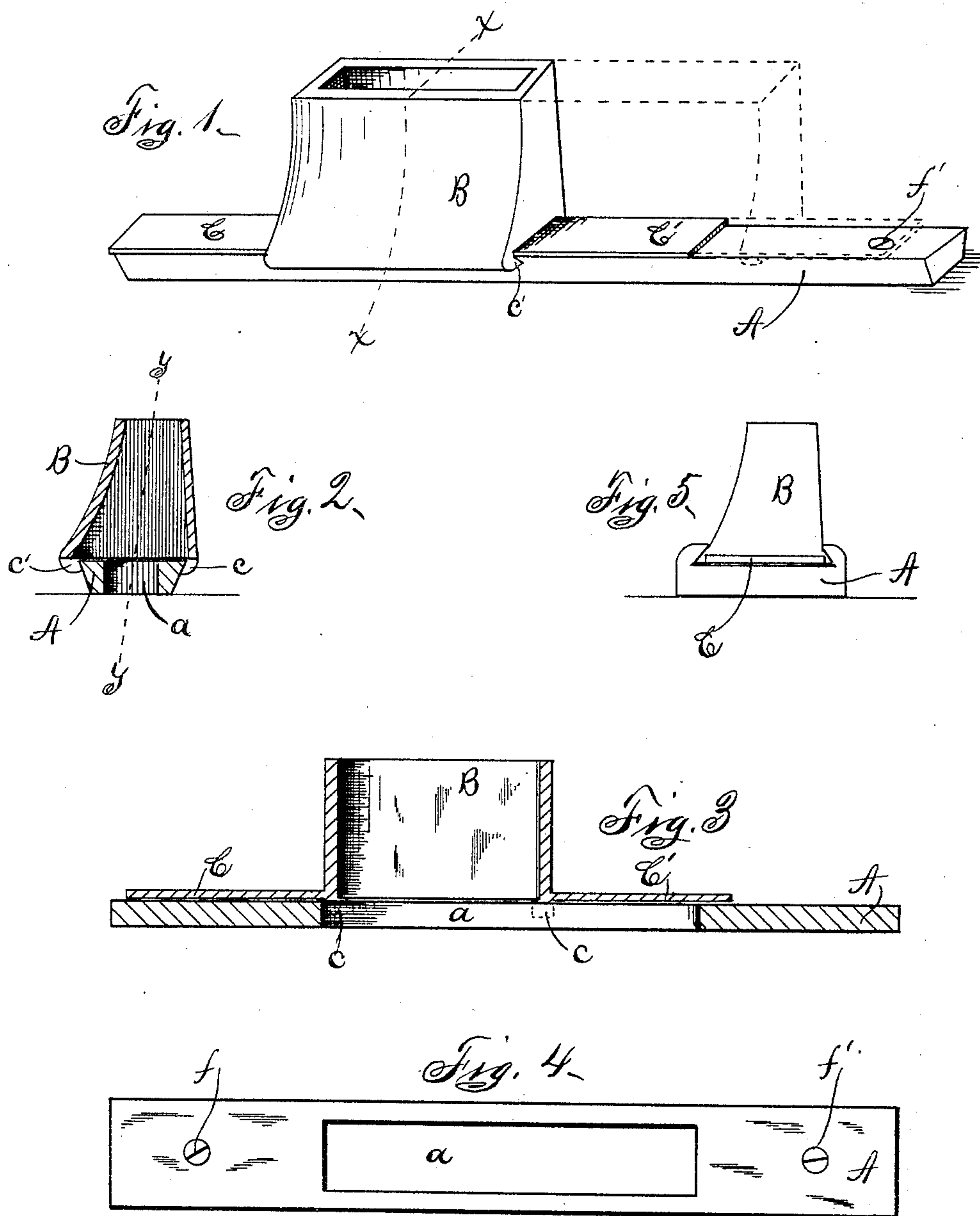


(No Model.)

D. KANE.
BELT HOLE COVER.

No. 327,694.

Patented Oct. 6, 1885.



Witnesses—
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UNITED STATES PATENT OFFICE.

DANIEL KANE, OF NORWICH, CONNECTICUT.

BELT-HOLE COVER.

SPECIFICATION forming part of Letters Patent No. 327,694, dated October 6, 1885.

Application filed March 9, 1885. Serial No. 158,240. (No model.)

To all whom it may concern:

Be it known that I, DANIEL KANE, of the city of Norwich, county of New London, and State of Connecticut, have invented certain
5 new and useful Improvements in Belt-Hole Covers, which improvements are fully set forth and described in the following specification, reference being had to the accompanying drawings, in which—

10 Figure 1 is a perspective view of my device complete. Fig. 2 is a cross-section on line x x of Fig. 1, and Fig. 3 a central longitudinal vertical section of said Fig. 1. Fig. 4 is a top detached view of the bed-plate on which
15 my belt-hole cover slides; and Fig. 5 is a modification of my invention, which is described in detail hereinafter.

This invention relates to that class of mechanical devices known as "belt-hole covers,"
20 provided in mills to close, as nearly as is practicable, the opening in a floor through which driving-belts pass to transmit power and motion from one story of a building to the story above or below; the immediate object
25 of such a belt-hole cover being to prevent the passage of dirt, lint, cop-tubes, and other similar articles through said belt-hole to the room below; also to prevent water or other liquids from passing through. It is also my purpose
30 to produce a belt-hole cover which may be used not only with those belts which travel at all times in a single plane, but also with that class which are arranged to travel laterally from the tight to the loose pulley, said
35 improved belt-hole cover being so constructed that it moves automatically with the belt.

In the annexed drawings, A represents the bed-plate on which the movable part of my device travels. Said bed-plate is made, preferably, of cast metal, is cut under on its edges
40 to form ways with which the movable part interlocks, and is provided with an opening, a , of sufficient length and width to allow the belt to travel freely in said opening, whether
45 on the tight or loose pulley.

B represents a cast-metal box having formed integral therewith on each end wings C C', each of about the same length as the width of the belt used. The opening in the box B is
50 also substantially of the same width, sufficient room being allowed to prevent unneces-

sary friction and wear of the belt as it travels through said box. The box B is inclined preferably at the same angle in which the belt travels, as shown in Fig. 2, in which figure line $y y$ represents said belt. The sides
55 of box B extend somewhat below the wings C C', and are cut under at each end, as at $c c'$, to fit the ways on bed-plate A, above referred to, thus forming a dovetail connection. 60
These locking-points $c c'$ on box B do not extend the entire length of the box, but are only of the thickness of the shell of said box, as shown in Fig. 2, and also in dotted lines
65 in Fig. 3. It will thus be seen that there are two such lugs on each side of the box, and it will also be understood that by so forming the locking-lugs I am able to reduce the friction of the moving parts to a minimum.

The plate A, when my belt-hole cover is
70 in use, is secured to the floor by screws $f f'$, or other suitable means, the central opening in said plate being immediately over the belt-hole in the floor. Having secured the bed-plate to the floor, the lugs on the box B are
75 slipped onto the ways of said bed-plate, as shown in Fig. 1, and the belt passed through said box and laced, in which position the bed-plate is covered by the box and wing C'.

When it is desired to ship the belt onto
80 the loose pulley, the box B travels freely with said belt, assuming the position shown in dotted lines in Fig. 1, in which position the bed-plate opening is covered by the box B and wing C. In Fig. 5 I have shown box B
85 arranged to slide in ways raised on the sides of plate A. While such a form is practicable, I prefer to make my device as shown in Figs. 1, 2, and 3.

Having thus described my invention, I
90 claim—

In combination with a bed-plate having an elongated belt-opening, the box B, adapted to slide on said bed-plate, and provided with wings or extensions C C', which, as box B is
95 moved to ship the belt, conceal the bed-plate opening, substantially as and for the object specified.

DANIEL KANE.

Witnesses:

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