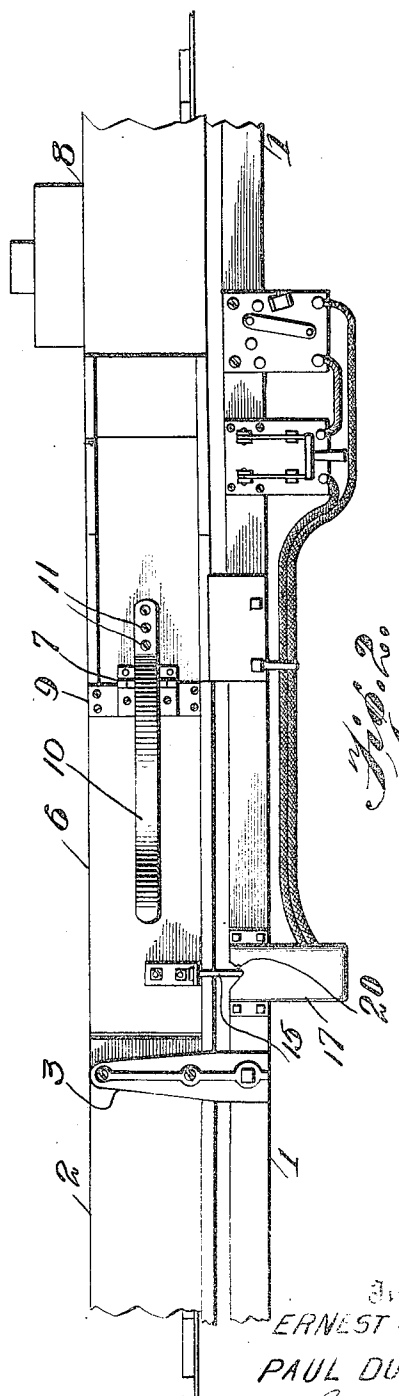
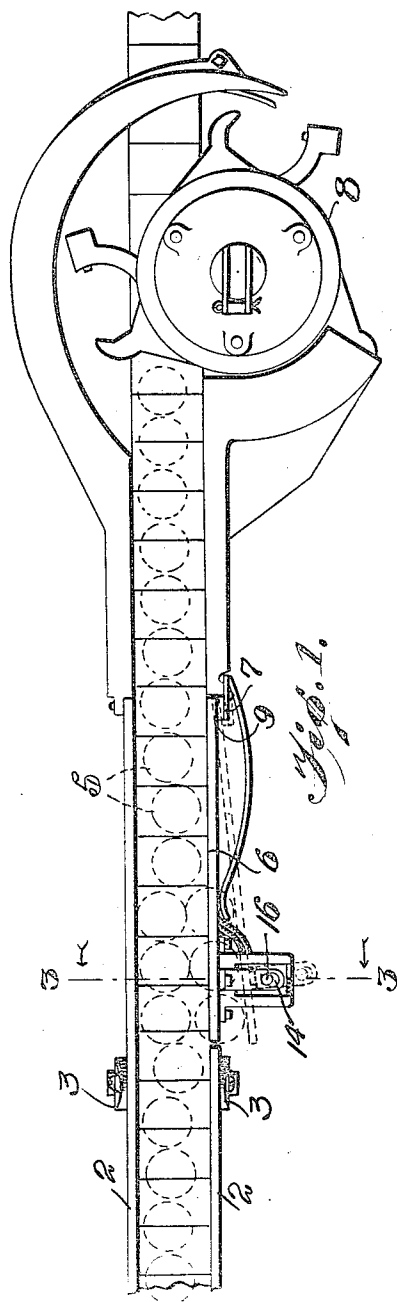


E. SEUFER AND P. DUBER.
 DEVICE FOR PREVENTING CLOGGING AND JAMMING OF CONVEYERS OF BOTTLING MACHINERY.
 APPLICATION FILED MAR. 27, 1919.

1,358,255.

Patented Nov. 9, 1920.

2 SHEETS—SHEET 1.



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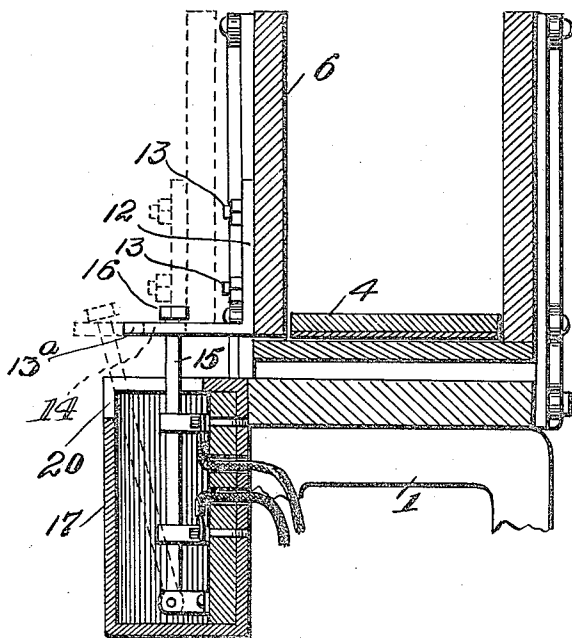


Fig. 3.

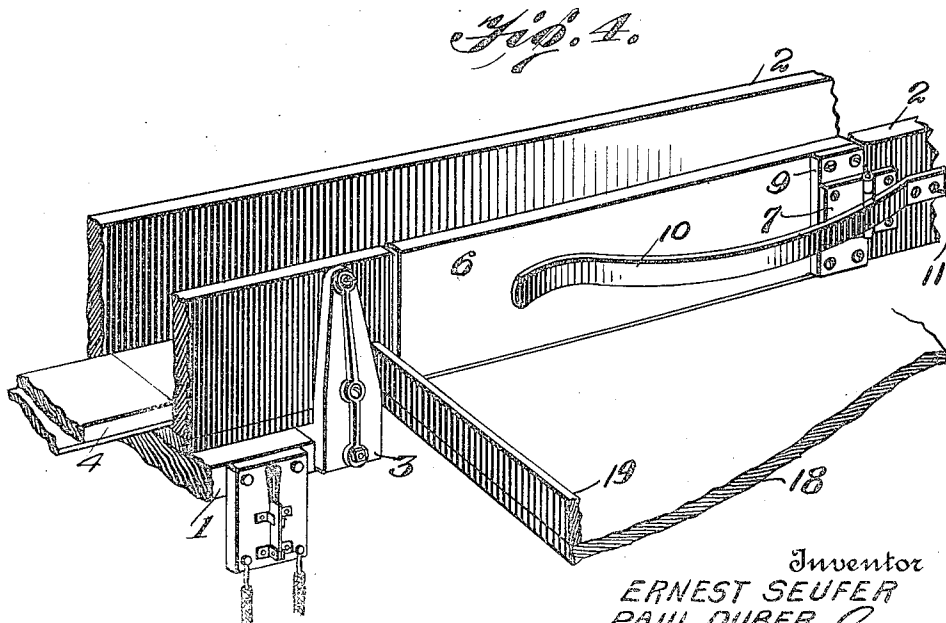


Fig. 4.

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UNITED STATES PATENT OFFICE.

ERNEST SEUFER AND PAUL DUBER, OF EVANSVILLE, INDIANA.

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1,358,255.

Specification of Letters Patent.

Patented Nov. 9, 1920.

Application filed March 27, 1919. Serial No. 285,689.

To all whom it may concern:

Be it known that we, ERNEST SEUFER and PAUL DUBER, citizens of the United States, residing at Evansville, in the county of Vanderburgh and State of Indiana, have invented certain new and useful Improvements in Devices for Preventing Clogging and Jamming of Conveyers of Bottling Machinery, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a device for preventing clogging and jamming of conveyers of bottling machinery.

Our new combination includes a safety device or safety gate to be used on labeling, crowning, and filling machines, and the object of our invention is the production of a combination whereby when the conveyer of a bottling machine becomes clogged or jammed, the bottles will not be broken, as would be the case without employing our invention, but upon the bottles becoming jammed or clogged, simple and efficient means is provided for automatically stopping the conveyer.

With these and other objects in view, our invention comprises certain novel combinations and arrangements of parts as will be fully illustrated in the official drawings, specifically described in the following specification, and more fully pointed out in the appended claim.

In the drawings:

Figure 1 is a fragmentary view of a bottling machine, showing in combination therewith our improved device for preventing clogging, jamming, and breaking of the bottles being handled, while

Fig. 2 is a view in side elevation of the mechanism depicted in Fig. 1.

Fig. 3 is a sectional view taken on lines 3—3, Fig. 1, looking in the direction of the arrows.

Fig. 4 is an enlarged, fragmentary, perspective view of another embodiment of the present invention.

Referring to the drawings by numerals, 1 designates the frame of the machine, and 2 are the sides of the conveyer supported upon the frame 1 by means of brackets 3. Between the sides 2 travels the upper run of the conveyer belt 4, and on this belt 4 are fed the bottles shown by dotted lines 5, Fig. 1.

We provide a gate 6 in one of the sides 2, which gate is hinged at 7 to the side of the conveyer, and the gate constitutes a part of the side when closed, very evenly and satisfactorily holding the bottles upon the conveyer during their travel from the turret 8 to the point of distribution on the conveyer.

A vertical, reinforcing metal strip 9 is interposed between the hinge of the gate 6, so as to satisfactorily strengthen the gate and at the same time form an efficient surface to which is attached the hinge of the gate 6. A bowed spring 10 has its outer free end bearing against the outer face of gate 6, and the inner end of spring 10 is fastened by screws 11 to the side of the conveyer, Fig. 2.

An angle bracket 12 is fastened by bolts 13 to the gate 6, and a horizontal portion 13^a of the bracket extends outward from the gate, and in this portion 13^a is formed an elongated aperture 14 (Fig. 1). Positioned in the aperture 14 is the upper end of the switch blade 15; the extreme upper end of blade 15 is preferably provided with a head 16 to prevent accidental displacement of the blade 15 out of the aperture 14 in the bracket 12. The switch 17, of which blade 15 constitutes a part, is fastened to the frame 1 of the conveyer or machine proper, beneath the gate 6, so that when the pressure of the clogged or jammed bottles in the conveyer causes the gate to swing outward, the switch blade 15 will be pivoted outwardly or to an "open" position (see dotted lines, Fig. 3), whereupon the motor driving the conveyer will be stopped, as the movement of the blade 15 of the switch, caused by the opening of the gate, will break the circuit.

Referring to Fig. 4, in this embodiment, the same principle is disclosed with the addition of a table or platform 18 built on substantially a level with the floor of the conveyer so that when the bottles are pushed or jammed against the gate 6 and forced outwardly as shown in dotted lines in Fig. 1, the jammed or clogged bottles will move upon the upper face of the table or support 18. This table 18 is provided with a flanged edge 19 to prevent the bottles from slipping off if the table should become well-loaded. In the embodiment depicted in Fig. 4, we have shown our device particularly adapted to a machine where only belt power is used, and not electrical power. In

the case of belt power being used, the operator upon seeing the gate opened resulting in bottles upon the table or support 18, can quickly stop the machine before any damage is done.

To allow a free movement of the blade 15 in the box 17, the upper edge of the box is notched at 20 so that the gate can have sufficient movement to permit the bottles that are jammed to move outwardly and at the same time open the switch for breaking the circuit.

In our combination, the sides of the bottle conveyer constitute an essential part, as well as the construction of the bracket attached to the gate and the switch position under the bracket, as described.

From years of experience with bottling machinery, we know that the described combination is an efficient and valuable improvement in a bottling machine, and that the application of the device is simple, yet its utility is comparatively great.

What we claim is:

In a bottling machine, the combination

with a conveyer provided with parallel sides, said conveyer including a traveling belt, of a gate forming a part of one of the sides of the conveyer, a vertical strengthening piece secured against one end of said gate, a hinge fastened to said strengthening piece and to one side of the conveyer, a bowed spring pressing at its outer end against the gate and being fastened at its inner end to the side of the conveyer, an angle bracket secured to the gate in front of said spring, and said bracket provided with a horizontal portion having an elongated aperture, a switch secured beneath said gate and bracket and including a box and a blade, said box being notched at its upper end for receiving the blade, said blade extending through the elongated aperture of the bracket, and said blade having a head formed upon its upper end.

In testimony whereof we hereunto affix our signatures.

ERNEST SEUFER.
PAUL DUBER.