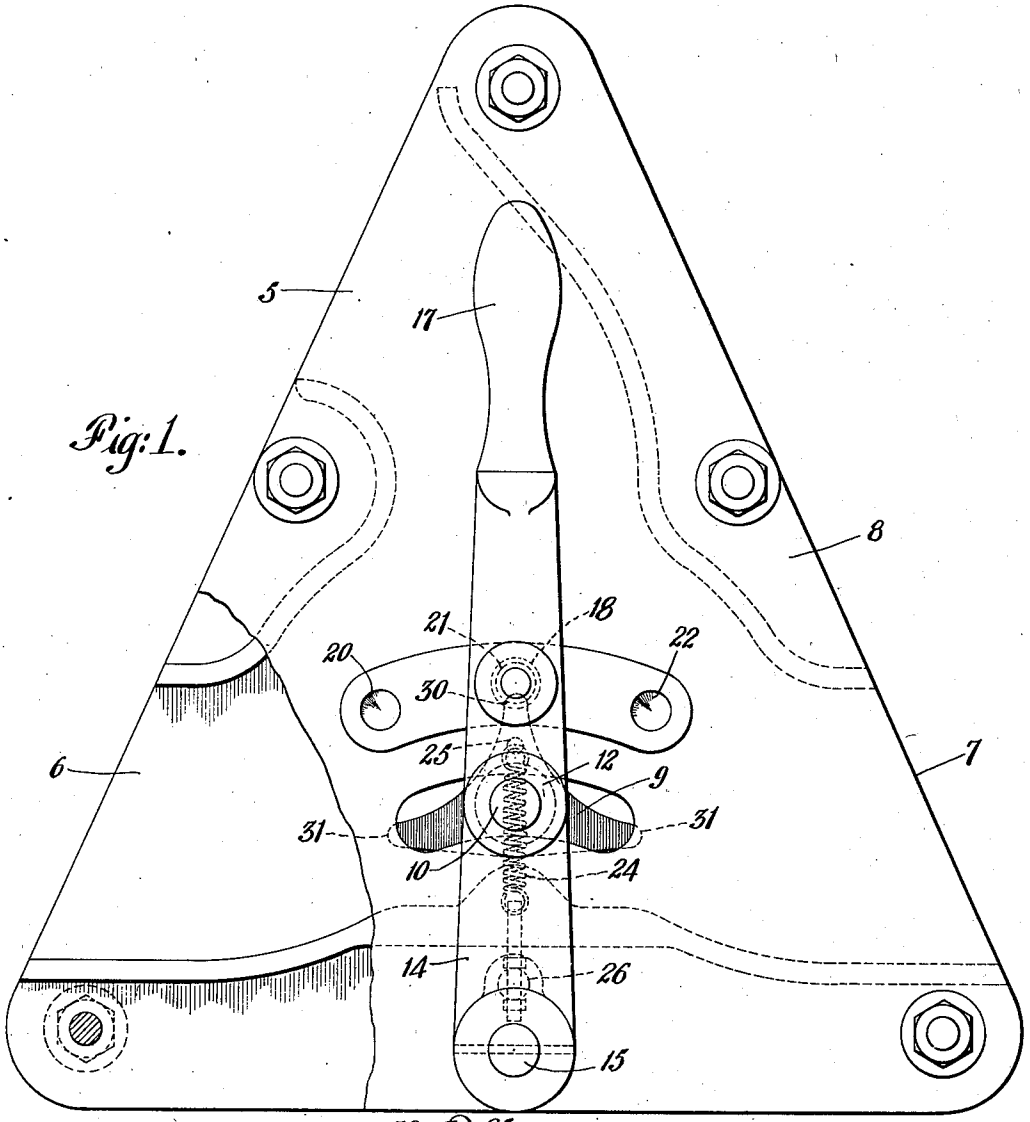
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CAN GUIDE

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Fig: 1.



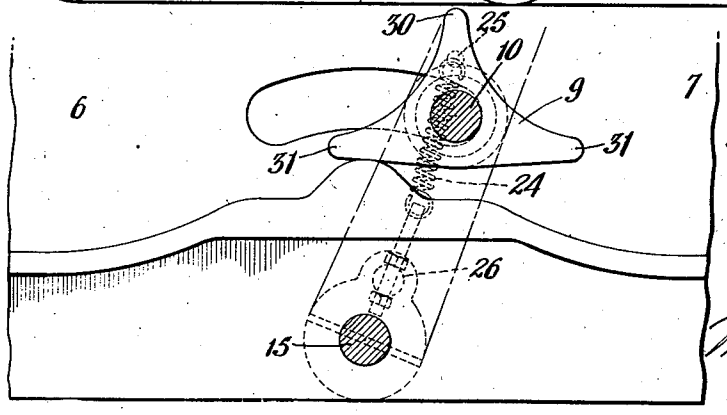


Fig: 2.

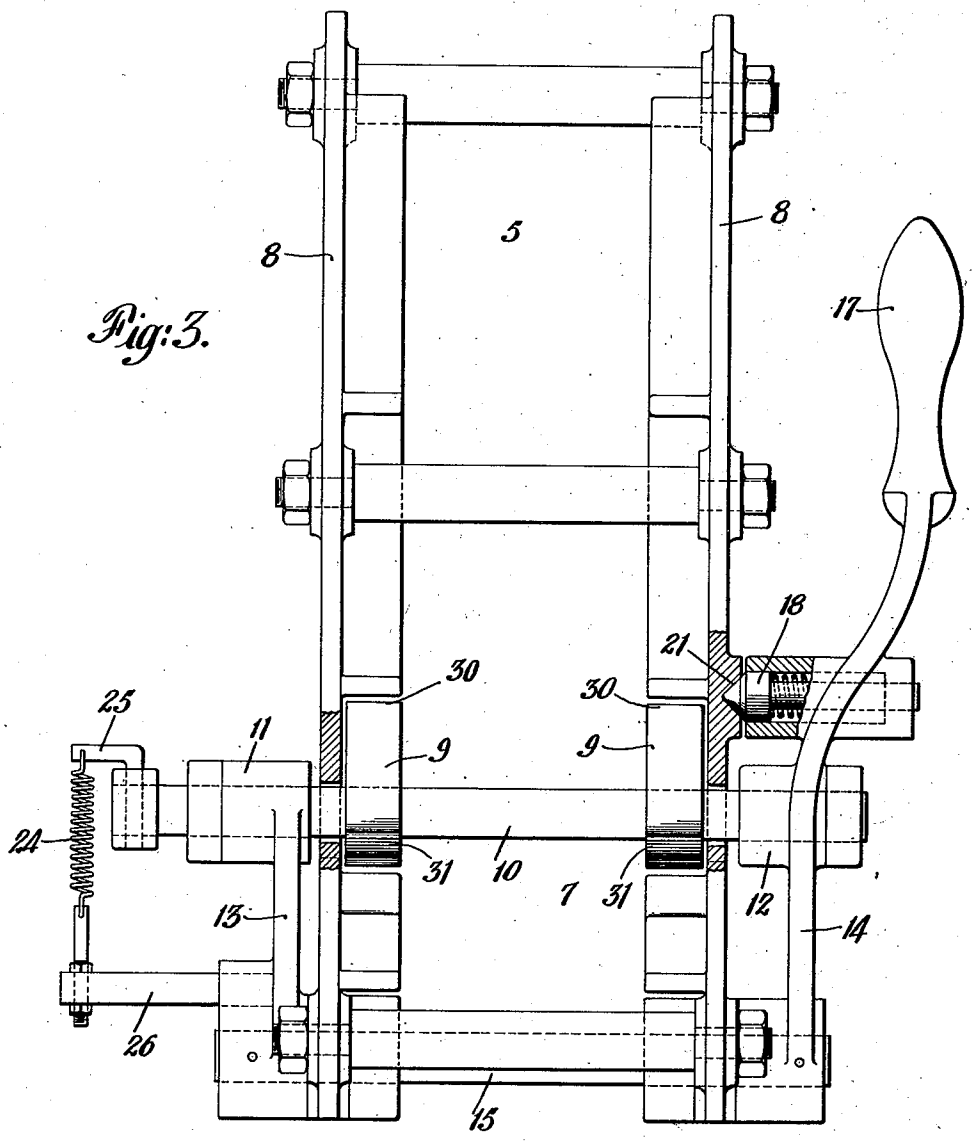
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Fig: 3.



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UNITED STATES PATENT OFFICE

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CAN GUIDE

Application filed January 28, 1929. Serial No. 335,523.

The present invention relates to can guides and the like and has for an object to provide an improved guide which can operate automatically to guide alternate cans in a branched runway to different branches thereof.

In canning factories the various automatic machines operate at different speeds for which reason it is desirable in some instances to provide two or more machines for performing a subsequent operation upon the cans delivered by a machine performing a precedent operation.

The present invention provides an improved apparatus whereby cans passing along a branched guideway may be separated and alternate cans passed to the two branches alternately. In the preferred embodiment of the invention the device may be operated manually to cause all cans to be guided to either of the branches of the runway or it may be set to operate automatically to divide the cans between the two branches.

The nature and objects of the invention will be better understood from a description of a particular embodiment for the purpose of which description reference should be had to the accompanying drawings forming a part hereof and in which—

Figure 1 is a front view partly in section of a can guiding arrangement embodying the invention,

Figure 2 is a detail view of the same, the parts being shown in position to deflect all cans to one side,

Figure 3 is a side view of the mechanism, parts being shown in section on the center line of the apparatus.

The apparatus shown for the purposes of illustration is designed to be connected in a system of guides which convey cans from one machine to two other machines, in an arrangement where the first machine delivers cans at such a rate that it is necessary to have two similar machines performing the subsequent operation on the cans delivered from the first machine. The apparatus makes provision for dividing the cans and passing them forward alternately to the guideways leading to the two subsequently operating machines.

Referring more particularly to the drawings, a branched guideway receives the cans in the upper branch 5 whence they pass on to the branches 6 and 7. In the structure shown the guides are formed by flanges projecting inwardly from spaced cheek plates 8. A deflector or cam 9 is arranged to guide the cans entering at 5 to either of the branches 6 or 7. It may be desirable in different conditions of operation to direct the cans alternately to the two branches or to guide all of the cans into one branch. If the former, the cam 9 is maintained in the central position and there oscillated automatically to direct the cans alternately into the two branches. If the latter, it is adjusted to guide all the cans to one branch. As shown, the cam comprises two side members and a transverse shaft 10 which is oscillatable in the extended bosses 11, 12 of arms 13, 14, both of which are rigidly keyed to a transverse shaft 15 to form a pivoted frame. The arm 14 is extended upward and terminates in a handle 17 and also carries a spring pressed detent 18 engageable alternatively with any one of the three recesses 20, 21, 22 in the side wall of the casing.

In order that the cam 9 may be positioned far enough to one side or the other for effective operation, a tension spring 24 is connected to the arm 25 projecting from the shaft 10 and extends across the center of the shaft 10 to an arm 26 secured in the boss of the arm 13 and operates to complete the turning movement of the cam after it is moved past the dead center. In Fig. 1 the cam and spring are shown in the dead center position, but it is understood that in operation the parts will never rest in this position.

When the handle 17 is in upright position with the frame central and the detent 18 in the recess 21, the cam 9 will be rocked about its pivot by each can entering through the branch 5 and passing vertically down into engagement with the cam. It will be understood that the point 30 of the cam will lie to one side of the center and will guide the can entering from a branch 5 to one of the branches 6 or 7. The can so guided will en-

gage the corresponding projection 31 at the lower edge of the cam and turn the cam through its central position (the spring 24 completing the movement) so that the next succeeding can will be guided to the opposite branch. This operation will continue automatically to guide the cans alternately into the two branches. When the handle 17 is moved to one side and the detent 18 engages one of the recesses 20 or 22, the cam will maintain a position such as that shown in Fig. 2 to direct all cans into one branch.

The foregoing particular description is illustrative merely and is not intended as defining the limits of the invention.

I claim:

1. In apparatus for guiding cans, the combination with a branched guideway of a cam movably supported at the juncture of the branches and shiftable to alternative positions to direct cans into either of the branches of said guideway and a movable support for said cam arranged to carry the cam to mid-position where it will operate to deflect cans to the two branches alternately or to position at one side to deflect all cans to one runway.

2. In apparatus for guiding cans, the combination with a branched guideway of a cam pivoted at the junction of two branches of said guideway, a spring connected to said cam to hold it normally in either of two operative positions to direct cans to either of the two branches of said guideway, and means for moving said cam bodily to position to guide all cans to one branch.

3. In apparatus for guiding cans, the combination with a branched guideway of a frame pivoted at the juncture of two branches, a cam pivoted to said frame and operable in one position of said frame to guide all cans to one branch and operable in another position of said frame to guide cans alternately to the two branches.

In testimony whereof, I have signed my name to this specification this 15th day of January, 1929.

WILLIAM JOHN KOCH.