

Nov. 19, 1929.

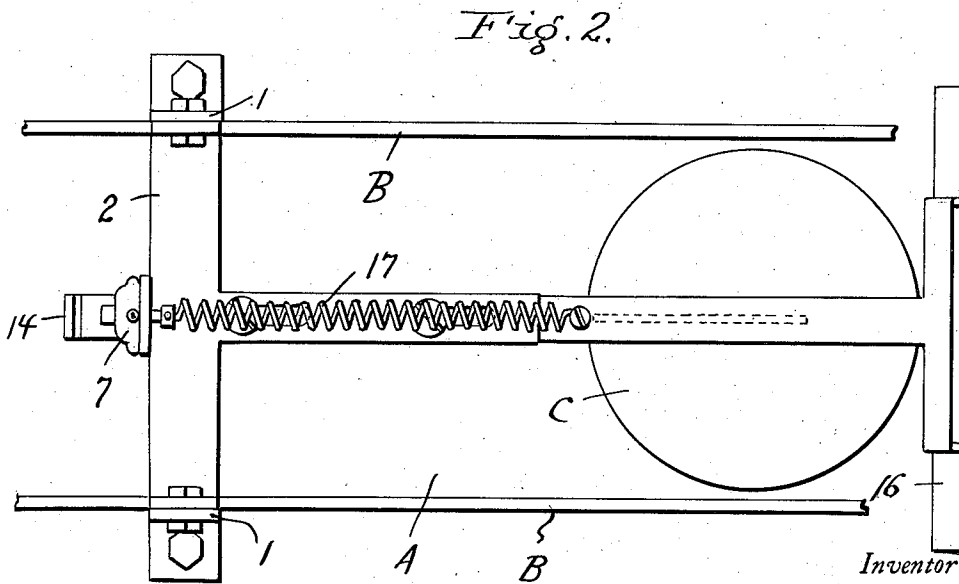
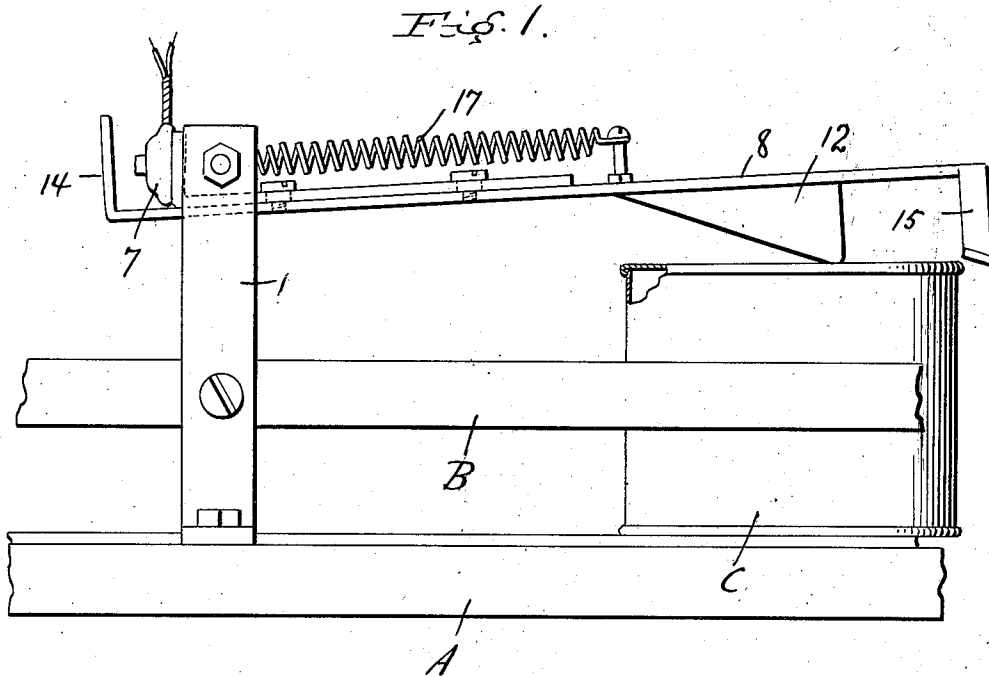
M. RIVERA

1,736,092

COMBINATION TRAP AND CIRCUIT CLOSER FOR CAN SEAMING MACHINES

Filed Dec. 8, 1928

2 Sheets-Sheet 1



Marcelino Rivera

By *Clarence A. O'Brien*
Attorney

Nov. 19, 1929.

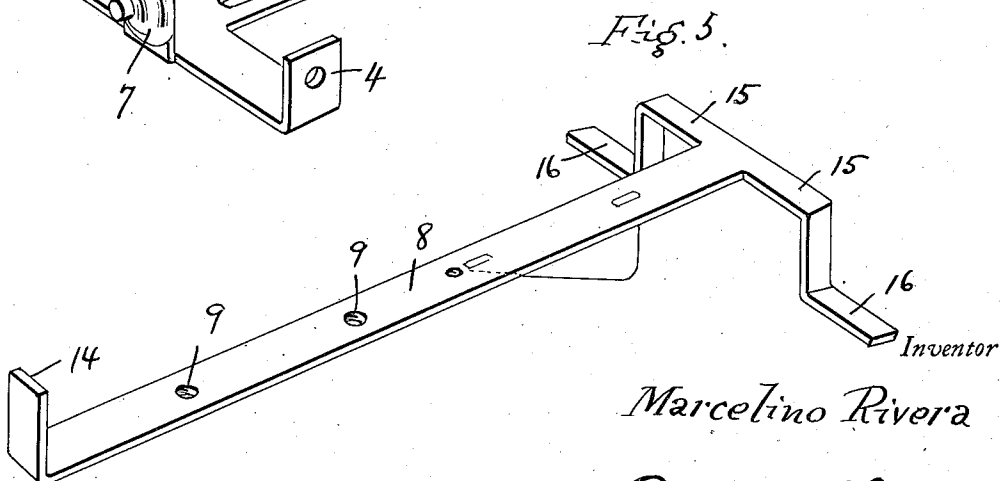
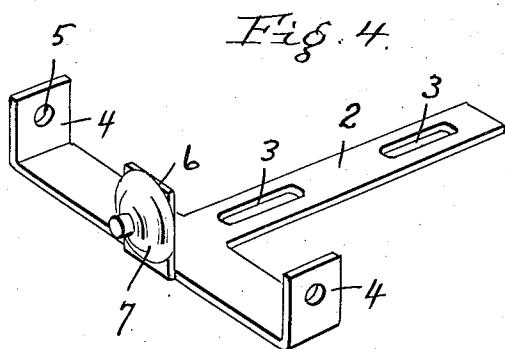
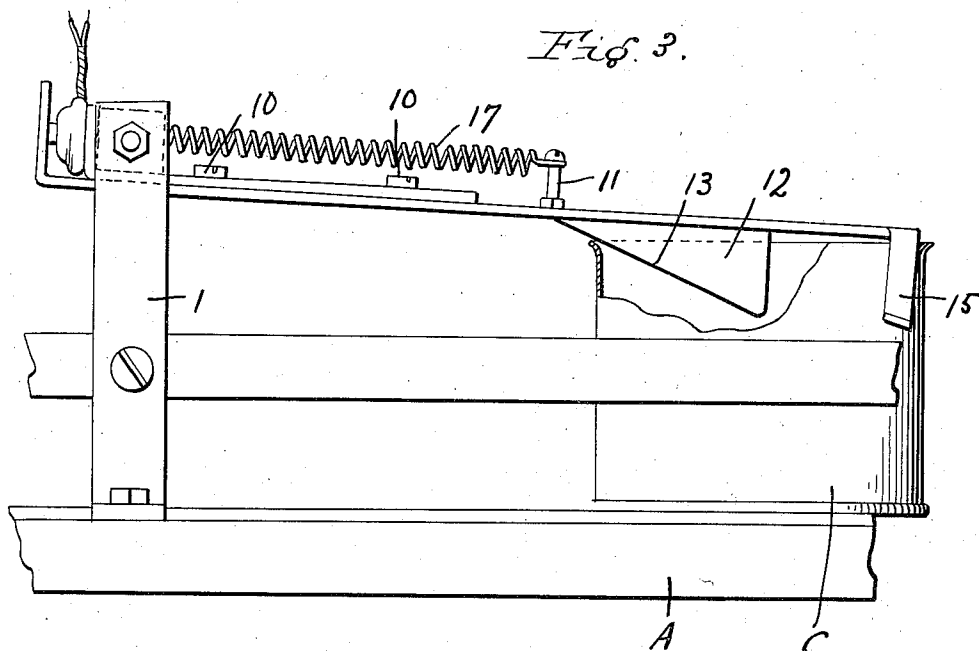
M. RIVERA

1,736,092

COMBINATION TRAP AND CIRCUIT CLOSER FOR CAN SEAMING MACHINES

Filed Dec. 8, 1928

2 Sheets-Sheet 2



Marcelino Rivera

By *Clarence A. O'Brien*
Attorney

UNITED STATES PATENT OFFICE

MARCELINO RIVERA, OF NEW YORK, N. Y.

COMBINATION TRAP AND CIRCUIT CLOSER FOR CAN-SEAMING MACHINES

Application filed December 8, 1923. Serial No. 324,734.

The present invention pertains to improvements in can seaming machines and more specifically has reference to a novel trap for retaining a can upon which a cap has not been
5 clinched.

In the canning industry, the cans first go through a clincher before they reach the vacuum seaming machines, where they have the caps clinched in place to be later seamed
10 by the vacuum seaming machine. The present difficulty experienced by workers in this industry contending with these types of canning machines resides in the damage occasioned by the lack of the clincher to operate
15 in placing a cap on each and every one of the cans passing therethrough, for if a can is permitted to pass through the clincher without having a cap clinched thereon, said capless can will be sure to cause disruption
20 of the vacuum seaming means, requiring considerable delay in work and frequently expense in repairing machinery damaged by these machine failures.

The prime object of this invention is to provide a device interposed between the clincher and the vacuum seaming machine so as to test each can to ascertain whether
25 the same has a cap placed thereon or not.

Another important object of the invention is to provide a trap of this character
30 for holding the capless cans passing from the clincher to the seaming machine.

Still another object of the invention is to provide a combined trap and circuit closing
35 device for effecting a signal when a capless can is retained by the trap.

These and other objects of the invention will become apparent to the reader after
40 considering the following description and claims.

In the drawings:

Figure 1 represents a side elevation of the improved trap showing the same in engaged
45 position with a capped can, part of the can being shown broken away.

Figure 2 is a top plan view of the trap engaged with a capped can.

Figure 3 is a side elevation of the trap
50 shown engaged with a capless can and in the

act of closing a signal circuit, part of the can being shown broken away.

Figure 4 is a perspective view of a detail of the invention.

Figure 5 is a perspective view of another
55 detail of the invention.

Referring to the drawing, wherein like numerals designate like parts, the usual table A is shown in Figures 1, 2, and 3, for supporting the cans during their passage between the clincher and the seaming machine. At a predetermined point on the table A, a pair of upstanding members 1—1 are mounted in spaced relation, the same being flanged at their lower portions to provide means where-
60 by they may be secured to the table A. The table is provided with the usual side rails B.

A T-shaped plate 2 has its vertical portion formed with a pair of longitudinally extending slots 3—3. The horizontal portion of the plate has its end portions bent laterally as at 4, each bent end portion being formed with an opening 5, whereby it may be pivotally connected to the upper end portion of one of the posts 1—1. The intermediate
70 portion of the plate 2 at its horizontal portion is provided with a plate 6 projecting laterally and having push button circuit closing device 7 of conventional design, suitably secured thereto.
75

In Figure 5 of the drawings, another detail of the invention includes an elongated bar 8 formed with a pair of threaded openings 9—9. Screw members 10—10 are dis-
80 posed through the slots 3—3 and are engaged within the openings 9—9 for slidably connecting the bar 8 to the T-shaped plate 2. The bar 8 is provided with an upstanding pin 11 at its intermediate portion, and a depending fin 12 at its under side. The fin
85 12 is formed to provide a bevelled edge 13, against the direction of travel of the can.

One end of the bar 8 is provided with an upstanding plate 14. The opposite end of the bar is provided with a pair of oppositely
90 disposed lateral arms 15—15.

These arms at their intermediate portions are bent downwardly and then outwardly, in the manner designated by the numeral 15. The distance between the downwardly bent
100

portion of each arm 15 is substantially less than the width of the cans in transit on the table A. A coiled spring 17 is interposed between the pin 11 and the upstanding plate 6 on the T-shaped plate 2.

Obviously, when the can C which has not been provided with a cap by the clincher passes against the bevelled edge 13 of the fin 12, the bar 8 will be caused to move upwardly.

As is shown in Figure 1 of the drawings, as the can C moves under the bar 8, the fin 12 will merely ride across the cap of the can, and in this manner each and every can is given a test.

However, when a can without a cap passes beneath the fin 12, the fin will drop into the can. The dropping of the fin into the can will also cause the disposition of the arms 15—15 as shown in Figure 3. The movement of the can C against the arms 15—15 will effect a pull on the bar 8, resulting in the contacting of the upstanding plate 14 with the push button 7. This will cause a circuit to be closed and a signal given to responsible persons.

It will thus be seen that the present device will save considerable damage to machinery while, in itself, because of simple construction, will be of nominal cost to install.

It is to be understood that certain changes in the specific shape, size and materials may be resorted to, without departing from the spirit of the invention or the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A trap for capless cans on the travelling tables of canning machines comprising a support, a pivotal member on said support, a feeler member on said pivotal member, and an arm on said feeler member for engaging and holding the capless can after the feeler has engaged within the same.

2. A trap for capless cans on the travelling tables of canning machines comprising in combination, a stationary support, a member pivoted to said support, a bar slidably connected to said pivotal member, a feeler on said bar for engaging within capless cans, an arm on the bar for engaging the can after the feeler has engaged within the can, and a circuit closing means between the bar and the pivotal member operable by the sliding of the bar effected by the moving can.

In testimony whereof I affix my signature.
MARCELINO RIVERA.