F. P. RYDER.

CAN MARKING MACHINE.

APPLICATION FILED MAR. 2, 1909. RENEWED SEPT. 20, 1910. 986,867. Patented Mar. 14, 1911. 3 SHEETS-SHEET 1. 3 WITNESSES: INVENTOR

F. P. RYDER.

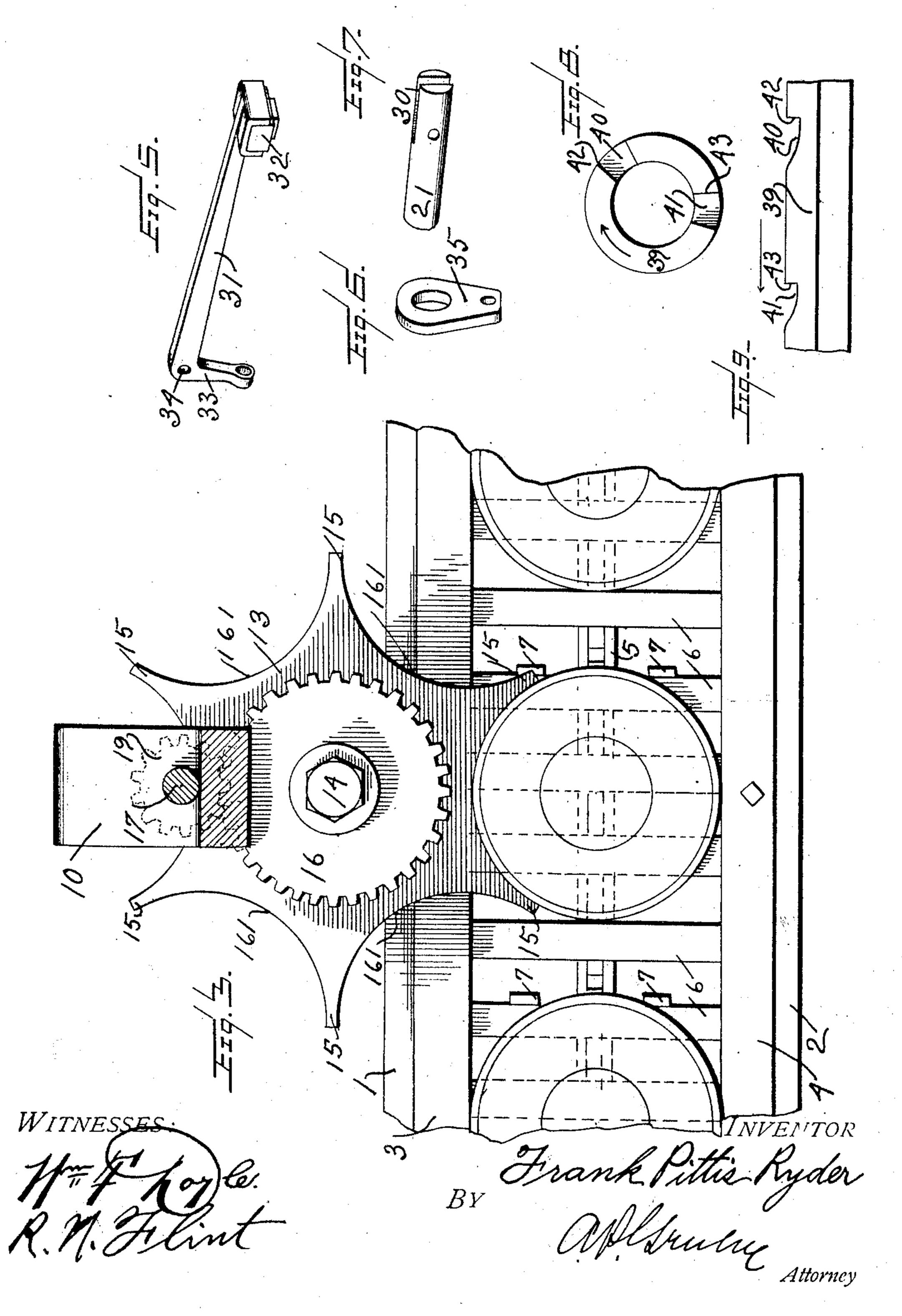
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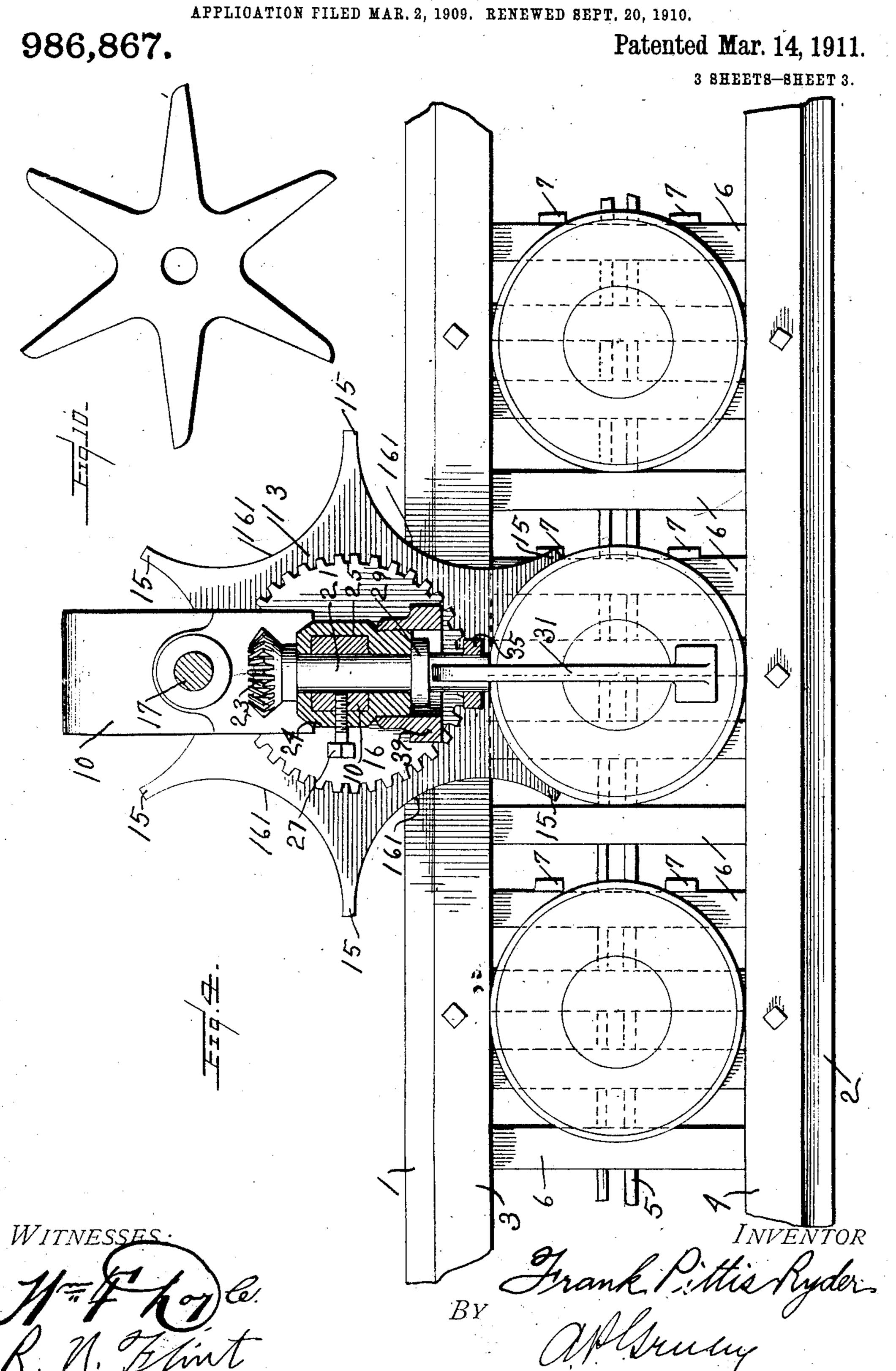
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3 SHEETS-SHEET 2.



F. P. RYDER. CAN MARKING MACHINE.



UNITED STATES PATENT OFFICE.

FRANK PITTIS RYDER, OF BOSTON, MASSACHUSETTS.

CAN-MARKING WACHINE.

986,867.

Marie Marie Marie

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed March 2, 1909, Serial No. 480,963. Renewed September 20, 1910. Serial No. 582,924.

To all whom it may concern:

Be it known that I, Frank Pittis Ryder, a citizen of the United States, residing at Boston, in the county of Suffolk, State of 5 Massachusetts, have invented certain new and useful Improvements in Can-Marking Machines, of which the following is a description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to can marking or numbering machines designed for use with canning machinery; and the purpose thereof is to stamp or print a certain word, number or mark upon the cans at some time 15 during the canning process, which word, number or mark will indicate the kind of goods, grade, or other features of the contents of the can; the purpose of this mark being to enable the subsequent identification 20 of the cans upon which it is printed, and not for the purpose of serving as a label to inform purchasers of the contents of the can.

With the above purpose in view, my in-25 vention consists in the construction and combination of elements hereinafter described and particularly pointed out in the claims.

In the accompanying drawings wherein 30 I have illustrated an embodiment of my invention: Figure 1 is an elevation of my improved can marking machine as seen looking along the line in which the cans travel, the movement of the cans being to-35 ward the observer; Fig. 2 is an elevation of my machine as sec from the right of Fig. 1, the movement of the cans being toward the left; Fig. 3 is a plan view illustrating so much of my machine as lies be-40 low the plane indicated by the line A-B Figs. 1 and 2, the movement of the cans being toward the left; Fig. 4 is a sectional view taken in the horizontal plane indicated by the line C-D. Figs. 1 and 2, certain of 45 the parts, however, being omitted for the sake of clearness; Fig. 5 is a perspective

stamp or type for marking the cans; Fig. 6 is a perspective view of an arm coöperating 50 with said type supporting arm; Fig. 7 is a perspective view of the end of a rotary shaft. whereby the type supporting arm shown in Fig. 5 is carried; Fig. 8 is a view of a cam which controls the type supporting arm 55 above referred to; Fig. 9 is a view showing

view showing the arm for supporting a

the cam shown in Fig. 8 developed; and, Fig. 10 is a view showing a different form of turnstile or star wheel employed in my device.

In the drawings 1 and 2 represent por- 60 tions of the bed of my machine forming a part of cauning apparatus and to which it is desired to attach my marking machine. It will be understood that these elements may be a part of one of the numerous con- 65 veyers commonly used in canning plants, or they may be tracks provided for the express purpose of forming a support for my device.

My improved marking machine is adapted 70 for use in any location past which cans are moved.

The elements 1 and 2 will ordinarily be provided with guide strips 3 and 4 between which the cans pass, as will be understood 75 from Figs. 1 and 3; and 5 is a feeding chain having a series of slats 6 attached thereto which travel over the upper surfaces of the members 1 and 2, and upon which slats the cans rest, certain of said slats being pro- 80 vided with lugs 7 to engage and move the cans along. The elements thus far described, while they are present in many machines used in the canning business, will be seen to form in effect a conveyer by means 85 of which the cans are caused to travel past a given point, at which point my can marking machine will be located.

My can marking machine is shown as secured to the member 1 by means of a bracket 90 8, the upper surface of which is provided with a groove 9 whereby my machine may be adjusted transversely to the members 1 and 2.

10 represents the main frame of my ma- 95 chine, which frame serves as a support for all the operating parts and is secured to the bracket 8 by means of the bolt 12; a tongue 11 which enters the groove 9 being provided which, in connection with an elon- 100 gated slot for the bolt 12, permits the said frame to be adjusted transversely to the path along which the cans move.

13 is an element which I designate as a turnstile or star wheel and which is secured 105 to the frame 10 by means of a bolt 14 about which it is free to rotate. The turnstile or star wheel is provided with projecting arms 15 and with depressed intermediate portions 161 which may be shaped to conform sub- 110

stantially with the periphery of the cans to be operated upon as shown in Figs. 1 to 4; or the element 13 may take the form shown in the modified type of star wheel shown 5 in Fig. 10; and this turnstile or star wheel is so adjusted as by moving the frame 10 upon the bracket 8 that the arms 15 project over the conveyer along which the cans pass, so that successive cans will engage the 10 arms 15 as they pass along and thus rotate the turnstile 13, as will be understood from Figs. 1 and 2, in which the cans are shown in elevation and in dotted lines, and from Fig. 3 in which the cans are shown in plan. 15 16 is a gear secured to the turnstile 13,

and 17 is a vertical shaft supported in bearings 18 carried by the frame 10.

19 is a pinion upon the lower end of the shaft 17 and in mesh with the gear 16.

26. 20 is a collar for supporting the shaft 17. \\ 33 of the printing mechanism to force said 85 21 is a horizontal shaft driven from the shaft 17 by means of gears 22, 23, the gear 22 being twice the diameter of the gear 23 so that the shaft 21 is driven twice as fast 25 as the shaft 17, which shaft 21 extends inward to a point adjacent the cans to be marked and carries at its inner end the printing or marking mechanism hereinafter described. This shaft 21 may be supported in 30 any suitable bearings carried by the frame 10. I, however, as a preferred construction, mount the shaft 21 in a vertically adjustable supporting member 24 which is shown as provided with a square opening 25 through 35 which a correspondingly shaped portion of the frame 10 extends. In the construction illustrated, see Figs. 1 and 4, the shaft 21 extends through the frame 10, and an elongated slot 26 is formed therein the upper 40 end of which is shown in Fig. 1; the frame 10 being shown broken away to illustrate this feature. The supporting member 24 is secured in position by means of a set screw 27, and the gear 22 is freely adjustable upon 45 the shaft 17 to bring it into mesh with the gear 23 after the supporting member 24 is properly adjusted and secured in position. 28 is a set screw for securing the gear 22 to the shaft 17.

The shaft 21 is provided adjacent its inner end with a collar 29 which bears against. the end of the adjustable supporting member 24, and the inner end of said shaft is provided with an axially extending slot as 55 shown at 30 within which slot the printing mechanism of my device is secured. This printing mechanism comprises a bell-crank lever having a longer arm 31 and a shorter arm 33 extending at substantially a right 60 angle to the arm 31, said bell-crank lever being pivoted within the recess 30 by a pivot at 34 extending transverse to the axis of the shaft 21 and preferably at right angles thereto. The longer arm 31 of the bell-65 crank lever extends or projects to a consider-

able distance beyond the inner end of the shaft 21, and, while said lever is carried by and thus rotates with the shaft, it is movable relatively thereto and is free to swing about and upon the pivoted connection at 34. In the 70 preferred form of my device shown wherein the axis of the pivotal connection at 34 extends at right angles to the axis of the shaft 21, it will be seen that the bell-crank lever will swing in a plane passing through the 75 axis of said shaft. The free outer end of the arm 31 is recessed or slotted to receive a type or stamp 32 designed to come into contact with the cans to mark them as they pass along as will be understood from Fig. 1 of 80 the drawings.

35 is an arm secured to the inner end of the shaft 21 and which forms an abutment for a spring 36 acting upon the shorter arm arm away from the abutment, and, as will be understood, to thus swing the bell-crank lever 31, 33 about the pivot 34 and bring the type 32 at the free end thereof into contact with a can to be marked. Holes are pro- 90 vided as shown for receiving the ends of the spring 36.

37 is a rotary ink pad from which the type or stamp 32 receives its ink, and 38 is an arm whereby said ink pad is supported, 95 said arm in the form of my device illustrated being secured to the frame 10.

39 is a cam member for controlling the action of the printing mechanism above disclosed. This arm member is shown as lo- 100 cated upon the inner end of the adjustable supporting member 24, in which case it will move as the same is adjusted vertically and will always be concentric with the shaft 21, and said cam is shown as an element sep- 105 arable from said supporting member, although it may obviously be formed integrally therewith. The cam member is annular in form as will be understood from Figs. 2 and 8 of the drawings, and is pro- 110 vided with two depressions 40 and 41 in its operating surface, each of which depressions includes an abrupt shoulder at 42 or 43 extending from the operating surface of the cam to the bottom of the depression 40 or 41, 115. and an inclined surface leading from the bottoms of the depressions upward, as will be understood from Fig. 9 of the drawings. It will however be understood that the form of these depressions is of secondary impor- 120 tance, so long as the functions hereinafter ascribed to the cam member as a whole are carried out.

The shorter arm 33 of the bell-crank lever bears against and slides over the surface of 125 the cam 39 as the shaft 21 and the lever carried by it is rotated as above explained and, as the arm 33 passes beyond the shoulder 43, the spring 36 will force said arm 33 into the depression 41 and swing the longer 130

arm 31 about the pivot at 34 and bring the type 32 into contact with a can, all as will be understood from Figs. 1 and 9 of the drawing. As the shaft 21 and lever is ro-5 tated farther the arm 33 rides up the incline from the depression 41, and, when it reaches the second depression 40 is forced thereinto by the spring 36 to thereby bring the type 32 into contact with the ink pad 37. The abrupt 10 shoulders of the depressions 40 and 41 will, it will be understood, permit a quick movement of the type 32 into contact with the nik pad and the can, while the inclined surfaces will cause the type to be swung away from 15 the pad and can as the arm 33 is carried forward by the rotation of the shaft 21 more slowly, and without possible injury to the parts as would be the case if the arm 33 were forced against an abrupt shoulder.

20 The construction of my can marking machine being as above disclosed, the operation thereof is as follows: Cans are fed along the conveyer formed by the tracks 1 and 2 and the feeding chain 5, the direction of 25 movement being from right to left, Figs. 3 and 4. The cans engage and operate the star wheel or turnstile 13, which operates the shafts 17 and 21 through the gears 16 and pinion 19, and the gears 22, 23 thereby ro-30 tating the shaft 21 carrying the printing mechanism, the rotation imparted thereto | 21 is rotated the arm 33 of the bell-crank lever 31, 33 moves over the surface of the 35 cam 39 until said arm reaches the shoulder 42 of the depression 40, when the arm 33 will be forced to the left by the spring 36. This movement brings the type carried by the arm 31 into position to engage the ink 40 pad 37 and said type will engage and rotate the ink pad as the shaft 21 continues to rotate, and will finally be moved away from the ink pad as the arm 33 moves up the incline leading from the depression 40. The 45 bell crank lever 31, 33 is now further rotated until the arm 33 comes to the shoulder 43 of the depression 41, when the arm 33 will again be forced to the left by the spring 36, the type this time being forced 50 against the can to be marked. During further rotary movement of the shaft 21 the arm 33 moves up the inclined portion of the depression 41, whereby the type carrier is

15 21 AND 18

moved away from the can. The form of the depressed portion 40 of the cam 39 should be such that the type will move for some little distance in contact with the ink pad 50, while the form of the depressed portion 41 should permit as brief a contact as practicable of the type with the cans. I, however, have so proportioned the parts of my machine that the type carriers 32 when in contact with the cans move in

move forward; so that the type may be in contact with the cans for quite an appreciable time without blurring, as there is then substantially no relative movement between the type and the cans.

There being a single printing device carried by the shaft 21, and six arms upon the turnstile 13, it will be appreciated that the shaft 21 must rotate six times as fast as the turnstile in order that every can may 75

be marked. I therefore make the ratio of the gear 16 and pinion 19 three to one, and the ratio of the gears 22, 23 two to one.

The machine as illustrated is obviously intended to operate upon a definite size of 80 can, both as to diameter and height. The capability of adjustment of the frame 10 transversely and of the carrier 24 vertically is to adapt the machine for other sizes of cans. In case the difference of size is considerable 85 I may use a second turnstile or star wheel of larger diameter in place of the one shown.

Having thus described my invention and explained the mode of operation thereof, I 90 claim and desire to secure by Letters Patent:

1. In a can marking machine, a horizontally arranged rotary shaft; printing mechanism carried by said shaft and capable of 95 vertical movement in a direction radial to being in a clockwise direction. As the shaft | the axis of the horizontally arranged shaft toward and from cans to be marked to thereby be brought into contact with the cans; means for feeding cans past said 100 printing mechanism; means engaged by the cans for rotating said shaft; and a cam for controlling the movement of said printing mechanism toward and from the cans.

2. In a can marking machine, a horizon-105 tally arranged rotary shaft; printing mechanism carried by said shaft, capable of vertical movement in a direction radial to the axis of the horizontally arranged shaft and normally out of contact with the cans to be 110. marked; means tending to move said printing mechanism into contact with the cans; means for feeding cans past said printing mechanism; means engaged by the cans for rotating said shaft; and a cam for permit- 115 ting said printing mechanism to be moved into contact with the cans.

3. In a can marking machine, a horizontally arranged rotary shaft; printing mechanism carried by said shaft and capable of 120 vertical movement in a direction radial to the axis of the horizontally arranged shaft toward and from cans to be marked, to thereby be brought into contact with the 125 cans; means for feeding cans past said printing mechanism and in a direction at right angles to said shaft; means engaged by the cans for rotating said shaft; and a cam their path of travel at substantially the for controlling the movement of said print-55 same speed as the speed at which the cans ing mechanism toward and from the cans. 130

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4. In a can marking machine, a bed along which cans to be marked are fed; a horizontally arranged rotary shaft extending transverse to said bed; printing mecha-5 nism carried by said shaft, capable of vertical movement in a direction radial to the axis of the horizontally arranged shaft and normally out of contact with the cans to be marked; means tending to move said print-10 ing mechanism into contact with the cans: means for feeding cans past said printing mechanism; means engaged by the cans for rotating said shaft; and a cam for permitting said printing mechanism to be moved 15 into contact with the cans.

5. In a can marking machine, a turnstile adapted to be engaged and operated by cans as they are fed along; a shaft operated by said turnstile; a second shaft operated from 20 said first mentioned shaft; printing mechanism carried by said second shaft and located adjacent the cans to be marked but normally out of contact therewith; and a cam for controlling said printing mecha-

25 nism. 6. In a can marking machine, a turnstile adapted to be engaged and operated by cans as they are fed along; a vertical shaft operated by said turnstile; a horizontal shaft 30 extending transverse to the line of movement of and located above the cans and operated from said vertical shaft; printing mechanism carried by said horizontal shaft and located adjacent the cans to be marked 35 but normally out of contact therewith; and a cam for controlling said printing mechanism.

7. In a can marking machine, a turnstile adapted to be engaged and operated by cans 40 as they are fed along; a horizontally arranged shaft; printing mechanism carried by said shaft and located adjacent the cans to be marked but normally out of contact therewith and capable of vertical movement 45 in a direction radial to the axis of the horizontally arranged shaft; means whereby said shaft is operated by said turnstile; and a cam for controlling said printing mechamism.

8. In a can marking machine, a turnstile adapted to be engaged and operated by cans as they are fed along; a horizontally arranged shaft; printing mechanism carried by said shaft and located adjacent the cans 55 to be marked but normally out of contact therewith and capable of vertical movement in a direction radial to the axis of the horizontally arranged shaft; means tending to move said printing mechanism into contact with the cans; a cam for permitting said printing mechanism to be moved into contact with the cans as they pass the printing mechanism; and means whereby said shaft operated by said turnstile.
9. In a can marking machine, a suitable

frame; a supporting member secured to said frame; a horizontally arranged rotary shaft supported by said supporting member; printing mechanism carried by said rotary shaft and located adjacent the cans to be 70 marked but normally out of contact therewith and capable of vertical movement in a direction radial to the axis of the horizontally arranged shaft; a cam carried by said supporting member and adapted to control 75 the operation of said printing mechanism; a turnstile adapted to be engaged by the cans as they are fed along; and means whereby said shaft is operated by said turnstile.

10. In a can marking machine, a verti- 80 cally extending supporting frame; a supporting member capable of vertical adjustment upon said frame; a horizontally arranged rotary shaft supported by said supporting member; printing mechanism car- 85 ried by said rotary shaft and located adjacent the cans to be marked but normally out of contact therewith; a cam carried by said supporting member and adapted to control the operation of said printing mechanism; 90 a turnstile adapted to be engaged by cans as they are fed along; a vertically extending shaft operated by said turnstile; and gearing whereby said vertically extending shaft drives said first mentioned shaft.

11. In a can marking machine, a vertically extending supporting frame; a horizontally disposed supporting member capable of vertical adjustment upon said frame; a rotary horizontal shaft supported by said 100 supporting member and extending above the cans to be marked; printing mechanism carried by said rotary shaft and located adjacent the cans to be marked but normally out of contact therewith; a cam carried by said 105 supporting member and adapted to control the operation of said printing mechanism; a turnstile adapted to be engaged by cans as they are fed along; a vertically extending shaft; gearing between said turnstile and 110. said vertically extending shaft whereby said shaft is operated; and gearing between said vertically extending shaft and said horizontal shaft whereby said horizontal shaft is operated.

12. In a can marking machine, a rotary shaft; means for feeding cans past said rotary shaft; means engaged by the cans for rotating said shaft; an arm carried by said shaft; a type-supporting member hinged to 120 said arm and adapted to swing in a direction transverse to the axis of said shaft; a stationary cam surrounding said shaft; and an arm projecting from said type-supporting member and adapted to engage said cam. 125

13. In a can marking machine, in combination with means for feeding cans in upright position, a horizontally arranged shaft above the plane of the top of the cans, a pivoted lever carried by the shaft having 130

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a stamp at its free end, means for forcing the free end of the lever downward in a direction radial to the axis of the horizontally arranged shaft to cause the stamp to 5 come in contact with the can top, means for lifting the free end of the lever, and means operated by the movement of the cans for rotating the horizontally arranged shaft.

14. A can marking machine adapted for 10 use in connection with means for feeding cans in upright position, a horizontally arranged rotary shaft above the plane of the tops of the cans, a pivoted lever carried by the shaft having a stamp at its free end, 15 means for forcing the free end of the lever downward in a direction radial to the axis of the horizontally arranged shaft to cause the stamp to come in contact with the can top, means for lifting the stamp away from 20 the can top, and means adapted to be operated by the movement of the cans for rotating the horizontally arranged shaft.

15. A can marking machine adapted for use in connection with means for feeding 25 cans in upright position, a horizontally arranged rotary shaft above the plane of the tops of the cans, a pivoted lever carried by the shaft having a stamp at its free end, means for forcing the free end of the lever 30 downward in a direction radial to the axis of the horizontally arranged shaft to cause the stamp to come in contact with the can top, a stationary cam for lifting the stamp away from the can top, and means adapted 35 to be operated by the movement of the cans for rotating the horizontally arranged shaft.

16. In a can marking machine in combination with means for feeding cans in uphight position, a horizontally arranged shaft 40 above the plane of the tops of the cans, a pivoted lever carried by the shaft having a stamp at its free end, a spring arranged to force the free end of the lever downward in a direction radial to the axis of the horizon-45 tally arranged shaft to bring the stamp into contact with the can top, a stationary cam for lifting the free end of the lever, and means operated by the movement of the cans for rotating the horizontally arranged 50 shaft.

17. In a can marking machine, a rotary shaft; means for feeding cans past said shaft; means engaged by the cans for rotating said shaft; a lever carried by and pivot-55 ally connected with said shaft and projecting beyond the inner end thereof and provided with a stamp at its free end, the axis of said pivotal connection extending transverse to the axis of said shaft; and a cam 60 adapted to engage said lever to thereby swing it about said pivotal connection.

18. In a can marking machine, a rotary shaft; means for feeding cans past said shaft: means engaged by the cans for ro-

by said shaft and pivotally connected therewith, the axis of said pivotal connection extending at right angles to the axis of said shaft whereby said lever will swing in a plane passing through the axis of said shaft, 70 one arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end and the other arm thereof being adapted to engage a cam; and a cam surrounding said shaft and with 75 which one of the arms of said lever engages.

19. In a can marking machine, a retary shaft; provided with an axially extending slot at its inner end; means for feeding cans past said shaft; means engaged by the cans 80 for retating said shaft; a bell-crank lever having arms of unequal length pivotally secured within said slot, the axis of said pivotal connection extending at right angles to the axis of said shaft whereby said lever 85 will swing in a plane passing through the axis of said shaft, the longer arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end and the shorter arm thereof 90 being adapted to engage a cam; and a cam concentric with said shaft and with which the shorter arm of said lever engages.

20. In a can marking machine, a rotary shaft; means for feeding cans past said 95 shaft; means engaged by the cans for rotating said shaft; a lever carried by and pivotally connected with said shaft and projecting beyond the inner end thereof and provided with a stamp at its free end normally 100 out of contact with the cans to be marked. the axis of said pivotal connection extending transverse to the axis of said shaft; means tending to move said stamp into contact with the cans; and a cam with which said 105 lever engages and whereby its movements

are controlled. 21. In a can marking machine, a rotary shaft; means for feeding cans past said. shaft; means engaged by the cans for ro- 110 tating said shaft; a lever carried by and pivotally connected with said shaft and projecting beyond the inner end thereof and provided with a stamp at its free end normally out of contact with the cans to be 115 marked, the axis of said pivotal connection extending transverse to the axis of said shaft; a spring engaging said lever and tending to move said stamp into contact with the cans; and a cam with which said 120 lever engages and whereby its movements are controlled.

re controlled.
22. In a can marking machine, a rotary shaft; means for feeding cans past said shaft; means engaged by the cans for rotat- 125 ing said shaft; a bell-crank lever carried by said shaft and pivotally connected therewith, the axis of said pivotal connection extending at right angles to the axis of the 65 tating said shaft; a bell-crank lever carried | shaft whereby said lever will swing in a 130

plane passing through the axis of said shaft, one arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end normally out 5 of contact with the cans to be marked, and the other arm thereof being adapted to engage a cam; means tending to move said stamp into contact with the cans; and a cam surrounding said shaft and with which 10 one arm of said lever engages and whereby its movements are controlled.

23. In a can marking machine, a rotary shaft provided with an axially-extending slot at its inner end; means for feeding cans 15 past said shaft; means engaged by the cans for rotating said shaft; a bell-crank lever having arms of unequal length pivotally secured within said slot, the axis of said pivotal connection extending at right angles to 20 the axis of said shaft whereby said lever will swing in a plane passing through the axis of said shaft, the longer arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at 25 its free end normally out of contact with the cans to be marked, and the shorter arm thereof being adapted to engage a cam; a spring engaging said lever and tending to move said stamp into contact with the cans; 30 and a cam concentric with said shaft and with which the shorter arm of said lever engages and whereby its movements are con-.trolled.

24. In a can marking machine, a rotary 35 shaft; means for feeding cans past said shaft; means engaged by the cans for rotating said shaft; a bell-crank lever having a longer and a shorter arm carried by and pivotally connected with said shaft, the 40 longer arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end normally out of contact with the cans to be marked, and the shorter arm thereof being adapted 45 to engage a cam; a spring engaging said lever and tending to move said stamp into contact with the cans; and a cam surrounding said shaft and with which the shorter arm of said lever engages and whereby its 50 movements are controlled.

25. In a can marking machine, a rotary shaft; means for feeding cans past said shaft and in a direction at right angles to the axis of said shaft; means engaged by 55 the cans for rotating said shaft; a bell-crank lever having a longer and a shorter arm carried by and pivotally connected with said shaft, the longer arm of said lever projecting beyond the inner end of said shaft and 60 being provided with a stamp at its free end normally out of contact with the cans to be marked, and the shorter arm thereof being adapted to engage a cam; a spring engaging said lever and tending to move said stamp 65 into contact with the cans; and a cam sur-

rounding said shaft and with which the shorter arm of said lever engages and whereby its movements are controlled.

26. In a can marking machine, a bed along which cans to be marked are fed; a 70 rotary shaft extending transverse to said bed; means for feeding cans past said shaft; means engaged by the cans for rotating said shaft; a bell-crank lever having a longer and a shorter arm carried by and pivotally 75 connected with said shaft, the longer arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end normally out of contact with the cans to be marked, and the 80 shorter arm thereof being adapted to engage a cam; a spring engaging said lever and tending to move said stamp into contact with the cans; and a cam surrounding said shaft and with which the shorter arm of 85 said lever engages and whereby its movements are controlled.

27. In a can marking machine, a rotary shaft; means for feeding cans past said shaft; a turnstile adapted to be engaged and 90 operated by cans as they are fed along; means whereby said shaft is operated by said turnstile; a bell-crank lever having a longer and a shorter arm carried by and pivotally connected with said shaft, the longer 95 arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end normally out of contact with the cans to be marked, and the shorter arm thereof being adapted to 100 engage a cam; a spring engaging said lever and tending to move said stamp into contact with the cans; and a cam surrounding said shaft and with which the shorter arm of said lever engages and whereby its movements 105 are controlled.

28. In à can marking machine, a turnstile adapted to be engaged and operated by cans as they are fed along; a vertical shaft operated by said turnstile; a horizontal shaft ex- 110 tending transverse to the line of movement of and located above the cans and operated from said vertical shaft; a bell-crank lever having a longer and a shorter arm carried by and pivotally connected with said hori- 115 zontal shaft, the longer arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end normally out of contact with the cans to be marked, and the shorter arm thereof 120 being adapted to engage a cam; a spring engaging said lever and tending to move said stamp into contact with the cans; and a cam surrounding said shaft and with which the shorter arm of said lever engages 125 and whereby its movements are controlled.

29. In a can marking machine, a suitable frame; a supporting member secured to said frame; a rotary shaft supported by said supporting member; means for feeding cans 130

past said shaft; a turnstile adapted to be engaged and operated by cans as they are fed along; means whereby said shaft is operated by said turnstile; a bell-crank lever 5 having a longer and a shorter arm carried by and pivotally connected with said shaft, the longer arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end nor-10 mally out of contact with the cans to be marked, and the shorter arm thereof being adapted to engage a cam; a spring engaging said lever and tending to move said stamp into contact with the cans; and a cam 15 carried by said supporting member and with which the shorter arm of said lever engages and whereby its movements are controlled.

30. In a can marking machine a vertically extending supporting frame; a supporting member capable of vertical adjustment upon said frame; a rotary shaft supported by said supporting member; means for feeding cans past said shaft; a turnstile adapted to ²⁵ be engaged and operated by cans as they are fed along; means whereby said shaft is operated by said turnstile; a bell-crank lever having a longer and a shorter arm carried by and pivotally connected with said shaft, the longer arm of said lever projecting beyond the inner end of said shaft and being provided with a stamp at its free end normally out of contact with the cans to be marked, and the shorter arm thereof being adapted to engage a cam; a spring engaging said lever and tending to move said stamp into contact with the cans; and a cam car-

ried by said supporting member and with which the shorter arm of said lever engages and whereby its movements are controlled. 40

31. In a can marking machine, a vertically extending supporting frame; a horizontally disposed supporting member capable of vertical adjustment upon said frame; a rotary horizontal shaft supported by said support- 45 ing member and extending above the cans to be marked; a bell-crank lever having a longer and a shorter arm carried by and pivotally connected with said horizontal shaft, the longer arm of said lever project- 50 ing beyond the inner end of said shaft and being provided with a stamp at its free end normally out of contact with the cans to be marked, and the shorter arm thereof being adapted to engage a cam; a spring engag- 55 ing said lever and tending to move said stamp into contact with the cans; a cam carried by said supporting member and with which the shorter arm of said lever engages and whereby its movements are controlled; 60 a turnstile adapted to be engaged and operated by cans as they are fed along; a vertically extending shaft; gearing between said turnstile and said vertically extending shaft whereby said shaft may be operated; and 65 gearing between said vertically extending shaft and said horizontal shaft whereby said horizontal shaft may be operated.

This specification signed and witnessed this tenth day of February A. D. 1909.

FRANK PITTIS RYDER.

In the presence of— Edwin Francis Stimpson, Edmund A. Schwarz.