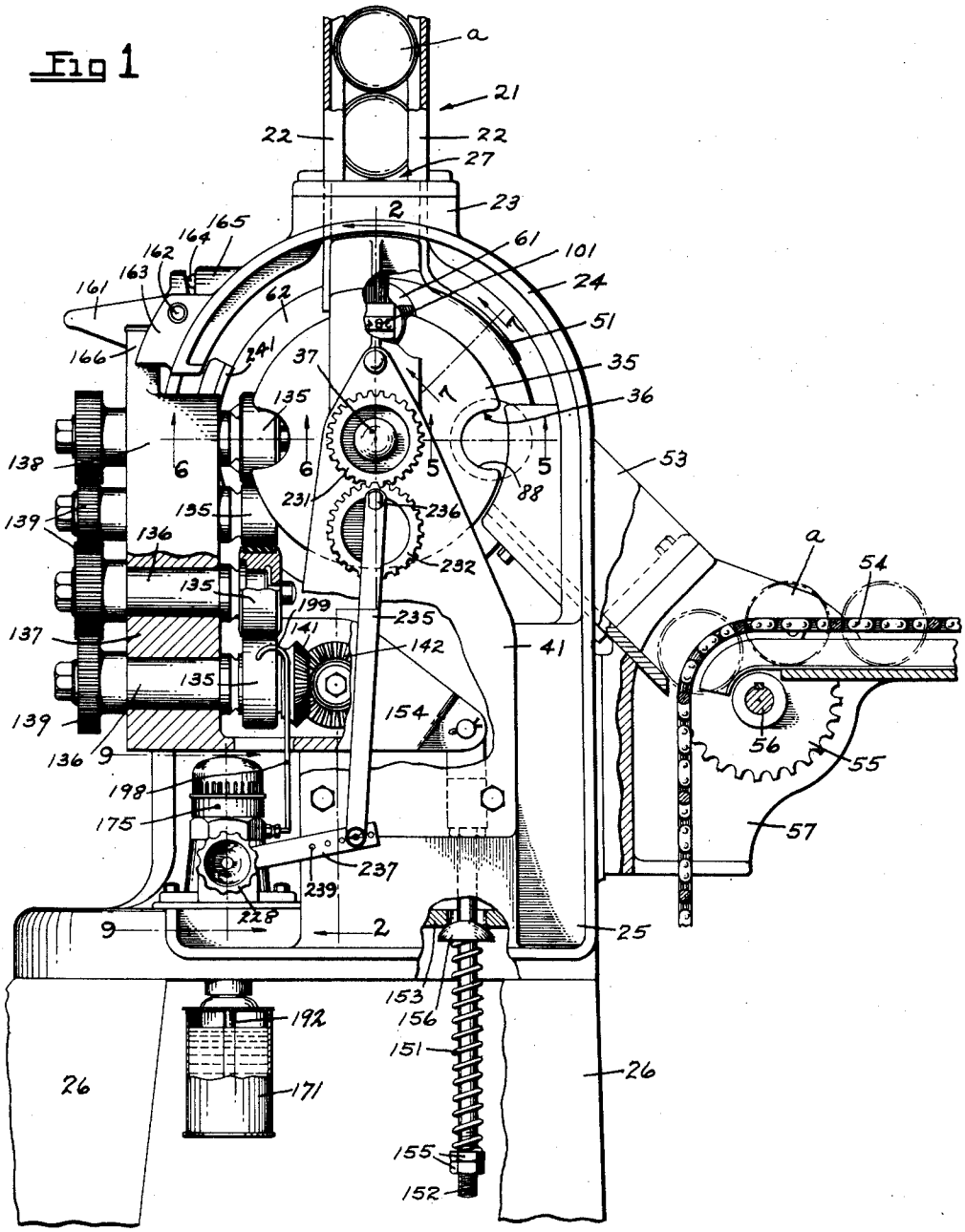
June 2, 1942. A. E. ALMGREN 2,284,628

CAN MARKING MACHINE

Filed Oct. 11, 1938 4 Sheets-Sheet 1

Fig 1



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June 2, 1942. A. E. ALMGREN 2,284,628

CAN MARKING MACHINE

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Fig 2

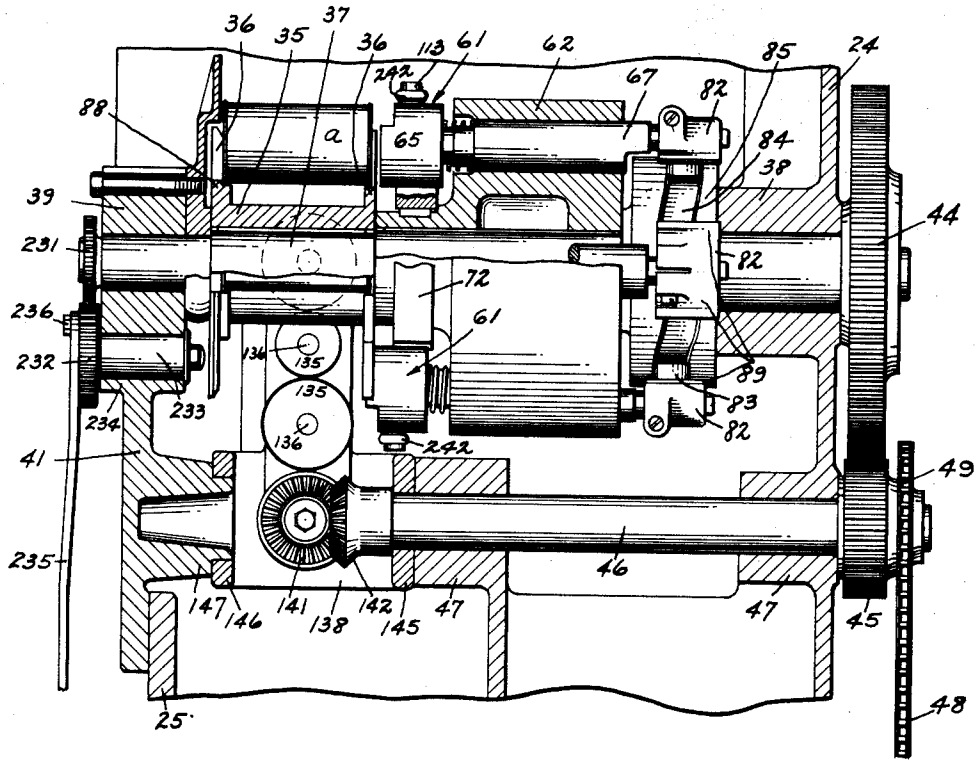


Fig 4

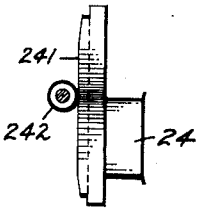
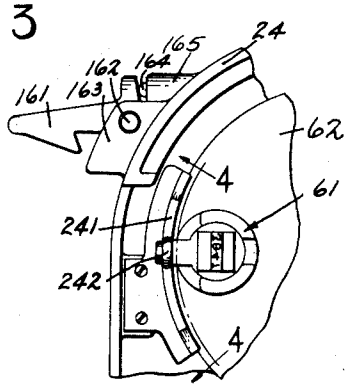


Fig 3



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June 2, 1942. A. E. ALMGREN 2,284,628

CAN MARKING MACHINE

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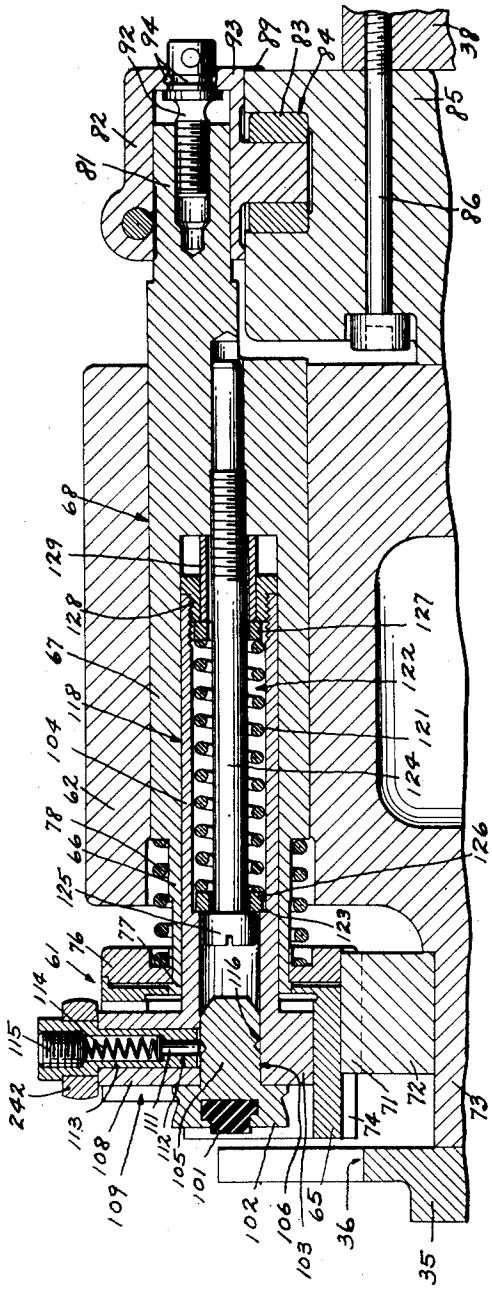


Fig 5

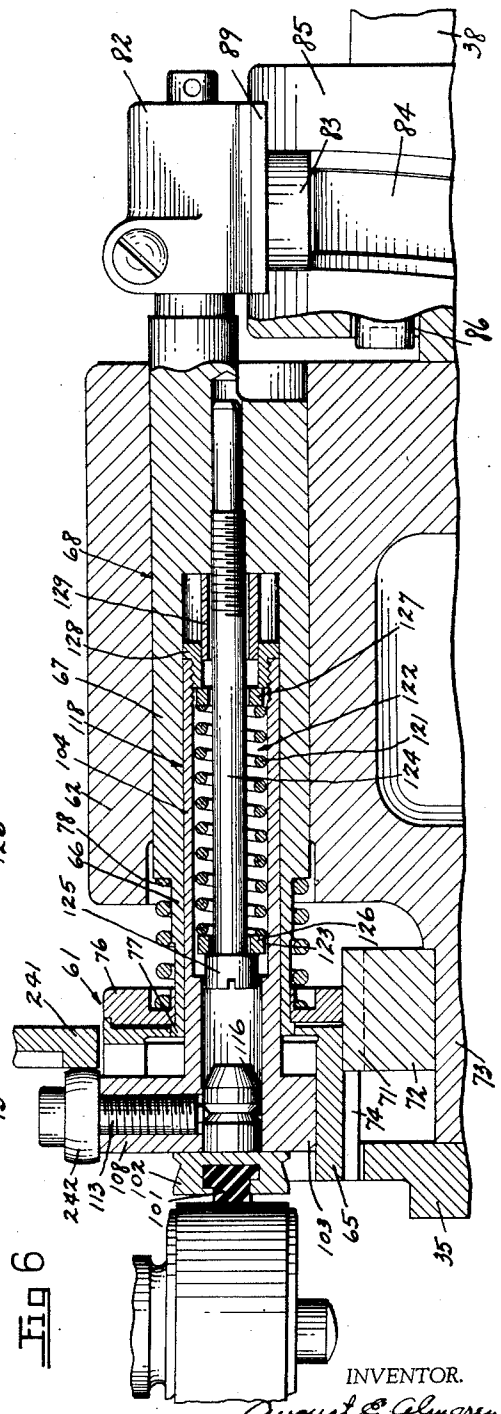


Fig 6

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CAN MARKING MACHINE

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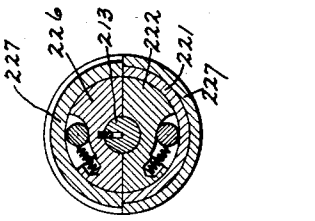


Fig 10

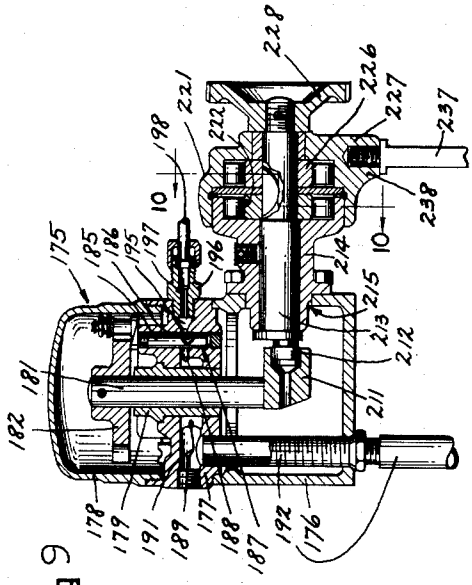


Fig 9

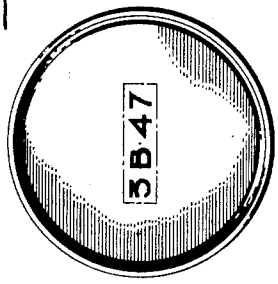


Fig 8

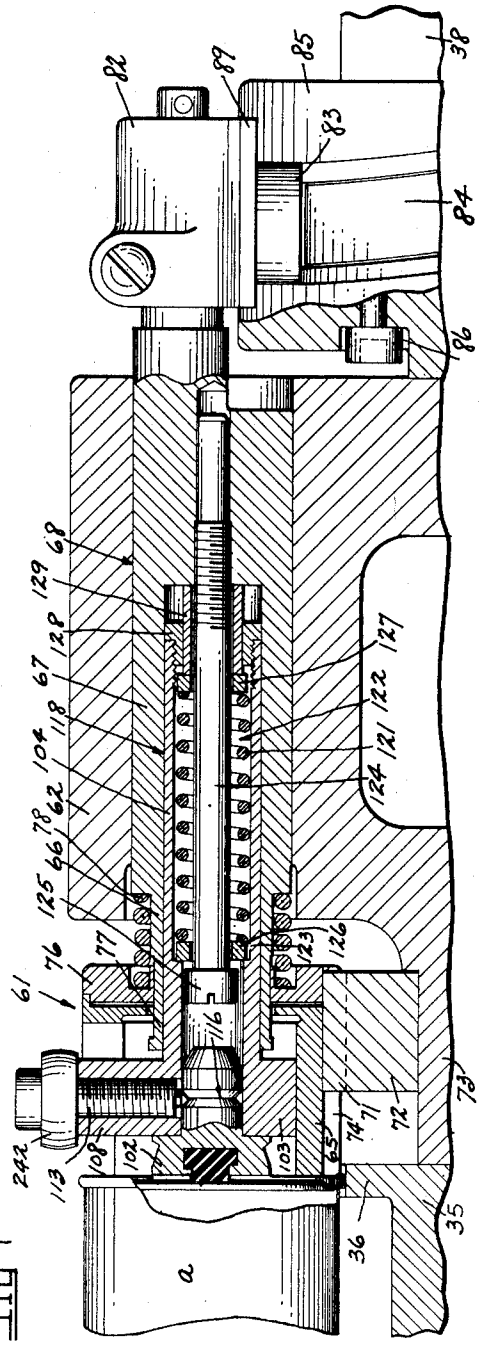


Fig 7

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2,284,628

UNITED STATES PATENT OFFICE

2,284,628

CAN MARKING MACHINE

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Application October 11, 1938, Serial No. 234,479

12 Claims. (Cl. 101—44)

The present invention relates to printing or marking machines and has particular reference to printing an identifying mark on an end of sheet metal sealed containers propelled in rapid succession through the machine.

An object of the invention is the provision of a can marking machine which is adapted to rapidly and efficiently stamp with ink or the like an identifying mark on the ends of moving cans and in such a clear and accurate manner as to insure against blurring or smudging of the mark.

Another object is the provision in a machine of this character of a marking head of novel construction which travels with a can to be marked during the marking operation and which assures clear and accurate marking of the cans.

Another object is the provision of such a marking head wherein parts of the head operate to clamp the can against shifting while the marking operation is being performed thereon.

Another object is the provision of controlled ink or the like feeding devices wherein just the required quantity of ink is supplied and uniformly distributed onto the marking head so that blurring of the identifying mark from an oversupply of ink will be prevented.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawings, discloses a preferred embodiment thereof.

Referring to the drawings:

Figure 1 is a front elevation of a can marking machine embodying the instant invention, parts being broken away and other parts being shown in section;

Fig. 2 is an enlarged section taken substantially along the broken line 2—2 in Fig. 1;

Fig. 3 is an enlarged detail shown in elevation, with parts broken away;

Fig. 4 is a section taken substantially along the curved line 4—4 in Fig. 3;

Figs. 5, 6 and 7 are enlarged sectional details taken substantially along the respective lines 5—5, 6—6 and 7—7 in Fig. 1;

Fig. 8 is an enlarged view of an end of a marked can showing one form of marking which may be printed thereon;

Fig. 9 is an enlarged sectional detail taken substantially along the line 9—9 in Fig. 1; and

Fig. 10 is a sectional view taken substantially along the broken line 10—10 in Fig. 9.

As a preferred embodiment of the present invention the drawings disclose a can marking machine in which cans *a* are stamped on one end with an identifying mark as they pass through the machine and are then discharged to any suitable place of deposit.

The cans to be marked enter the machine by way of a magazine or can entrance runway 21 (Fig. 1) having vertical guides 22 which retain the cans in a horizontal stacked position. These guides are secured to a boss 23 formed on top of an arch frame portion 24 of a main frame 25. The frame is supported on legs 26.

Openings 27 in the boss 23 and in the arch frame 24 permit the cans to fall vertically from the runway and thus pass through the frame. The lower ends of the vertical guides 22 extend through these openings and thus guide the cans as they fall.

Within the arch frame 24 there is located a rotatable turret 35 having spaced pockets 36 (see also Fig. 2). There are preferably four pockets 36 spaced at ninety degree intervals around the turret. The turret is disposed directly under the can entrance runway 21 and is mounted on a horizontal turret shaft 37 journaled in a bearing 38 formed in the arch frame 24 and in a bearing 39 formed in a bracket 41 which is bolted to the front of the main frame 25.

The turret shaft 37 is continuously rotated preferably by a spur gear 44 which is carried on one end of the shaft. Gear 44 meshes with a pinion 45 which is carried on one end of a driving shaft 46. The driving shaft is journaled in bearings 47 formed in the main frame 25. This driving shaft is rotated in any suitable manner, as for example, through a chain connection with a suitable source of driving power such as an electric motor or the like. For this purpose there is provided a chain 48 which takes over a sprocket 49 mounted on the driving shaft adjacent the pinion 45.

As the turret 35 rotates and successively brings its pockets 36 into alignment with the vertical path of travel of the cans in the runway 21, the lowermost can in the stack drops into the aligned pocket and is carried around with the turret in a circular path of travel. A curved guide rail 51 formed on the lower end of one of the entrance guides 22 holds a received can in its turret pocket during this travel.

The can is carried by the turret through an arc of substantially ninety degrees during which travel it is marked and it is then discharged from the machine. Discharge of the can will be explained first. This discharge is effected by way of an inclined chute 53 (Fig. 1) which is bolted

to the main frame 25. The upper end of the chute extends adjacent the outer edge of the turret 35 and is disposed adjacent the terminal end of the curved guide rail 51.

Thus as a can after being marked reaches the end of the guide rail 51 it drops out of its turret pocket and falls into and rolls toward the bottom of the inclined discharge chute. At the bottom of the chute the discharged can is preferably caught by a chain conveyor 54 and is carried away to any suitable place of deposit. Adjacent the chute the conveyor preferably takes over a sprocket 55 mounted on a shaft 56 supported in bearings formed in a bracket 57 secured to a side of the main frame 25. This conveyor may be operated in any suitable manner in time with the other moving parts of the machine.

Marking of the cans *a* as they pass through the machine will now be explained. This marking is effected by a marking head 61 (Figs. 1, 2, 5, 6 and 7) which travels with the can turret 35. There are four of these marking heads, one for each turret pocket 36. Each head is located in endwise alignment with its pocket and is carried by a spindle turret 62 mounted on the turret shaft 37 adjacent the can turret 35.

Each marking head 61 includes a hollow can clamping shoe 65 which is floatingly mounted on a concentrically reduced and shouldered end 66 of a non-rotating head spindle 67 carried in a bore 68 formed in the spindle turret 62. The can clamping shoe is prevented from turning by a tongue 71 formed on a ring 72 keyed to a hub 73 of the spindle turret. The tongue operates in a groove 74 formed in the shoe. The shoe in turn is held in place on the spindle by a split ring 76 which surrounds the spindle adjacent a shoulder 77 formed thereon. A compression spring 78 coiled around the spindle holds the split ring tight against the shoulder 77 and thus keeps the clamping shoe in position. This spring also provides a yieldable connection between the clamping shoe 65 and the spindle so that relative movement may be had between these parts when clamping a can to be marked as will be hereinafter explained.

The opposite end of the head spindle 67 is formed with an eccentrically disposed shank 81 on which is clamped a cam shoe 82 carrying a cam roller 83. The cam roller operates in a cam groove 84 of a stationary cam 85 loosely mounted on the turret 62 adjacent the shaft bearing 38. The cam is secured by bolts 86 to the shaft bearing 38.

Thus the revolving turret shaft 37 rotates the spindle turret 62 relative to the cam 85 and thereby effects a reciprocating movement of the spindle 67 along its axis in its bore 68. This shifting action brings the can clamping shoe 65 into endwise engagement with a can *a* in its turret pocket 36 and momentarily holds it in the position under compression of the spring 78. A shoulder 88 (Figs. 1 and 2) formed in the can turret 35 adjacent each can pocket 36 holds the can against endwise displacement while thus clamped in marking position.

During this shifting of the head spindle 67 it is retained against turning in its bore 68 by side wings 89 (Figs. 2 and 5) which ride upon the periphery of the cam 85. Provision is also made for axially adjusting the spindle relative to the cam 85 so that proper clamping compression of the spring 78 may be obtained. This is effected by a cap screw 92 (Fig. 5) which is threaded into the end of the eccentric shank 81 of the spindle 67. The head of the cap screw is rotatably held in an end wall 93 of the cam shoe 82 by a pin and groove connection 94. By merely turning the screw the spindle may be shifted relative to the cam shoe and the cam roller carried thereon thereby bringing the spindle into proper relation with the cam.

While a can *a* is held by the clamping head 65 the marking operation is performed. This marking is effected by type or other suitable marking medium such as a rubber stamp 101 (Figs. 1, 5, 6 and 7) secured in a type holder 102 disposed in an enlarged head 103 of a type holder sleeve 104 carried in the head spindle 67. The head of the sleeve 104 is located within the can clamping shoe 65 and is formed with a vertical boss 108 which extends up through a slot 109 formed in the clamping shoe. This boss retains the sleeve 104 against turning in the spindle 67.

The type holder is readily detachable from the sleeve 104 so that the type may be quickly changed or a different holder inserted if desired. For this purpose the type holder is provided with a stem 105 which fits within a bore 106 formed in the type holder sleeve 104. The holder is held in place by a plunger 111 which is located in a bore 112 formed in a stud 113 threaded into the head boss 108. The plunger is backed up by a compression spring 114 located within the stud and held in place by a headless screw 115. The lower end of the plunger engages in a groove 116 formed in the type holder stem 105.

The type holder sleeve 104 is located in a horizontal bore 118 in the head spindle 67 and is yieldably connected with the latter. This yieldable connection includes a compression spring 121 which is located inside the sleeve in an enlarged bore 122 connecting with the type holder bore 106 and forming a shoulder 123 between them. The spring is coiled around a bolt 124 the inner end of which is threaded into the spindle 67. The outer end of the bolt is provided with a head 125 and a loose collar 126 against which the outer end of the spring engages, the spring normally pressing the collar against the sleeve shoulder 123.

The inner end of the bolt 124 is provided with a loose collar 127 which is forced by the spring against a nut 128 threaded into the end of the sleeve. The nut surrounds a tubular spacing member 129 which fits around the bolt 124. The compression spring thus presses against both collars 126, 127 and thereby holds the type holder sleeve 104 yieldably connected with the spindle 67 and in a position within the can clamping shoe 65 as shown in Fig. 5. This is the normal position of the spindle and the type holder sleeve.

Thus the type holder sleeve 104 moves with the spindle 67 when the latter moves forward and brings the clamping shoe 65 into engagement with the end of a can *a* to be marked. Continued movement of the spindle after clamping of the can is effected compresses the clamping shoe spring 78. This brings the type 101 into engagement with the can end and against the resistance of the sleeve spring 121 thereby printing the desired identifying mark upon the can end. The position of the spindle and sleeve parts at this period in the cycle of operations is shown in Fig. 7. This completes the marking of a can.

Provision is made for applying ink onto the type 101 just prior to the latter's engagement with a can end. This is effected by a plurality of ink distributing rollers 135 and they are arranged in a straight vertical row and in frictional

engagement with each other. The upper roller in the row is normally disposed in the path of travel of the marking heads 61 as they are brought into alignment with a can just prior to marking. Each roller is mounted on the inner end of a short shaft 136 which is journaled in a bearing block 137 of a bracket 138 mounted on the machine frame 25.

On their outer ends each roller shaft 136 carries a gear 139, thus providing a train of intermeshing gears which rotate the ink rollers in unison and in the proper direction. Rotation of the gears is brought about by a bevel gear 141 which is mounted on the lowermost roller shaft 136 of the row and adjacent the lowermost roller 135. Bevel gear 141 meshes with a bevel gear 142 which is mounted on the inner end of the driving shaft 46. Thus the rotating driving shaft revolves the ink roller gears in the train and the ink rollers in unison.

The ink roller bracket 138 is adapted to be swung free of the machine frame when desired so that the ink rollers 135 may be readily reached for cleaning. For this purpose the bracket is provided with a bearing 145 which surrounds the inner end of the driving shaft 46 adjacent the bevel gear 142. Opposite this bearing, the bracket is also provided with a second bearing 146 which surrounds a stationary hollow trunnion 147 formed on the front can guide bracket 41. Thus the bracket may be pivoted or swung outwardly on the driving shaft and on the trunnion.

To counter balance the weight of the bracket 138 and the parts carried thereon, a compression spring 151 is directly associated with the bracket. This spring is coiled around a vertically disposed rod 152 which extends up through a bottom wall section 153 of the main frame 25. The upper end of the rod is secured to an arm extension 154 formed on the bracket adjacent its pivot bearings 145, 146. The spring is held on the rod by lock nuts 155 and exerts its pressure against a swivel collar 156 which is loosely carried on the rod and which is forced by the spring against the frame wall section 153.

When the ink roller bracket 138 is in its normal operating position it is held against displacement by a hook shaped latch finger 161 (Fig. 1). The latch finger is mounted on a pivot pin 162 retained in a boss 163 formed on the arch frame 24. This finger is backed up by a spring barrel 164 disposed in a boss 165 which is also formed on the arch frame. The outer hook end of the latch finger engages over a lug 166 formed on the ink roller bracket and thus holds the latter in place.

Ink for the rollers 135 is preferably supplied continuously and is applied to the lowermost distributing roller. This roller may therefore be properly designated as the ink receiving roller. The ink is pumped up from a reservoir 171 (Fig. 1) which depends from the bottom wall section 153 of the main frame 25.

Pumping of the ink from the reservoir may be brought about in any suitable manner such as for example, by a pump 175 (Figs. 1 and 9). The pump illustrated in the drawings is preferably of the type used as lubricators or the like. Such a pump is disclosed in United States Patent 2,007,797, issued July 9, 1935, to Bengt E. Folke, and United States Patent 2,107,662, issued February 8, 1938, to Bengt E. Folke and Walter E. Woolheim.

Briefly such a pump includes a lower casing 176 (Fig. 9), an intermediate housing 177 and an upper casing 178. The valve housing is provided with a vertical bearing 179 in which there slides a rod 181. At its upper end the rod carries a disc 182 which is located in the upper casing 178. This disc is connected to the upper end of a depending piston 185 having an internal check valve 186.

Piston 185 operates in a blind cylinder bore 187 formed in the housing 177. One side of the cylinder bore is connected by a channel 188 to a cylindrical passageway 189 which surrounds the bearing 179, the channel and the passageway being formed in the housing 177. The passageway also communicates with a horizontal bore 191 also formed in the housing. This latter bore communicates with a tube 192 which is threaded into the housing. The tube extends down through the lower casing 176 and into the ink in the reservoir 171.

The opposite side of the cylinder bore 187 communicates with an ink outlet recess 195 into which a plug 196 is threaded. The plug is provided with a channel 197 which in turn communicates with the inner end of a discharge pipe 198 (see also Fig. 1). The pipe extends up into the region of the lowermost ink distributing roller 135 and terminates in a curved section 199 which is adjacent the periphery of the roller.

The piston 185 and the parts connected therewith are adapted to be vertically reciprocated. For this purpose the lower end of the rod 181 extends down into the lower casing 176 and is provided with a bearing 211 in which there operates a pin 212 eccentrically threaded into the inner end of a ratchet shaft 213. The ratchet shaft is journaled in a stationary bearing 214 which extends through a hole 215 formed in a side of the lower casing 176, the bearing being secured to the side of the casing.

The outer end of the ratchet shaft bearing 214 is formed with a housing 221 in which a roller ratchet 222 is disposed (see also Fig. 10). This ratchet is keyed onto the ratchet shaft 213. Adjacent the ratchet 222, an auxiliary roller ratchet 226 is also keyed onto the shaft 213. This auxiliary ratchet is housed in a rotatable cover 227 which is loosely mounted on the ratchet shaft 213 and which extends over the bearing housing 221. A hand wheel lock nut 228 is threaded on the outer end of the ratchet shaft and holds the cover in place against lateral movement.

The cover is rocked on the ratchet shaft 213 in time with the other moving parts of the machine. This is effected by a gear 231 (Figs. 1 and 2) which is mounted on the outer end of the turret shaft 37. Gear 231 meshes with a gear 232 which is formed on a stub shaft 233 carried in a bearing 234 in the frame bracket 41. The gear 232 serves as a crank for a connecting rod 235 the upper end of which is connected to the face of the gear by a screw 236. The screw is threaded into the gear face in an off center position.

The lower end of the rod 235 is connected to an arm 237 (see also Fig. 9) which is threaded into a boss 238 formed on the ratchet cover 227. This connection between rod and arm is adjustable so that the length of the stroke of the arm may be altered as desired. A plurality of spaced holes 239 in which the end of the rod may be fastened is provided for this purpose.

Accordingly the rotation of the turret shaft 37 reciprocates the connecting rod 235 and hence rocks the arm 237 up and down. This results in

a rocking of the ratchet cover on the ratchet shaft 213. On the upward stroke of the arm, ratchet 226 grips against the inside of the cover 227 and hence connects the ratchet shaft with the cover. This rotates the shaft through a partial rotation.

On the downward stroke of the arm 237, the cover rocks in a reverse direction to that on the upward stroke. This reverse movement of the cover unlocks or frees the ratchet 226 which thus permits the ratchet shaft to remain in its advanced position. On this same stroke the rollers of ratchet 222 grip against the inside of the housing 221 and hold the ratchet shaft against turning in a reverse direction. In this manner the ratchet shaft is rotated in one direction in a step by step movement.

Such a rotation of the ratchet shaft 213 slowly raises and lowers the rod 181 within the pump and its disc 182 and thus reciprocates the piston 185 in its cylinder bore 187. On the upward stroke of the piston the latter draws ink up out of the reservoir 171, through tube 192, passageway 191, 189, and channel 188 into the cylinder bore 187.

On the downward stroke the ink received in the cylinder bore is forced by the descending piston up through the center of the latter and out through the check valve 186, recess 195, channel 197 and into the discharge tube 198 where it issues forth onto the lower or ink receiving roller 135. The ink received is uniformly distributed by the rotating rollers 135 and thus carried up onto the uppermost or ink dispensing roller which is disposed adjacent the path of travel of the marking heads 61 as hereinbefore mentioned.

As a marking head 61 moves past the ink dispensing roller 135 it is shifted on its axis into engagement with the roller in order to pick up a coating of ink. This shifting of the marking head is effected by a stationary cam 241 (Figs. 3, 4 and 6) which is bolted to the arch frame 24 in a position adjacent the ink dispensing roller 135. The moving marking head is provided with a cam roller 242 (Figs. 5 and 6) which is carried on the type holder stud 113.

Thus when the roller 242 rides over the cam 241 the marking head 61 is moved inwardly into engagement with the ink roller as best shown in Fig. 6 and against the force of the compression spring 121. This spring returns the marking head to its normal position after the cam roller 242 rides off of the cam 241, where the marking head is held ready to be advanced against the end of a can to be marked as hereinbefore explained.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. In a machine for marking cans and the like, the combination of a frame, a rotatable can turret mounted in said frame and having a plurality of pockets for receiving and for carrying cans along a predetermined path of travel, a plurality of marking heads disposed adjacent said can turret and movable in timed relation therewith, there being one head for each pocket of said turret, said head being in axial alignment with its pocket, axially movable means carried by each of said marking heads and cooperating therewith for engaging and clamping a can to be marked against movement relative to said carrier, actuating means for axially shifting each head in timed relation into marking engagement with the can in its turret pocket, an inking roller disposed in the path of travel of said heads as they move with said turret, and means for bringing each head as it approaches said roller into engagement therewith for receiving an application of ink therefrom prior to its engagement with a can to be marked.

2. In a machine for marking cans and the like, the combination of a frame, a can carrier rotatably mounted in said frame for receiving and for conveying cans through the machine, a marking head carrying means mounted coaxially with said can carrier and movable in timed relation therewith, a marking head mounted in said carrying means, movable means carried by said marking head and cooperating therewith for engaging and clamping a can to be marked against movement relative to said carrier, actuating means for shifting said marking head into marking engagement with cans while the latter are being conveyed and held in said can carrier, an inking roller disposed in the path of travel of said marking head as the latter moves with said can carrier, and means for bringing said marking head as it moves with said conveyor into engagement with said inking roller so that the head will receive an application of ink prior to its engagement with a can to be marked.

3. In a machine for marking cans and the like, the combination of a frame, a can carrier rotatably mounted in said frame for receiving and for conveying cans through the machine, a marking head carrying means mounted coaxially with said can carrier and movable in timed relation therewith, a marking head mounted in said carrying means, movable means carried by said marking head and cooperating therewith for engaging and clamping a can to be marked against movement relative to said carrier, actuating means for shifting said marking head into marking engagement with the cans while the latter are being conveyed and held in said can carrier, an inking roller disposed in the path of travel of said marking head as the latter moves with said can carrier, devices for supplying said inking roller with a uniform coating of ink, and means for bringing said marking head as it moves with said conveyor into engagement with said inking roller so that the head will receive an application of ink prior to its engagement with a can to be marked.

4. In a machine for marking cans and the like, the combination of a frame, a can carrier rotatably mounted in said frame for receiving and for conveying cans through the machine, a marking head carrying means mounted for coaxial rotation with said can carrier and axially reciprocable in timed relation therewith, a marking head mounted in said carrying means, actuating means for shifting said marking head into marking engagement with cans while the latter are being conveyed and held in said can carrier, clamping instrumentalities carried by said marking head for holding said cans stationary relative to said can carrier during the marking operation, an inking roller disposed in the path of travel of said marking head as the latter moves with said can carrier, means for bringing said marking head as it moves with said conveyor into engagement

with said inking roller so that the head will receive an application of ink prior to its engagement with a can to be marked, and cam mechanism for periodically actuating said marking head and said clamping instrumentalities to move the same axially into engagement with cans conveyed by said carrier to clamp and mark said cans.

5. In a machine for marking cans and the like, the combination of a frame, a can carrier rotatably mounted in said frame for receiving and for conveying cans through the machine, a marking head carrying means mounted for bodily rotation coaxially with said can carrier and movable in timed relation therewith, a marking head mounted in said carrying means, actuating means for shifting said marking head into marking engagement with cans while the latter are being conveyed in said can carrier, axially movable clamping members carried by said marking head for holding said cans in said can carrier until they have been marked, an i ng roller disposed in the path of travel of said marking head as the latter moves with said can carrier, devices for supplying said inking roller with a uniform coating of ink, means for bringing said marking head as it moves wth said conveyor into engagement with said inking roller so that the head will receive an application of ink prior to its engagement with a can to be marked, and a discharge device disposed adjacent said can carrier for carrying marked cans to a suitable place of deposit.

6. In a machine for marking cans and the like, the combination of a frame, a can carrier rotatably mounted in said frame for receiving and for conveying cans through the machine, a marking head, means mounted coaxially with said can carrier and movable in timed relation therewith for carrying said marking head, movable means carried by said marking head and cooperating therewith for engaging and clamping a can to be marked against said carrier, actuating means for shifting said marking head into marking engagement with cans being conveyed in and while clamped against said can carrier, a plurality of ink distributing rollers one of which is disposed in the path of travel of said marking head, said rollers being arranged to receive ink and to distribute the same evenly over their outer surfaces, devices for supplying ink to said rollers, and means for bringing said marking head as it moves with said conveyor into engagement with the roller disposed in the path of travel of the head so that the head will receive an application of ink prior to its engagement with a can to be marked.

7. In a can marking machine including a rotatable carrier having peripheral pockets for successively conveying cans to be marked, and a turret mounted coaxially with said carrier for synchronous rotation therewith: a marking head carried by said turret and including a longitudinally reciprocable head spindle adapted to be shifted along its axis toward a can to be marked in said carrier, a type holder sleeve yieldably disposed in said spindle, a removable type holder yieldably retained in said sleeve, type removably carried in said type holder, type inking means adjacent the path of said type, cam mechanism disposed in the path of said type holder and adapted to urge said type holder outwardly of said sleeve against its yieldable retention therein and to press said type into contact with said inking means, said type being adapted to be yieldably pressed against a can to be marked when the spindle is shifted along its axis, and cam mechanism cooperating with said spindle for yieldably pressing said type into engagement with a can to be marked.

8. In a can marking machine including a rotatable carrier having peripheral pockets for successively conveying cans to be marked, and a turret mounted coaxially with said carrier for synchronous rotation therewith: a marking head carried by said turret and including a longitudinally reciprocable head spindle adapted to be shifted along its axis toward a can to be marked in said carrier, a type holder sleeve yieldably disposed in said spindle, a type holder in said sleeve, type carried in said type holder and adapted to be yieldably pressed into engagement with the can to be marked when the spindle is shifted along its axis, means connected with said type holder sleeve for shifting said sleeve independently of said spindle to bring said type into position for receiving a coating of ink, and cam mechanism disposed in the path of said type holder sleeve connecting means for actuating the latter to shift said sleeve prior to the engagement between said type and said can to mark the latter.

9. In a can marking machine including a rotatable carrier having peripheral pockets for successively conveying cans to be marked, and a turret mounted coaxially with said carrier for synchronous rotation therewith, a marking head carried by said turret and including a longitudinally reciprocable head spindle adapted to be shifted along its axis toward a can to be marked in said carrier, a type holder sleeve yieldably disposed in said spindle and axially reciprocable relative thereto, a type holder in said sleeve, type carried in said type holder and adapted to be yieldably pressed into engagement with the can to be marked when the spindle is shifted along its axis, clamping means yieldably mounted on said spindle and movable axially therewith for clamping a can to be marked prior to the marking of the can by the type, and cam mechanism for periodically actuating the aforesaid devices for moving said type into engagement with said can to mark the latter.

10. In a machine for marking cans and the like, the combination of a frame, a rotatable can turret mounted in said frame and having a plurality of pockets for receiving and moving the cans to be marked, a plurality of marking heads disposed adjacent said can turret and movable in timed relation therewith, there being one head for each pocket of said turret, said head being in axial alignment with its pocket, axially movable means carried by each of said marking heads and cooperating therewith for engaging and clamping a can to be marked against movement relative to said turret, actuating means for axially shifting each head in timed relation into marking engagement with the can in its turret pocket, an inking roller disposed in the path of travel of said heads as they move with said turret, and means for bringing each head as it approaches said roller into engagement therewith for receiving an application of ink therefrom prior to its engagement with a can to be marked.

11. In a machine for marking cans and the like, including a frame having a can carrier rotatably mounted therein for receiving and for conveying cans to be marked, can marking devices adapted to mark said cans during said conveyance, and a plurality of continuously rotated ink distributing rollers, one of said rollers being accurately and continuously positioned in the

path of said marking devices for transferring ink thereto from an ink reservoir: the improvement characterized by housing the said continuously rotatable ink distributing rollers in a bracket pivotally mounted on the frame adjacent a driving connection with said machine, the axes of said pivotal mounting and said can carrier being substantially parallel and at an angle to the longitudinal axes of the rollers, whereby the rollers may be swung outwardly free of the frame and said ink reservoir in the plane of their axes for convenience in cleaning and replacing the rollers and in being returned to their normal accurate position relative to said marking devices without disturbing adjustments or driving relationship with the machine.

12. In a machine for marking cans and the like, including a frame having a can carrier rotatably mounted therein for receiving and for conveying cans to be marked, can marking devices adapted to mark said cans during said conveyance, and a plurality of continuously rotated ink distributing rollers, one of said rollers being accurately and continuously positioned in the path of said marking devices for transferring ink thereto from an ink reservoir: the improvement characterized by housing the said continuously rotatable ink distributing rollers in a bracket pivotally mounted on the frame adjacent a driving connection with said machine, the axes of said pivotal mounting and said can carrier being substantially parallel and at an angle to the longitudinal axes of the rollers, whereby the rollers may be swung outwardly free of the frame and said ink reservoir in the plane of their axes and parallel to that of the path of said cans, while retaining driving relationship with the machine, for convenience in cleaning and replacing the rollers, spring means for yieldably counterbalancing the weight of the bracket as the same is swung outwardly and for limiting the extent of its swinging movement, and releasable locking means for normally holding said bracket in operative position against the machine frame.

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