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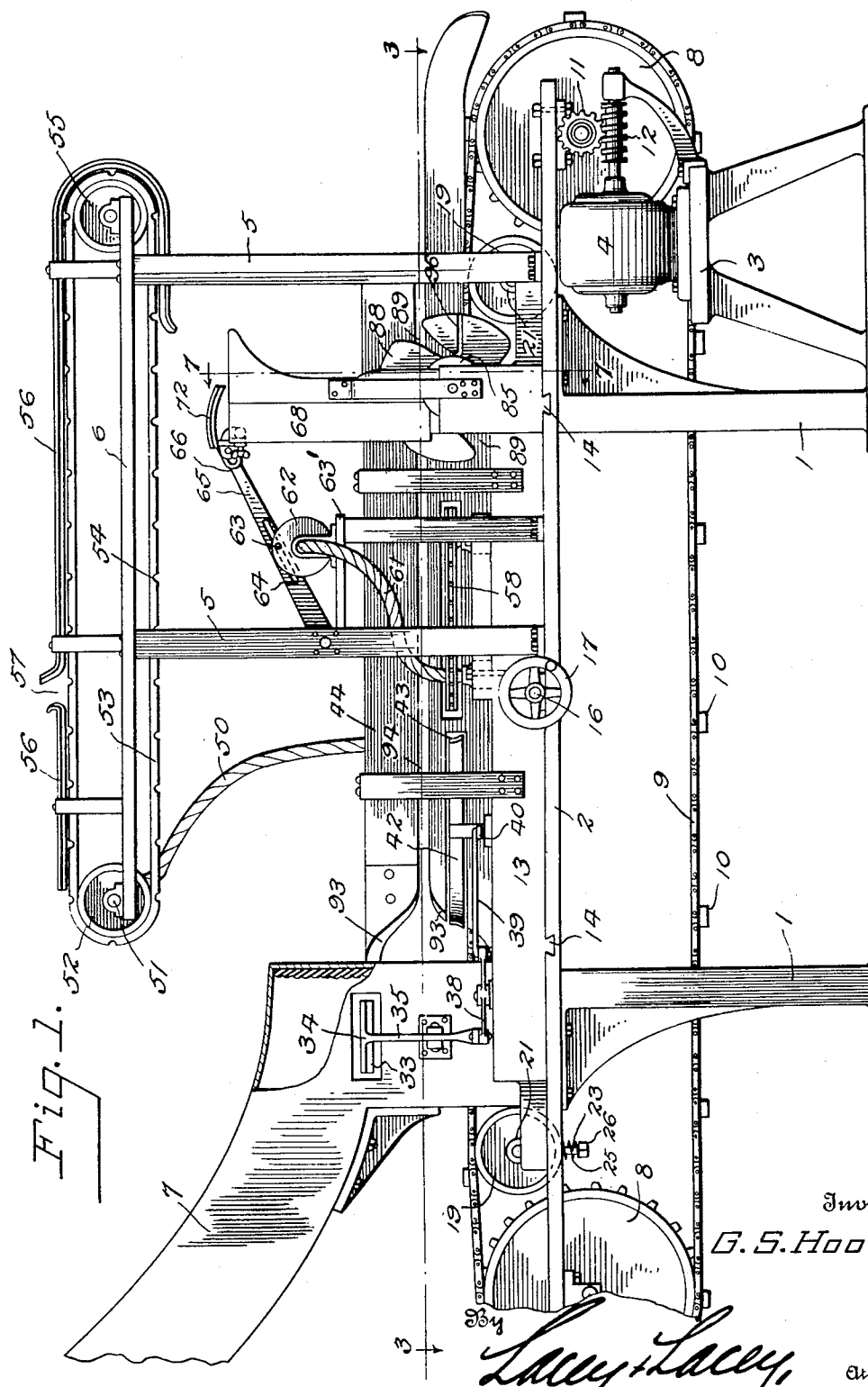
G. S. HOOVER

1,947,472

MACHINE FOR ATTACHING BAILS TO CONTAINERS

Filed March 21, 1932

5 Sheets-Sheet 1



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Feb. 20, 1934.

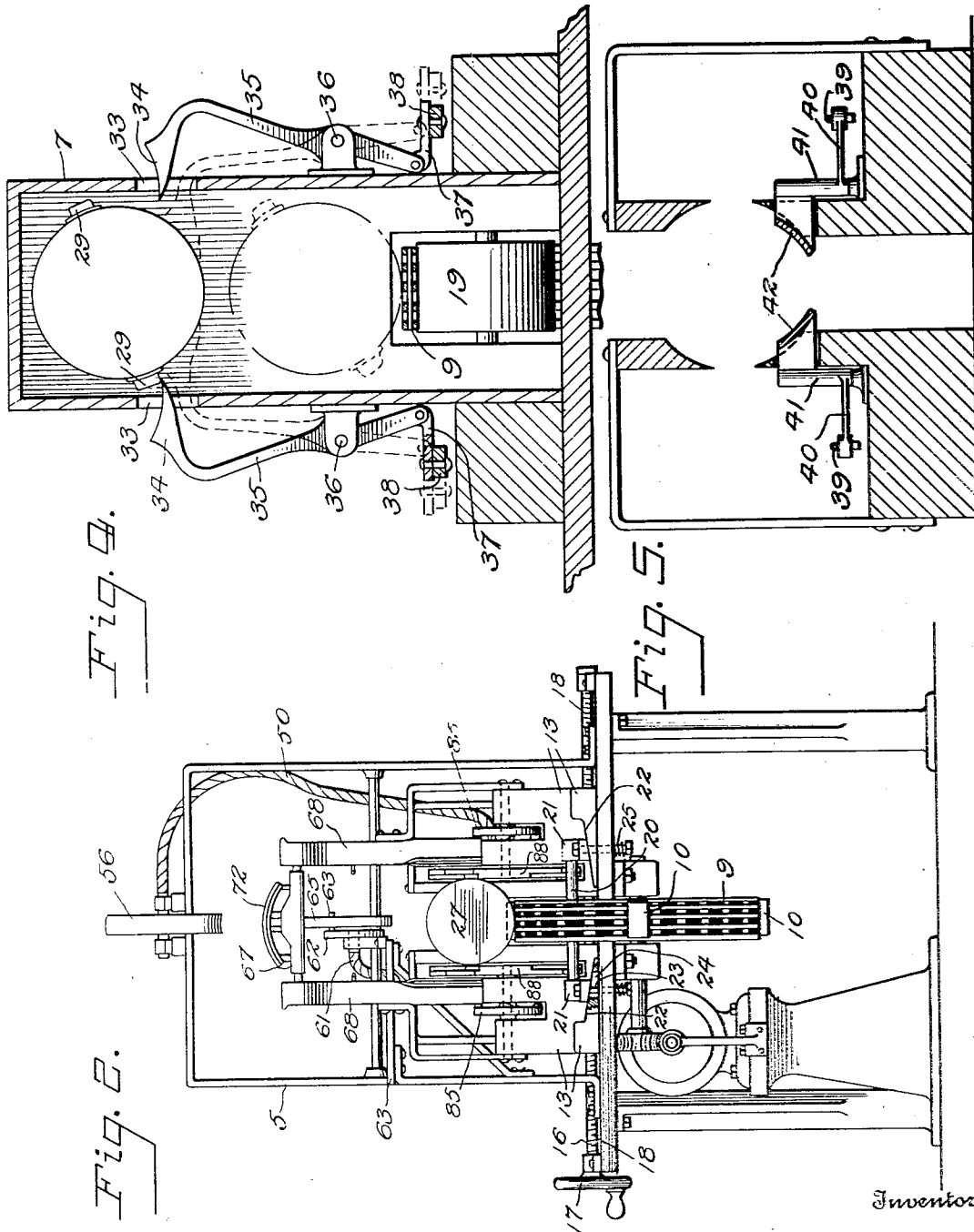
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MACHINE FOR ATTACHING BAILS TO CONTAINERS

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5 Sheets-Sheet 2



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5 Sheets-Sheet 3

Fig. 3.

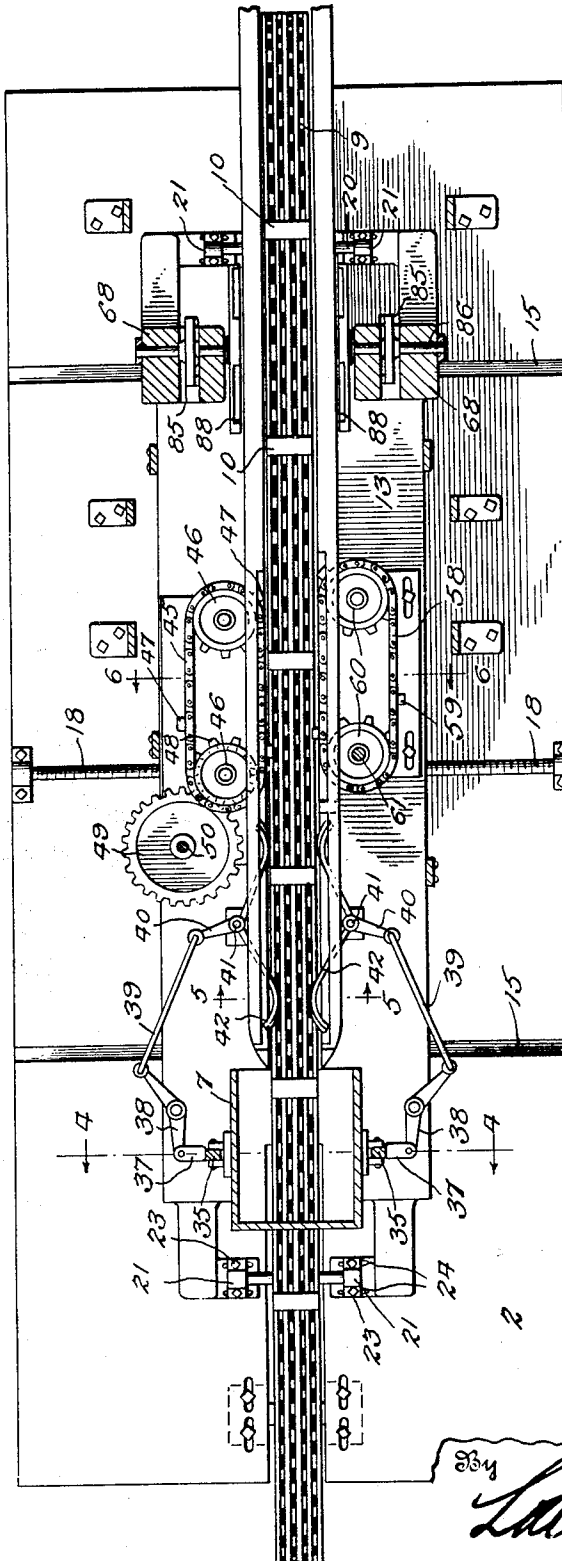


Fig. 14.

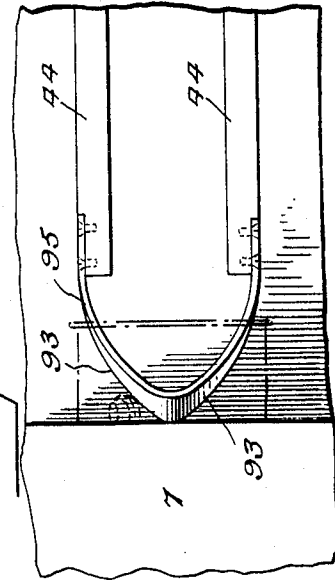
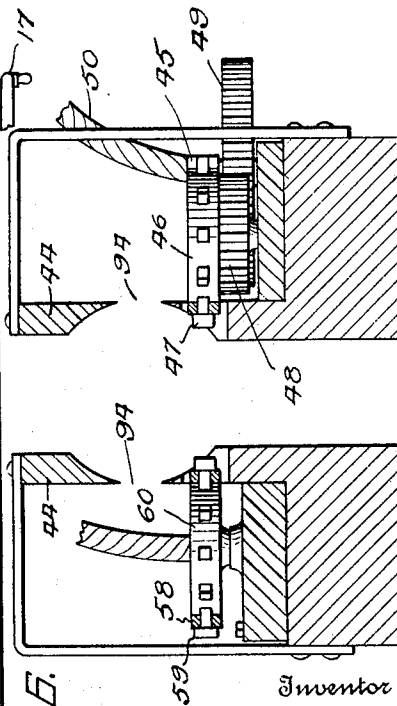


Fig. 6.

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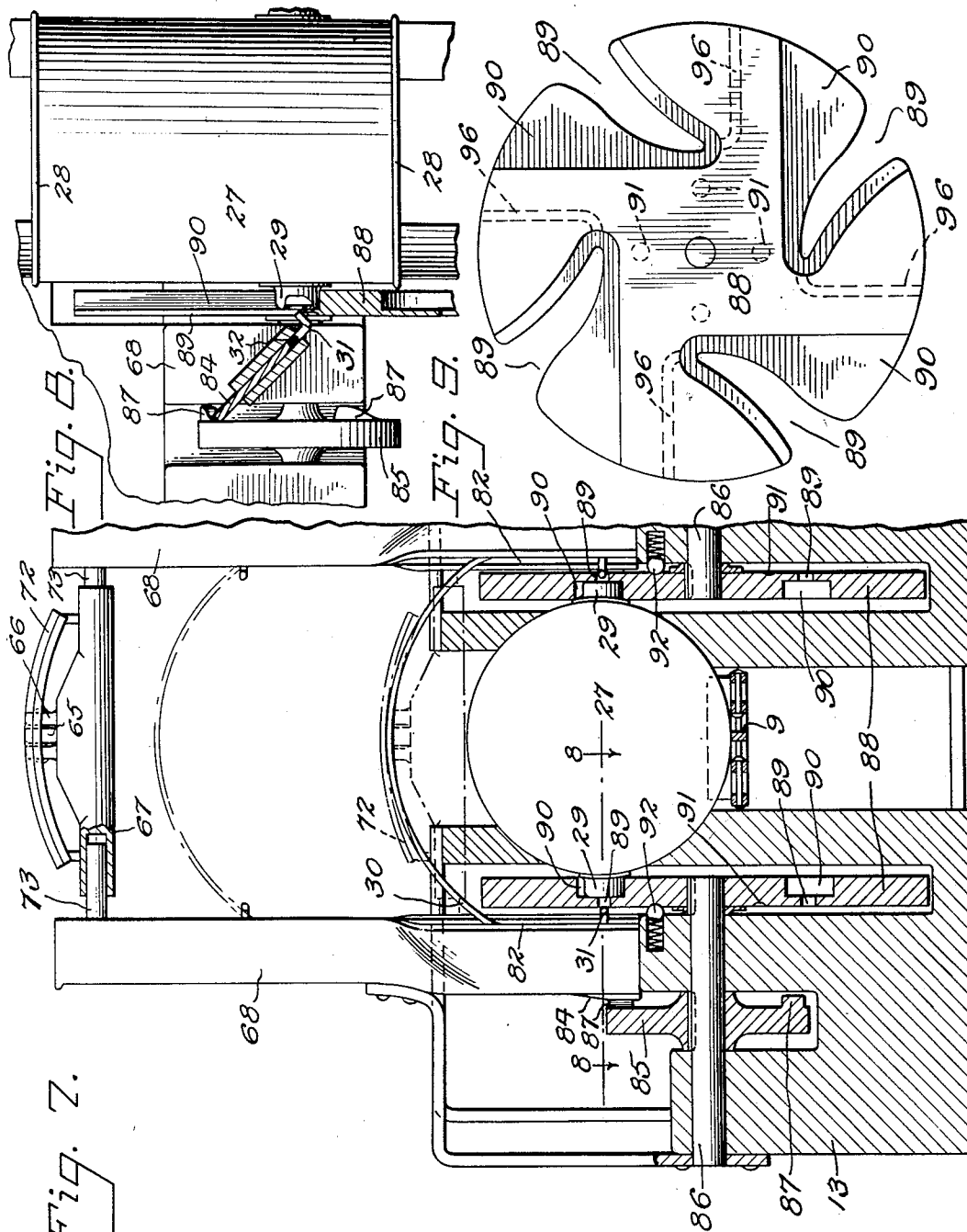
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5 Sheets-Sheet 4



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MACHINE FOR ATTACHING BAILS TO CONTAINERS

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5 Sheets-Sheet 5

Fig. 13.

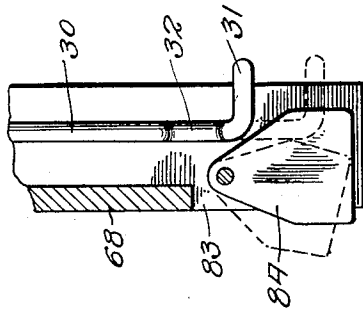
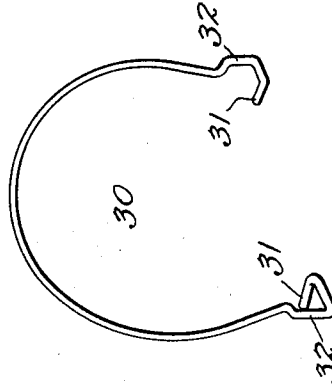


Fig. 15.

Fig. 11.

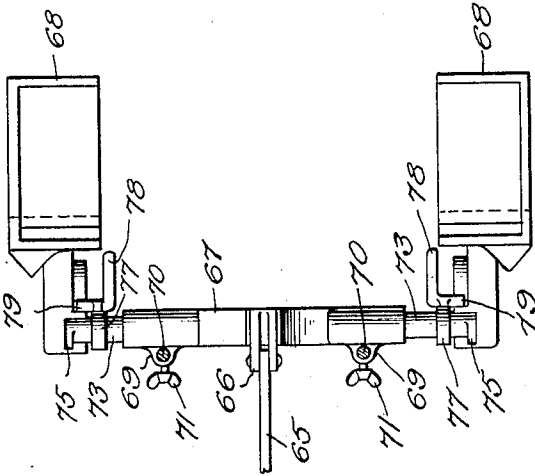
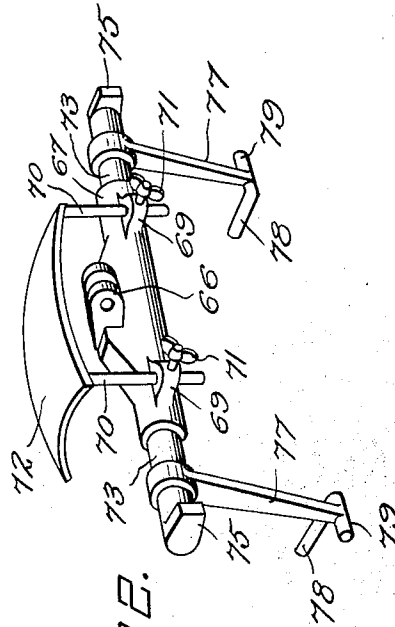
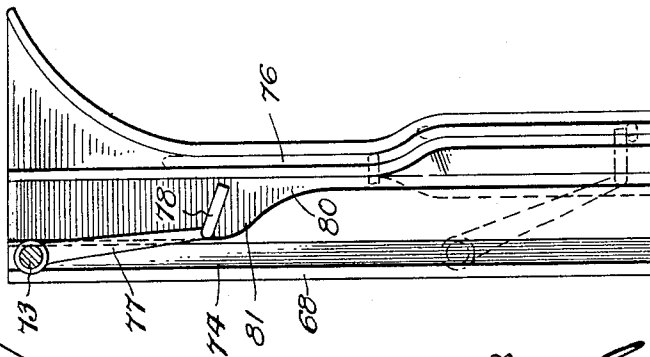


Fig. 12.

Fig. 10.



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UNITED STATES PATENT OFFICE

1,947,472

MACHINE FOR ATTACHING BAILS TO
CONTAINERS

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Application March 21, 1932. Serial No. 600,267

18 Claims. (Cl. 140—93)

This invention relates to means for attaching bails or handles to containers such as cans or buckets in which paints and similar commodities are placed upon the market. One object of the invention is to provide means whereby the cans with bail ears thereon will be fed successively to a point where they meet the bails, likewise fed successively thereto, and the bail ends then automatically engaged with and secured in the ears. Another object of the invention is to provide means whereby the apparatus may be adapted to containers of different sizes, and another object is to provide novel means for automatically engaging the bail ends with the ears and properly securing them thereto. Other objects of the invention will appear incidentally in the course of the following description, and the invention resides in certain novel features which will be particularly pointed out in the appended claims.

In the annexed drawings, Figure 1 is a side elevation of an apparatus embodying the invention,

Fig. 2 is an end view of the same showing the delivery end of the apparatus,

Fig. 3 is a horizontal section on the line 3—3 of Fig. 1,

Fig. 4 is an enlarged transverse section on the line 4—4 of Fig. 3,

Fig. 5 is an enlarged transverse section on the line 5—5 of Fig. 3,

Fig. 6 is an enlarged detail section on the line 6—6 of Fig. 3,

Fig. 7 is an enlarged transverse section on the line 7—7 of Fig. 1,

Fig. 8 is a detail section on the line 8—8 of Fig. 7,

Fig. 9 is an enlarged detail elevation of one of the cam wheels for engaging the bail ears on the containers and maintaining them in position to receive the ends of a bail,

Fig. 10 is an enlarged elevation with a part in section of one of the guides whereby the bail is directed to the point of meeting with a container,

Fig. 11 is an enlarged plan view of the bail-feeding device,

Fig. 12 is a perspective view of the same,

Fig. 13 is a detail sectional elevation of the cam device for forcing the bail end into engagement with the bail ear,

Fig. 14 is a detail plan view of the receiving end of the track along which the containers are fed,

Fig. 15 is a detail perspective view of a bail.

In carrying out the invention, there is provided

a supporting frame which may be of any convenient or approved form and is shown as including standards or legs 1 supporting a table 2 and also including a supplemental table or platform 3 upon which is mounted a motor 4 which is shown conventionally. Erected upon the table 2 are supplemental standards 5 which, at their upper ends, support a frame 6. At one end of the table 2 is provided a chute 7 through which the containers or can bodies are delivered to the mechanism of the present invention. Mounted in suitable bearings at the opposite ends of the table 2 are shafts carrying sprocket wheels or drums 8 about which is trained an endless chain belt conveyer 9 having lugs or cleats 10 disposed transversely thereon at regular intervals. The shaft carrying the wheels or drums at one end of the frame is equipped with a worm pinion 11 meshing with a worm 12 on the shaft of the motor 4, as clearly shown in Fig. 1, whereby a continuous travel will be imparted to the conveyer in an obvious manner. Adjacent the sides of the conveyer, rails 13 are provided, on the upper side of the table, and these rails provide supports for instrumentalities which control the travel of the can bodies, as will presently more fully appear. These rails are provided on their undersides with dovetail ribs 14 slidably seated in corresponding transverse grooves 15 in the top of the table whereby they may be shifted transversely of the table while being prevented from having longitudinal movement thereon. Disposed about midway the ends of the table, a shaft 16 is journaled transversely thereon and equipped at one end with a hand wheel 17 whereby it may be readily rotated. The opposite ends of the shaft 16 are reversely threaded or provided with reversed spiral ribs, as indicated at 18, and these threaded portions engage correspondingly threaded bores in the respective rails 13 whereby as the shaft is rotated in one or the opposite direction the rails will be caused to approach or recede. This arrangement permits the rails to be adjusted to accommodate wider or narrower containers. Idler rollers 19 are mounted in suitable bearings adjacent the ends of the rails to support the upper run of the conveyer and the axles 20 of these idlers are journaled in bearings 21 which have beveled undersides resting upon inwardly beveled upper surfaces 22 of the rails so that as the rails are shifted transversely the bearings will be permitted to descend or will be elevated, thereby raising or lowering the idlers and adjusting the upper run of the conveyer to the diameter of the container. The bearings 21 are held in

place by bolts 23 carried by the bearings and depending therefrom through transverse slots 24 in the end portions of the rails, as shown in Figs. 2 and 3, springs 25 being fitted about the bolts between the underside of the table and the nuts 26 on the lower ends of the bolts whereby they will be firmly held in place and will be permitted to accommodate the adjustment of the bearings.

A can body is shown at 27 and it will be noted that it is formed with annular flanges or beads 28 at its ends and at diametrically opposite points adjacent its open end has bail ears 29 secured thereon, said ears, as will be understood upon reference to Fig. 8, being hollow and having central openings in their outer walls to receive the ends of the handles or bails. One of the bails 30 is shown in Fig. 15 and it will be noted that it is formed of stout wire and has its extremities 31 lying at right angles to the plane of the bail. Adjacent the extremities 31, loops 32 are formed which extend outwardly from the bail and lie in the plane of the same.

The cans are delivered to the chute 7 by the can-forming machinery and slide down the chute to the lower end of the same to be delivered to the conveyer 9 with their axes extending longitudinally of the conveyer. Should the cans be fed into the chute faster than they are carried past the same by the conveyer, the flanges of adjacent cans are liable to interengage so that the delivery of the cans to the conveyer will be clogged and considerable damage might result. To avoid this condition, I provide means whereby an upper can is arrested and supported above a lower can to permit the lower can to move from the chute to the conveyer, said means being released by the travel of the lower can so that the upper can will, in its turn, be delivered upon the conveyer. Longitudinal slots 33 are formed in the side walls of the chute and receive jaws 34 formed at the upper ends of levers 35 fulcrumed upon the sides of the chute, as shown at 36, and extending below the fulcrums, links 37 being pivoted to the lower ends of the levers and extending outwardly therefrom. To the outer ends of the links 37 are pivoted the rear ends of angle levers 38 which are fulcrumed midway their ends upon the rails 13 and have their forward ends pivoted to forwardly extending links 39, as shown most clearly in Fig. 3. The links 39 are pivoted at their forward ends to the outer ends of cranks 40 which extend from rock shafts 41, disposed vertically upon the rails 13, and carrying escapement or feed levers 42. These levers 42 extend longitudinally in both directions from the respective rock shafts 41 and are arranged to operate in longitudinal slots 43 formed in the sides of an upper frame 44 secured upon the respective rails 13. The ends of the levers 42 are arcuate, as shown most clearly in Fig. 3, and normally the rear ends of the levers are disposed nearer each other so that a can or container body traveling with the conveyer 9 will be caused to engage said ends and move them apart so that the rock shafts 41 will be rocked to swing the cranks 40 forwardly. This movement of the cranks 40 will cause the levers 35 to rock inwardly at their upper ends and carry the jaws 34 inwardly to the position shown in dotted lines in Fig. 4 where they will receive and support a can body. As the can upon the conveyer continues its travels, it will engage the forward ends of the levers 42 which have been rocked toward each other by the spreading of the rear ends of the levers and the said forward ends will be then rocked apart so that the jaws

34 will be separated and permit the can supported thereby to drop to the conveyer. These several movements are properly timed so that clogging of the containers in the bottom of the chute will be prevented. It will be understood, of course, that at the start of operations the jaws 34 are separated so that the first container delivered to the chute may pass directly to the conveyer.

Disposed at one side of the conveyer 9 is a horizontally extending endless chain or belt 45 which is trained around sprockets 46 carried by vertically disposed shafts mounted on the adjacent rail 13. The chain or belt 45 is provided on its side, at intervals, with lugs or projections 47 which are adapted to be engaged by a container body upon the conveyer 9 so that travel will be imparted to the chain or belt coincident with the travel of the container body past the same. Beneath one of the sprockets 46, and secured thereto or to the shaft carrying the sprocket, is a gear wheel 48 which meshes with a gear wheel 49 suitably mounted upon the rail 13 and having the lower end of a flexible shaft 50 secured axially thereto. The flexible shaft 50 extends upwardly and is attached to the axle or shaft 51 carrying a drive wheel 52 about which is trained an endless conveyer 53 which is preferably a chain belt and is provided in its outer surface at regular intervals with notches 54 adapted to receive the handles of bails which are to be applied to the containers. The axle or shaft 51 is mounted in bearings upon the upper frame 6, and, at the opposite end of said frame, a similar gear or drum 55 is mounted to support the conveyer belt 53, as shown in Fig. 1. A guide frame 56 is secured upon the supporting frame 6 and extends along the upper run of the conveyer 53 and around the delivery end of the same and is disposed in spaced relation to the conveyer so that the distance between the surface of the conveyer and the inner surface of the guide frame will be just sufficient to accommodate the arch of one bail. Deleterious crowding of the bails is thus prevented. The guide frame is provided with an inlet, indicated at 57, at a suitable point in its upper portion through which the bails are delivered to the conveyer and it may be stated at this point that while, in the present drawings, I do not show any bail-delivering means I contemplate the provision of automatic means for delivering the bails successively and such means will form the subject matter of another application for patent.

At the opposite side of the conveyer 9 from the chain belt 45 is arranged a second endless chain belt 58, which is also provided upon its outer side, at regular intervals, with lugs or projections 59 to be engaged by the container bodies traveling upon the conveyer 9, and upon reference to Fig. 3 it will be noted that the belts or chains 45 and 58 are so disposed that a lug upon the belt 45 will be engaged by a container body slightly in advance of the engagement of a lug 59 by the body. The chain or belt 58 is carried by horizontally disposed gears or drums 60 mounted upon the adjacent rail 13 and one of said gears 60 has the lower end of a flexible shaft 61 secured axially thereto, said shaft 61 extending upwardly and having its upper end attached to the axle of a crank disk 62 suitably mounted upon the shelf 63' which is supported by the rail 13 and the upper frame 5. The crank disk 62 carries a wrist pin 63 which plays in a longitudinal slot 64 in a lever or presser arm 65 which is fulcrumed at one end upon the frame 5, as shown in

Fig. 1, and extends upwardly and forwardly from its fulcrum. The upper forward end of the lever 65 is pivoted to lugs or ears 66 at the center of a cross bar or rod 67 which is disposed adjacent the upper ends of guides 68 rising from the respective rails 13 and to and between which the bails are delivered, it being noted, upon reference to Fig. 1, that the delivery end of the guide frame 56 is disposed over the upper ends of the guides 68. As shown in Fig. 12, lugs or ears 69 are provided upon one side of the bar 67 and in these lugs rods 70 are adjustably secured by set screws 71, as will be understood, said rods 70 carrying at their upper ends an arcuate plate or hood 72 which is adapted to project over and bear upon the arch of a bail delivered to and between the guides 68. Sockets are formed in the ends of the bar 67, as shown in Fig. 7, and these sockets receive studs or short shafts 73 which extend to and engage in vertical guide grooves 74 in the inner opposed faces of the guides 68, short cranks 75 being formed on the ends of said studs or shafts to run in the groove 74 and thereby hold the bar 67 to a rectilinear path during the vertical movement of the lever 65 while permitting the bar to rock and accommodate the relative angular movement of the lever. The rocking movement of the bar 67 will cause the presser plate 72 to ride across the arched central portion of the bail and feed the same downwardly within guide grooves 76 formed on the inner opposed faces of the guides 68. Hung loosely upon the shafts or studs 73 are presser arms 77 which are provided at their lower ends with fingers 78 adapted to bear upon the extremities 31 of the bail and exert a downward pressure thereon simultaneously with the pressure exerted by the plate or hood 72 so that the bail will be properly guided to the container to which it is to be applied. The arms 77 are also provided with lateral studs 79 which ride in guide grooves 80 in the inner opposed faces of the guides 68 and thereby prevent the arms from moving to an inoperative position. Upon reference to Fig. 10, it will be noted that the guide groove 80 is relatively wide in its upper end portion and pronouncedly contracted in its lower portion and is located between the vertical straight guide grooves 74 and the guide groove 76 which receives an end of the bail. The bar 67 and the studs 73, consequently, move in a plane at one side of the plane in which the lugs 79 play and therefore the arms 77 tend constantly to swing toward the grooves 74 and away from the groove 76 so that the finger 78 will be out of the paths of the ends of the bails. As the bar 67, however, moves downwardly, the lugs 79 will ride upon the inclined portions 81 of the walls of the grooves 80 and will be thereby deflected toward the groove 76 so that the fingers 78 will be disposed above the ends of the bails and arranged to bear upon the same. The bails will thus be positively fed to the lower ends of the guide members 68 and properly placed to engage the bail ears. As shown at 82, in Fig. 7, the lower portions of the guide members 68 have their inner surfaces beveled or disposed obliquely to accommodate the rocking movement of the bail ends as they are pushed into the bail ears and are locked therein. In the lower end of each guide member 68 is an obliquely disposed slot 83 in which is pivotally suspended a trigger 84 which is approximately triangular in form and normally has one side edge projecting into the path of the bail riding downwardly in the guide groove 76 while its op-

posite side edge projects from the guide member, as shown in Figs. 7, 8 and 13. The trigger will, of course, yield to the downward movement of the bail, as will be understood upon reference to the dotted lines in Fig. 13, and, as the bail is properly positioned with respect to the container body, the trigger is forced inwardly and thereby drives the bail end into the bail ear. To drive the trigger inwardly, there is provided adjacent each guide member 68 a cam disk 85 which is secured upon a shaft 86 journaled transversely in the adjacent rail 13, the cam disk being provided on its face presented to the trigger with cam projections 87 adapted to successively act upon the trigger, the cam projections being spaced equi-distantly around the cam disk so that they will operate the trigger at the proper intervals. The shafts 86 extend beyond the inner sides of the respective rails 13 and on their inner ends are secured wheels or disks 88 which have the form shown in Fig. 9. Each disk or wheel 88 is provided with a plurality of slots or notches 89 in its periphery which are flared outwardly and extend at angles to the radii of the disk or wheel, which notches receive the ends of the successive bails and accommodate the relative angular movement thereof. On the inner faces of these disks or wheels 88 are formed recesses 90 having one wall disposed parallel with the adjacent wall of the adjacent notch 89 while the other wall of the recess extends parallel with a diameter of the disk or wheel and when the wheel is at rest extends horizontally so that it forms a guide or track for a bail ear 29 on the approaching container body. The disks or wheels are provided in their outer faces with recesses or seats 91 adapted to be engaged by spring detents 92 whereby the disks will be arrested at an end of a period of operation and will be given a step by step movement at regular intervals and of equal duration.

It may sometimes happen that the container bodies will be delivered onto the conveyer 9 with the bail ears disposed out of horizontal alignment, as indicated in Fig. 4. To meet this condition, and partially turn the bodies so that the bail ears will be disposed on a horizontal diameter of the bodies, I provide the obliquely disposed surfaces 93 at the rear ends of the frame 44, these surfaces converging toward the medial longitudinal line of the sides of the said frames, as shown in Fig. 1. As the body is carried forwardly by the conveyer 9, the bail ears will engage and ride upon these inclined surfaces so that the body will be rotated about its own axis and, consequently, will be brought into proper position for application of the bails. The bail ears travel along slots 94 in the sides of the frame 44 so that the body will be held in the proper position after it has once been turned. The obliquely disposed guide surfaces 93 at the upper part of the frames 44 are provided by a spring plate 95 which has its ends secured to the ends of the sides of the frames 44 and extend rearwardly therefrom to bridge the space between them so that, as the frames are separated or caused to approach to accommodate bodies of different diameters, the adjustment will be accommodated without removing the guiding surface.

Containers of the type upon which my invention is intended more particularly to operate are made in two standard sizes which vary in diameter only so that while I have provided means for adjusting the machine to different size containers, it should be understood that this adjustment is not of a wide range. When the supporting and

guiding rails and frames are set closer together to accommodate containers of lesser diameter, the upper run of the conveyer 9 should be shifted upwardly correspondingly to accommodate the bodies and support them with the bail ears in the proper positions. When the rails 13 are shifted outwardly to accommodate bodies of greater diameters, the bearings 21 will gravitate toward the lower ends of the beveled surfaces 22 and, consequently, will lower the idlers 19 while, in setting the rails and frames closer together, the inclined surfaces 22 will be moved inwardly under the bearings and the idlers 19, consequently, set in a higher position.

It is thought the operation will be readily understood from the foregoing description, taken in connection with the accompanying drawings. The bails are received by the conveyer 53 and carried around to the delivery end of the guide frame 56 from which they are dropped singly and successively to and between the upright guide members 68 and will enter the grooves 76 therein. The conveyer 9 travels constantly while the machine is in operation and the can bodies are, of course, received successively by said conveyer and carried by it toward the front delivery end of the machine. The endless belts 45 and 58 are actuated by the passing body and, of course, will operate only while a body is passing and in engagement therewith so that the feeding of the bails and the delivering of the same to the lower ends of the guide members 68 will be intermittent and in consonance with the travel of the body, the result being that the bails will be delivered to the triggers 84 only as and when can bodies are placed in position to receive them. As the body is carried toward the delivery end of the machine, the bail ears thereon will ride onto the straight walls of the recesses 90 and pass to the inner corners thereof, arriving at said inner corners simultaneously with the delivery of a bail end at the inner end of the notch 89 through the action of the trigger 84. The travel of the body continues and, by the engagement of the bail ear with the inner corners of the recesses 90, the wheels or disks 88 will be rotated through 90° so that the bails will be drawn from the guide members 68 and will be rocked so that the bail ends will be locked in engagement with the bail ears.

Sometimes, in cutting the formed bail from the length of wire stock, a sharp fin is left on the end of the bail ear. This fin is apt to score the outer face of the rotatable member 88 or ever catch on the edge of said member and cause bending of the bail ends which will destroy the usefulness of the bail. To accommodate the fins and avoid damage to the bails and the rotatable members, grooves 96 are provided in the outer faces of said members, as indicated in Figs. 1 and 9.

Having thus described the invention, I claim:—
1. Apparatus for the purpose set forth comprising a chute for container bodies, a conveyer traveling past the chute to receive bodies therefrom, means actuated by engagement with the container bodies traveling on the conveyer for applying bails to the bodies, and means at the delivery end of the chute for separating the bodies delivered to the conveyer.

2. In apparatus for the purpose set forth, a chute receiving container bodies, a conveyer moving past the chute to receive the bodies therefrom, body-supporting jaws mounted on the chute and operable to retard the movement of the bodies therethrough, and means disposed in the path of the container bodies traveling on the conveyer

and actuated by engagement with said bodies for releasing the jaws in the chute from a body therein.

3. In apparatus for the purpose set forth, a chute receiving container bodies, a conveyer moving past the chute and receiving the container bodies therefrom, rocking arms disposed adjacent the sides of the chute to be engaged by the bodies thereon, jaws mounted on the chute and engageable under bodies therein to separate the bodies in the chute, and connections between said jaws and the arms adjacent the conveyer whereby the jaws will be released from a body and set to engage a succeeding body.

4. In apparatus for the purpose set forth, a chute receiving container bodies, a conveyer moving past the chute and receiving bodies therefrom, frames at the sides of the conveyer having longitudinal slots to receive the bail ears on the bodies and thereby guide the bodies, and converging guide surfaces at the ends of said frames to engage bail ears on the bodies and turn the bodies to cause the ears to enter said longitudinal slots.

5. In apparatus for the purpose set forth, a conveyer for container bodies, laterally movable frames disposed at the sides of the conveyer, idlers mounted on said frames for supporting the upper run of the conveyer, means for adjusting the frames toward or from the sides of the conveyer to accommodate bodies of different diameters, and means whereby as the frames are moved apart or together the idlers will be lowered or raised.

6. In apparatus for the purpose set forth, a conveyer for container bodies which are provided with bail ears, rotatable elements adjacent one end of the conveyer constructed to receive and be engaged by the bail ears whereby continued travel of the bodies will effect rotation of said members, bail guides leading to said members, means for delivering bails to said guides, and means whereby the bail-delivering means will be controlled by the travel of the container bodies.

7. In apparatus for the purpose set forth, a conveyer for container bodies, a conveyer for bail handles, an endless belt disposed adjacent one side of the first mentioned conveyer and provided with lateral lugs on its outer side to be engaged by the container bodies, and operative connections between said belt and the bail handles conveyer.

8. In apparatus for the purpose set forth, a conveyor for container bodies, guide members at the sides of the conveyer, means for delivering bail handles to said guide members, a belt at the side of the conveyer provided with lugs on its outer side to be engaged by the container bodies on the conveyer, a presser mechanism for feeding the bail handles through the guide members, and operative connections between said belt and the presser mechanism.

9. In apparatus for the purpose set forth, a conveyor for container bodies, guide members rising at the sides of the container, means for delivering bail handles to and between said guide members, rotatable elements at the sides of the conveyer and at the lower ends of said guide members having peripheral notches to receive the ends of the bails and recesses on their opposed faces to receive the bail ears on the container bodies whereby the travel of the container bodies will effect engagement between the bail ears and the walls of said recesses to rotate said members and discharge the bail ears, and means controlled by the travel of the container bodies for positively

feeding the bail handles through the guide members and causing the ends thereof to enter and be locked in the bail ears on the bodies.

10. In apparatus for the purpose set forth, a
 5 conveyer for container bodies with bail ears thereon, rotatable members at the sides of the conveyer constructed to receive and be engaged by said bail ears, vertically extending guide members at the sides of said rotatable elements, means for
 10 delivering bail handles to said guide members, means for positively feeding the bail handles along said guide members to the bail ears engaging the rotatable elements, triggers at the lower ends of said guide members to bear against the
 15 ends of the bail handles, and cam members rotatable with the rotatable elements under travel of the container bodies to actuate said triggers and force the ends of the bail handles into locking engagement with the bail ears.

20 11. In apparatus for the purpose set forth, vertically extending guide members provided on their inner opposed faces with series of vertically extending guide grooves, means for delivering bail
 25 handles to the foremost of said guide grooves, a rod slidably engaged in the rearmost of said grooves, arms suspended loosely on said rod, fingers at the lower ends of said arms adapted to engage over the ends of the bail handles, and lugs adjacent said fingers traveling in the intermediate
 30 grooves of the guide members, said intermediate grooves and the foremost grooves of said members having offset portions whereby the ends of the bail handles may be rocked and the fingers will be retracted from the paths of the bail
 35 handles.

12. In apparatus for the purpose set forth, a conveyer for container bodies, guides at the sides of the conveyer, means for delivering bail handles to said guides, means at the lower ends of the
 40 guides for rocking the ends of the bail handles into locking engagement with bail ears on the container bodies, and a presser mechanism operating between said guides and including a plate for engaging the upper arched portions of the
 45 bails and fingers for engaging the ends of the bails.

13. In apparatus for the purpose set forth, a conveyer for container bodies, guides at the sides of the conveyer, means at the lower ends of the guides for rocking the ends of bail handles into
 50 locking engagement with the bail ears on the bodies, a lever fulcrumed adjacent the guides, a bar carried by the upper end of said lever, means controlled by the travel of container bodies for rocking said lever, a presser plate carried by
 55 said bar to engage the upper portion of a bail handle between the guides, and arms suspended from said bar and provided at their lower ends

with fingers to engage the lower ends of the bail handles whereby to positively feed the bail handles to the means for interlocking them with the bail ears.

14. Apparatus for the purpose set forth comprising an endless conveyer for container bodies, means for feeding bails to said bodies, endless belts disposed on opposite sides of the conveyer and operatively connected with the bail feeding
 80 means, and projections on the belts extending in the path of and actuated by engagement with the container bodies on the conveyer for rotating the belts.

15. Apparatus for the purpose set forth comprising an endless conveyer for container bodies having bail receiving ears, a bail guide, means actuated by engagement with the container
 90 bodies traveling on said conveyer for feeding bails to said bail guide, and means operatively connected with the first mentioned means for successively applying the ends of the bails from the guide to the receiving ears of said container
 95 bodies.

16. Apparatus for the purpose set forth comprising a conveyer for container bodies, a bail
 100 guide, endless members mounted for rotation on opposite sides of the conveyer and actuated by engagement with the container bodies traveling on the conveyer, means operatively connected with one of said endless members for feeding
 105 bails to the guide, and means operatively connected with the other endless member for applying the bails from the guide to said container bodies.

17. Apparatus for the purpose set forth comprising a conveyer for container bodies having
 110 bail receiving ears, a frame disposed above the conveyer and provided with longitudinal guide channels adapted to receive the bail ears, a chute for the bodies, means operating in the chute for delivering the bodies one at a time to the
 115 conveyer, means mounted on the frame at said chute for directing the bail ears of the bodies into the guide channels, and means actuated by engagement with the container bodies traveling
 120 on the conveyer for feeding bails to the container bodies and engaging the bails therewith.

18. Apparatus for the purpose set forth comprising a conveyer for container bodies having
 125 bail receiving ears, and means actuated by engagement with the container bodies traveling on said conveyer for feeding bails to the container bodies and engaging the ends of the bails with the ears thereof.

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