J. BRENZINGER.

AUTOMATIC ASSEMBLING AND FEEDING DEVICE FOR CAN HEADING MACHINES.

APPLICATION FILED SEPT. 29, 1913.

1,167,352.

Patented Jan. 4, 1916.

5 SHEETS—SHEET 1.

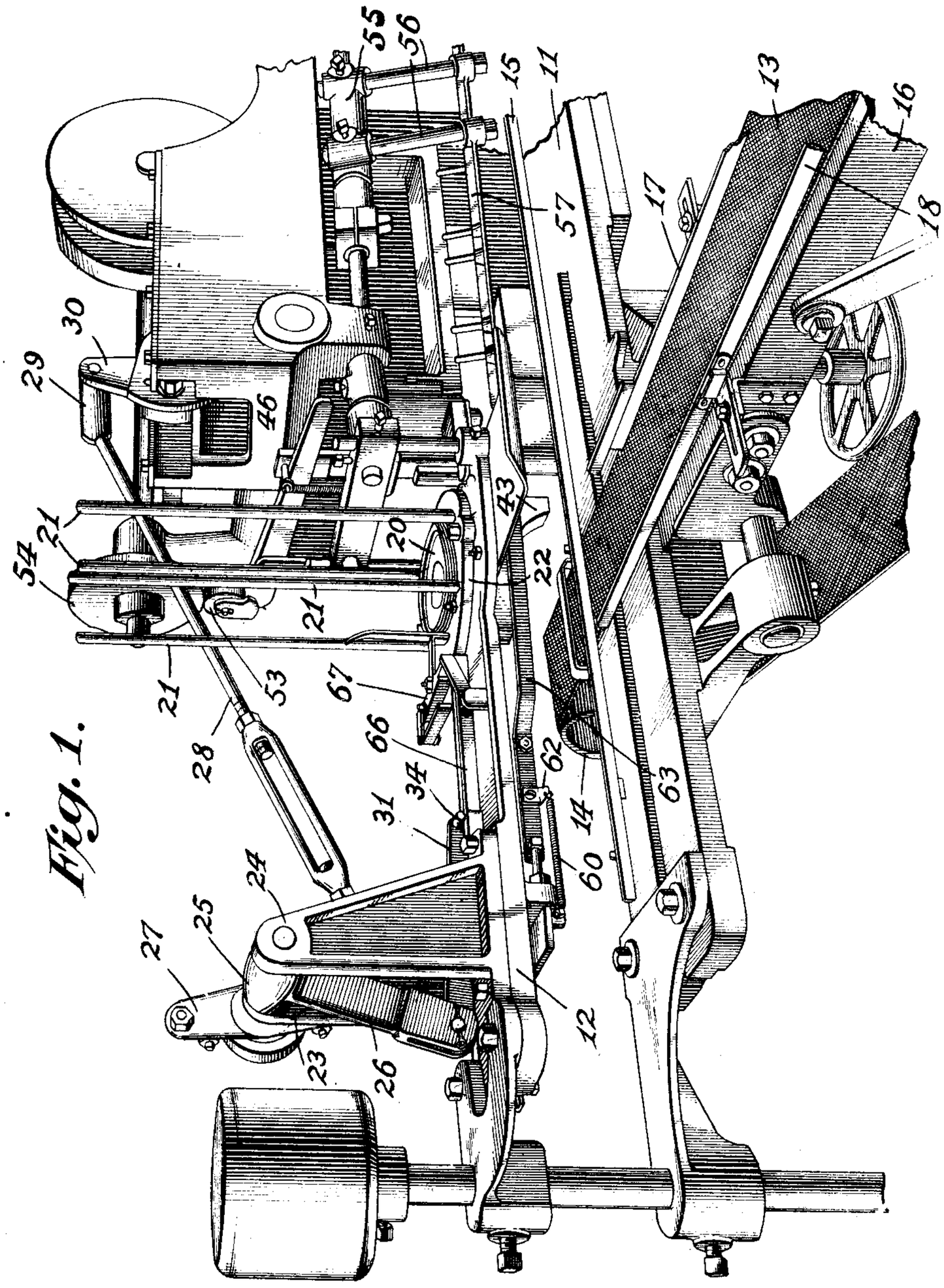

Fig. 1.

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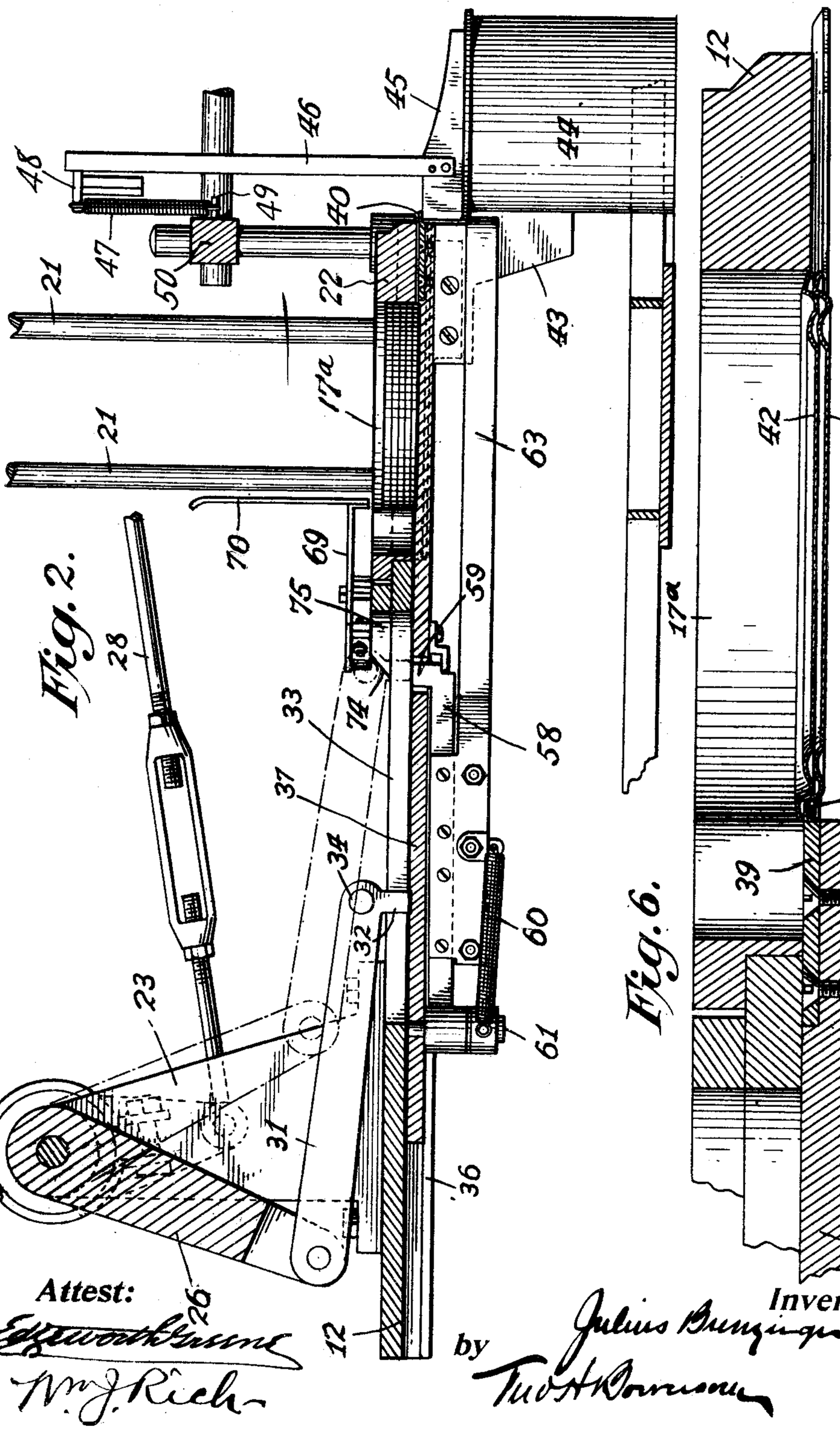

Fig. 2.

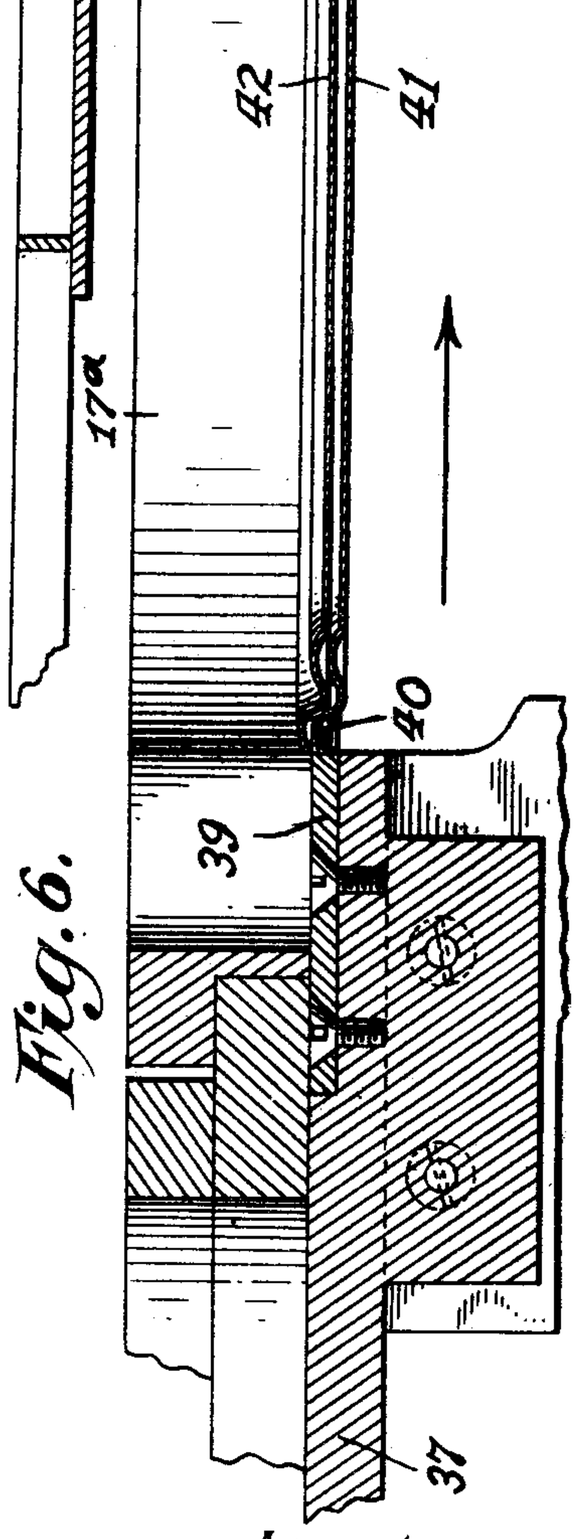

Fig. 6.

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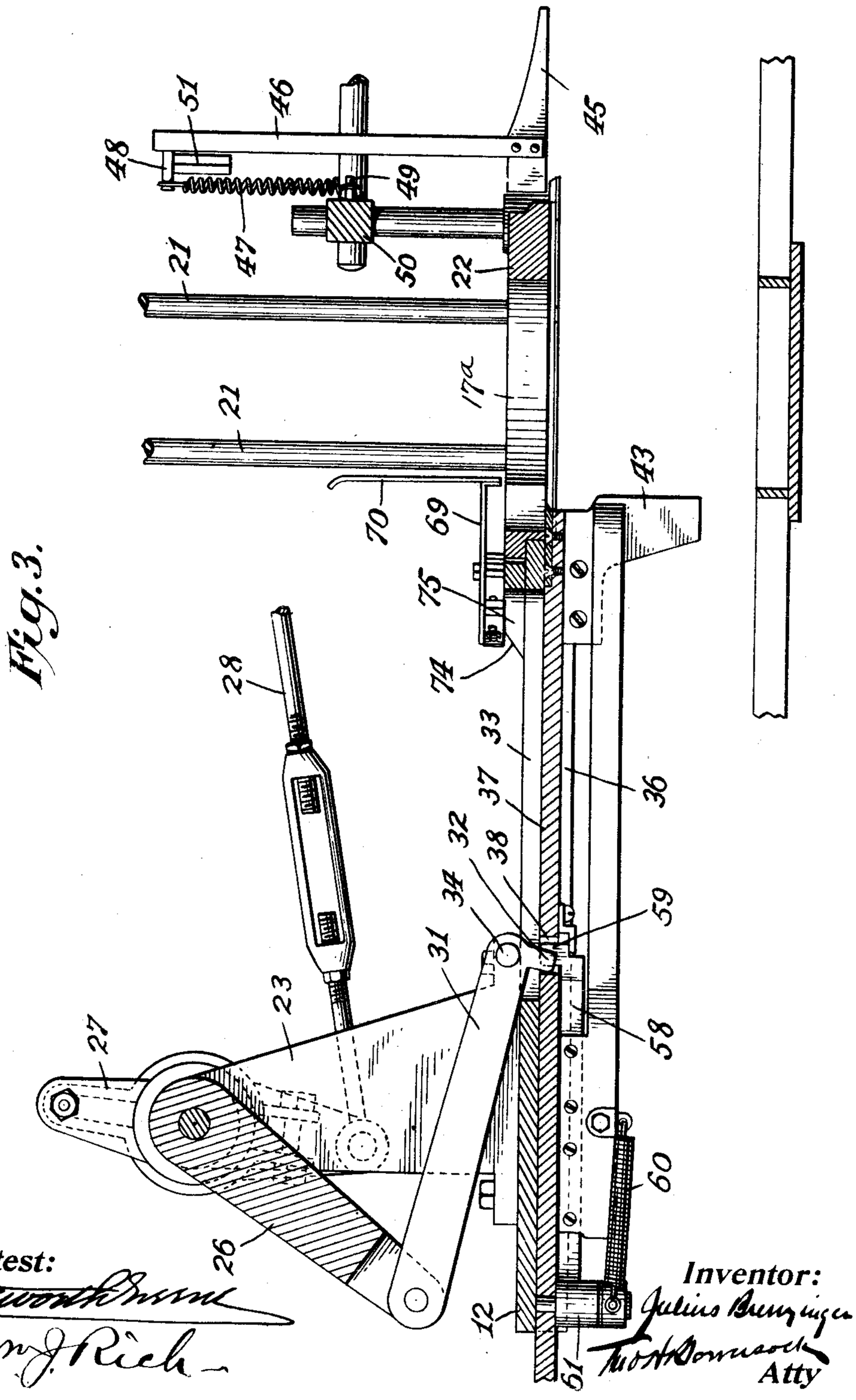
Fig. 3.



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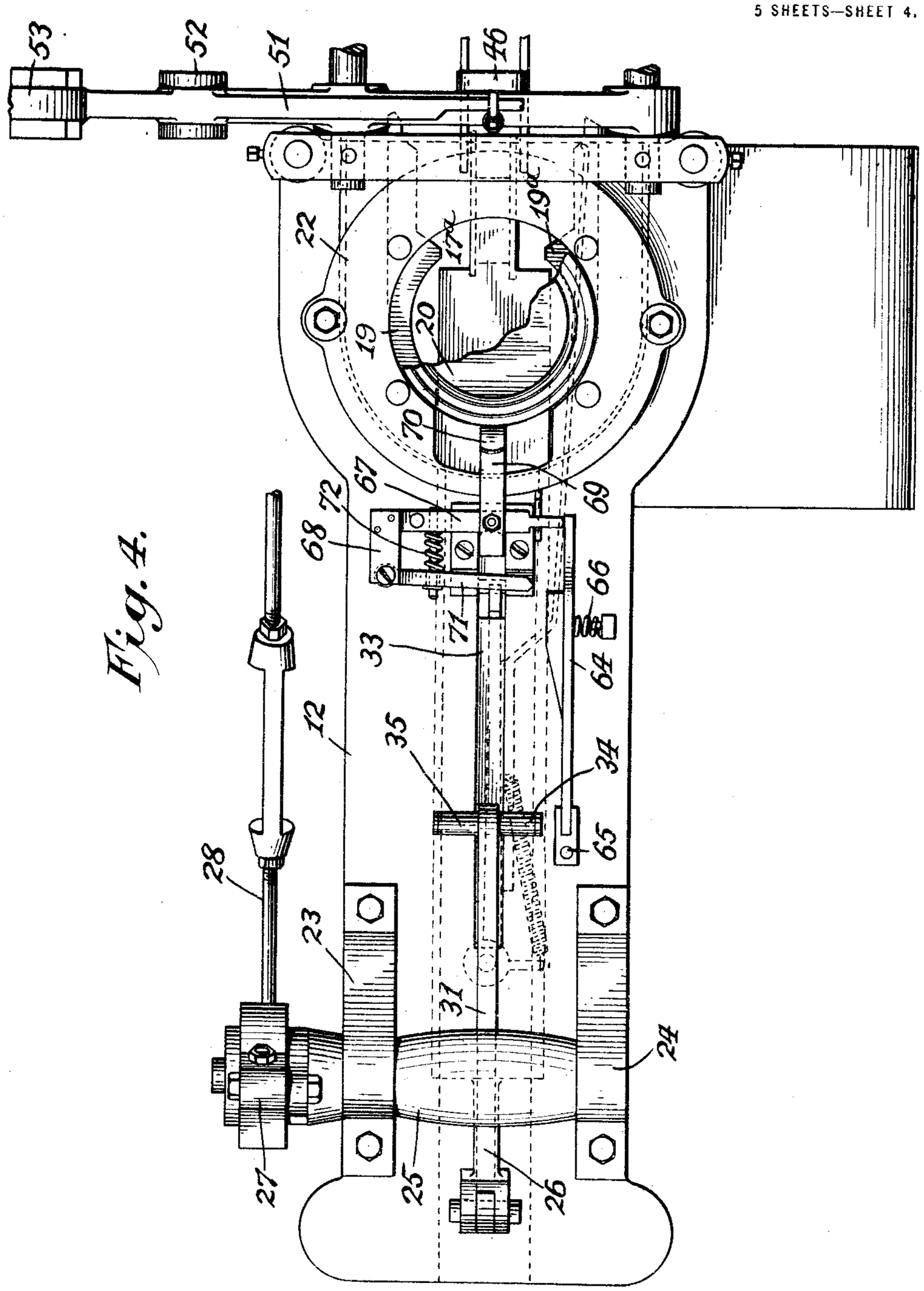

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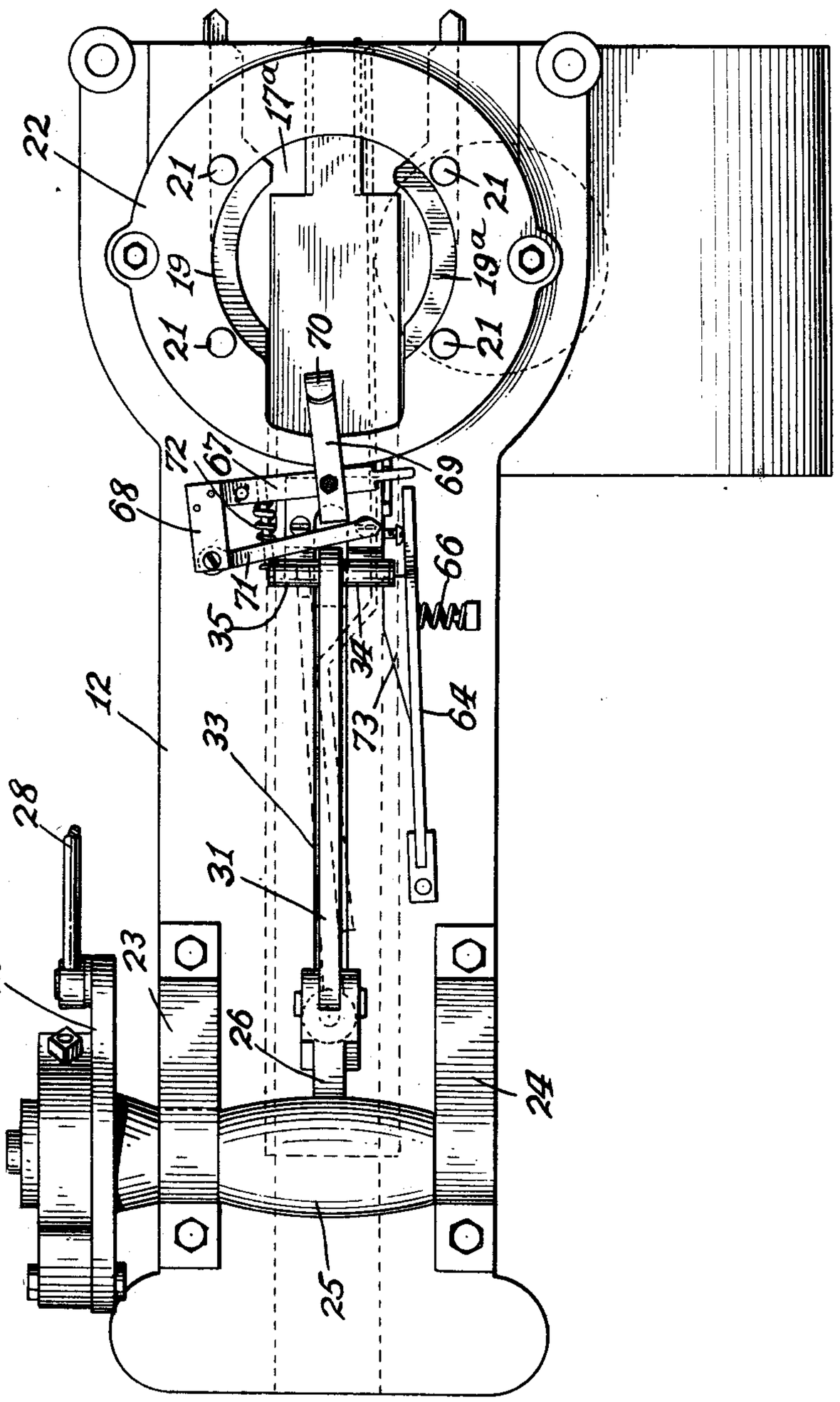
5 SHEETS—SHEET 5.

Fig. 5.



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UNITED STATES PATENT OFFICE.

JULIUS BRENZINGER, OF MOUNT VERNON, NEW YORK, ASSIGNOR TO THE MAX AMS MACHINE COMPANY, OF MOUNT VERNON, NEW YORK, A CORPORATION OF NEW YORK.

AUTOMATIC ASSEMBLING AND FEEDING DEVICE FOR CAN-HEADING MACHINES.

1,167,352. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed September 29, 1913. Serial No. 792,290.

To all whom it may concern:

Be it known that I, JULIUS BRENZINGER, a citizen of the United States, residing at Mount Vernon, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Automatic Assembling and Feeding Devices for Can-Heading Machines, of which the following is a specification.

This invention relates to machines adapted to be secured to or operated in connection with what are known as double-seaming machines, for the purpose of automatically adjusting the can cover upon a can body and delivering these assembled parts to the seaming mechanism in which, as is well known, the can head or cover is secured to the body portion by intercurling the edges of the metal and compressing the same into a substantially solid bead, this being known as the double seaming process.

As is well known in this art, one of the more serious difficulties encountered in connection with the provision of devices for automatically assembling the unseamed can parts and delivering the same in succession to the seaming mechanism, is that which grows out of the fact that in the packaging of many kinds of perishable food products, the can must be more or less over-filled in order to secure the desired weight or bulk of contents when the cover is pressed thereon and then hermetically sealed thereto. In automatically assembling these parts when the can has been overfilled, and then conveying the same to the seaming mechanism, it will be apparent that, first, it is not by any means easy to perfectly adjust the cover on an overfilled can, and, second, that it is not easy to retain the unseamed cover in adjustment during transit of the parts to the seaming mechanism.

The principal object of the present invention is the provision of a machine which will automatically feed the tops or covers successively to the can bodies in transit to the seaming mechanism, which will insure the delivery of each of said can tops to proper adjustment upon said can body, and which will insure the retention of this adjustment until the completion of the double-seaming operation.

Incidental to the above, I have in view a comparatively simple construction of machine, yet one which is both dependable and durable, and I have further in view a number of minor features of automatic operation, as will be brought out in the following specification.

My invention will be readily understood by reference to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of a machine or device embodying my invention; Figs. 2 and 3 are enlarged central sectional elevations, of the feed mechanism proper, with the mechanism in different positions of operation; Figs. 4 and 5 are top plan views of the same parts of the device, with the mechanisms in different positions of operation, and Fig. 6 is an enlarged central vertical section of the cover feeding mechanism alone.

Referring to the drawings in detail, it is to be understood that the device herein shown and described is designed to be connected to or operate in connection with a double-seaming machine, the assembled can parts being ultimately delivered to the seaming mechanism in proper adjustment for the seaming operation. Therefore, the main frame of the machine or device which I am about to describe may be at least partly supported from or by the frame of the double-seaming machine, or may be independently supported, the frame of the assembling and feeding device including a lower plate 11 and an upper plate 12, these plates being rigidly held at a fixed distance from each other and the lower plate 11 providing a platform upon which the can bodies with their contents may be delivered, and also providing a track for their conveyance to the seaming mechanism. The lower plate 11, therefore, should be made adjustable in order to provide for can bodies of different sizes and, particularly, different heights.

For the purposes of this description, I have shown an endless conveyer belt 13 passing over and around the idler 14 and over and across the plate 11. The filled cans are placed on this conveyer, the same being driven in the usual manner from any suitable and convenient source of power, and it will be apparent that they will be delivered successively over the plate 11 which is provided with a guide rail 15, which also serves as a stop to arrest movement of the can body in a certain definite position. I have shown the frame 16, which supports the conveyer belt 13, provided with guide-rails 17 and 18 to control laterally the position of the advancing can body, the guide rail 17 being shorter than the guide rail 18 in order to provide an opening for movement of the can body at the proper time upon and along the plate or platform 11.

The upper plate 12 is provided with an orifice or opening 17ª near one end thereof, brackets or shoulders 19 and 19ª being provided at the lower edge thereof for the support of a stack of can covers 20, these brackets or shoulders being so located as to position the bottom cover of the stack below the plane of the bottom face of the plate 12 and permit of the withdrawal of said bottom cover in the manner hereinafter described. This opening 17ª is of a size to loosely contain the lower covers of the stack, these covers being retained in position by means of preferably four guide posts 21 secured in an annular rib or shoulder 22 which surrounds the opening 17ª.

The plate 12, at or near its outer end, is provided with the standards 23 and 24, in the upper end of which is journaled the short shaft 25 which carries the rocker arm 26. The shaft 25 projects beyond the standard 23, where it is provided with an arm 27 to the lower end of which is pivoted the connecting rod 28, this connecting rod being preferably provided with the turnbuckle, as shown, in order that the length of the same may be readily adjusted to control the stroke of the rocker arm 26. The other end of the connecting rod 28 is pivoted to a stud 29 on an arm 30 which is oscillated continuously at regular intervals in any desired manner from the driving mechanism of the seaming machine. It will be apparent that oscillation of the arm 30 will cause correspondingly-timed oscillation of the arm 26. To the latter is pivoted a rod or bar 31 which is provided at its free end with a lug or downwardly-directed extension 32, this lug or downwardly-directed end portion being located and adapted to travel in a longitudinal slot 33 in the plate 12, this end of the bar 31 also being provided with laterally projecting rollers 34 and 35 which support the free end of this bar and facilitate its movement back and forth on the plate 12 with the lug or extension 32 traveling in the slot 33, and one of said rollers having an additional function which will be hereinafter described.

On the under side of the plate 12 are secured guides 36 on each side of and paralleling the groove 33, these guides supporting a bar 37 for sliding movement therebetween This bar 37 is provided with an orifice 38, adapted to receive and contain the lug or extension 32 at the free end of the arm 31 whereby, under normal conditions of operation, said bar 37 will be reciprocated by the rocking of the arm 26 in the manner described, said lug or extension 32 being retained in the orifice 38 by gravity alone. At the end of bar 37 and on the top face thereof, I have shown in-set a plate 39, although this plate may be an integral part of the bar 37, if desired, it being shown as a separate member to facilitate its removal for purposes of repair or for the substitution of another plate. At the end of this plate 39 I provide a thin projecting blade 40, the bar 37 with its plate 39 and extension blade 40, being so relatively adjusted that blade 40 is located slightly above the shoulders 19 and 19ª.

It is well known that can tops or covers adapted for the double seaming operation are provided with flanges around their outer edges, these flanges projecting from annular ribs and the covers thus being of such configuration that when stacked, in the manner suggested, these flanges are held at a very slight distance from each other. Wherefore, it will be apparent that with the lowermost cover of the stack resting upon the shoulders 19 and 19ª, this extension blade 40, with its knife edge, may be directed between the flanges of the lowermost cover 41 (Fig. 6) and the cover 42 immediately above and supported by the cover 41. Therefore, when the bar 37 is moved in the direction of the arrow (same figure) the blade 40 will slightly elevate all of the covers except the lowermost, which lowermost cover will be engaged by the end of the plate 39 and advanced in the same direction, the plate 39 in the bar 37 being substituted for the lower cover to support the remainder of the stack. It will be apparent, of course, that opposite portions of the lower edge of the orifice 17 must be cut away in order to provide for the reciprocation of the end of the bar 37 and for the longitudinal escapement of the lower can cover 41.

Projecting downwardly from the end of the bar 37 is the arm or pusher 43, this arm or pusher being so located on said bar as to engage a can 44 which has been conveyed by the belt 13 to a position over the plate 11 where it has been stopped by the guide rail 15. In this position the can is substantially under the stack of covers between the guide posts 21 21, and as the bar 37 is reciprocated

to advance the lowermost can cover of this stack, in the manner described, the arm 43 will engage the can 44 and advance the same with the cover to a position just beyond the end of the plate 12, the shoulders 19 and 19ª terminating at a point which permits the advanced can cover to drop upon the filled can which had been conveyed to a corresponding position underneath the same.

I have referred to the cans as being somewhat overfilled, as a rule, wherefore, it is necessary to positively seat the cover on the filled can, and to this end I provide a presser member 45 at the end of a vertical sliding bar 46 which is yieldingly pressed in a downward direction by means of a spring 47 in tension between a pin 48 at the end of said bar 46 and a pin 49 on the cross-bar 50 which is a part of the frame of the machine. This bar 46 with its presser member 45 is held in an elevated position against the action of the spring 47 by means of a lever 51 fulcrumed at 52 to the frame of the machine and carrying at its other end a roller 53 adapted to be raised and lowered at regular and suitable intervals by the cam 54 which is driven from any suitable rotating element in the double seaming machine. It will be apparent that these intervals may be so timed that the presser member 45 will be retained at an elevated position until a can and its cover have been brought to a position of rest immediately underneath the same, whereupon the lever 51 is depressed to release the bar 46 which, under action of the spring 47, forces the cover downwardly and seats the same firmly on the can. I have shown this cover seated by yielding forces, instead of positively, in view of slight variations in the sizes of the containers, whereby for the assembled parts may never become stuck to the point of clogging the machine or otherwise interfering with its operation. From this point the assembled can parts are carried in succession to the seaming mechanism, preferably by means of a reciprocating carriage, which is provided with oppositely located and acting jaws which close to embrace the can body and carry the same forward one step, then open to release said body and return to their original position for the repetition of this operation. One half of this mechanism is shown in Fig. 1, the same including the rocking sleeve 55 with its arms 56 at the end of which is mounted the engaging and releasing member 57, the cans being advanced underneath guide rails which retain the covers in position during transit of the containers. This mechanism is shown and described in detail in a co-pending application, filed by me September 29, 1913, Serial No. 792,295, and further description of the same in connection with this application is thought to be unnecessary.

It will be apparent that in connection with an automatic feeding and assembling device such as that described, there are two contingencies which should be met, and in the event of such contingencies the feeding and assembling mechanism should become inoperative without stopping operation of the machine as a whole. Obviously, if no filled can body should be delivered upon the platform 11 and advanced to the position where it would receive the can cover, no cover should be advanced from the stack thereof, and it is just as obvious that should the covers become exhausted, no can body should be advanced along the platform 11 and to the seaming mechanism.

In order to insure against the delivery of a can cover when no can body has been advanced to receive the same, I make the orifice 38 in width something over twice the width of the lug or extension 32 at the end of the bar 31, and on the under face of the bar 37 I pivot an arm 58 having a lug or projection 59 at the free end thereof and projecting upwardly into the orifice 38. The lug or projection 32 and the lug or projection 39 each occupy a little less than half the width of the orifice, whereby, when said arm 58 is in one position, the lug or projection 32 on the arm 31 is free to drop into the orifice for the purposes set forth, while when the arm 58 is in its other position, the lug 59 occupies the space in the orifice into which the lug 32 would normally drop, under which conditions the arm 31 would ride idly back and forth over the orifice and the bar 37 would not be reciprocated. The arm 58 is normally held in position where the lug 59 thereon closes the orifice against the lug 32 and the arm 31, by means of a spring 60 in tension between a pin in the post 61 on the lower face of the bar 37 and a pin or post 62 projecting from the arm 58. This arm 58 is further provided with an extension strip 63, so located with respect to the guide rail 15, which arrests movement of the can body on the conveyer 13, as to be engaged by said can body prior to the latter being stopped by the guide rail 15, the power of the spring 60 being insufficient to overcome the friction which retains the container in its position on the conveyer 13, whereby the arm 58 will be moved to withdraw the lug 59 from that portion of the orifice 38 where it interferes with the entrance of the lug 32 into said orifice, and it will be apparent therefore, that when a can has been advanced by the conveyer 13 and has impinged against the extension 63 and moved the arm 58, the bar 37 will be engaged and reciprocated to advance the container and deliver and position a cover, while if a can has not been advanced by the conveyer 13, the arm 58 will not be moved, but will be retained by the

spring 60 in such position that the orifice 38 remains closed against entrance of the lug 32 and the bar 37 will not be reciprocated.

The mechanism for preventing operation of the feeding and assembling devices when the supply of covers has become exhausted or depleted, is somewhat more complicated, and includes an arm 64 pivoted at 65 upon the upper face of the plate 12 and subject to the action of the compression spring 66 which tends to force said arm under yielding pressure in the direction of the slot 33 in said plate and the end of the arm 31 riding in said slot. The end of the arm 64 normally impinges against the end of the member 67 which forms a part of the rigid frame which includes the arms 68 and the arm 69, the latter carrying a substantially vertical part 70 which, when a stack of covers is present between the posts 21 21, will contact with the edges of said covers and retain the arm 67 in position where it engages the end of the arm 64 and holds the same against the action of the spring 66, as shown in Fig. 4. In this position, when the arm 31 has been advanced with the lug or projection 32 in engagement with the plate 37, the end of said arm 31 will impinge against the spring-pressed pivot bar 71, which is pivoted in the ends of the arms 68, and the lug or projection 32, while withdrawn from the orifice 38, due to the rollers 34 and 35 impinged against and rolling up inclined faces 74 of the block 75 on the plate 12, will again drop into said orifice as the arm 31 is reciprocated in the other direction and carry therewith the plate 37. However, when the stack of covers has become nearly exhausted or depleted, and the top cover of the stack has been lowered to a position where it may be cleared by the vertical rod 70, then, when the end of the arm 31 impinges against the pivot bar 71, the force of the spring 72 will force the arm 67 to the position indicated in Fig 5, withdrawing the end thereof from engagement with the end of the arm 64 which, under action of the spring 66, will interpose the wedge-shaped member 73 in the path of movement of the roller 34. As the arm 32 now reaches the end of its forward stroke of reciprocation, the rollers come in contact with inclined faces on the block 75, which has the effect of elevating the end of the arm 31 and withdrawing the lug or extension 32 from the orifice 38, as explained. If a can is pressing against the extension 63 of the arm 58, and a stack of covers prevent movement of the arm 67, upon the return stroke of reciprocation, the lug 32 will immediately drop into the orifice 38 and return the plate 37 to its original position. However, with the arm 64 free to move under action of the spring 66, although the plate 37 will be carried forward with the arm 31 during the forward stroke of reciprocation, the end of the roller 34 riding along the inclined surface of the member 73 and forcing this part from its path of movement, when said rollers have been elevated along the inclined face of 74 of the block 75, the member 73 will be forced, under action of the spring 66, into the normal path of movement of the roller 34, which will, upon the return stroke of reciprocation, ride along the top of this member 73 and thus the lug 32 at the end of the arm 31 be prevented from again dropping into the orifice 38, under which condition the plate 37 will be left in a stationary condition while the arm 31 is idly reciprocated back and forth. Therefore neither can bodies nor can covers will be advanced except as a can body has been conveyed to the feeding and assembling devices, and except as there is a sufficient supply of covers in the stack thereof.

Many modifications of minor detail of my improved device for automatically asembling can parts and feeding the same to the seaming mechanism of can heading machines will doubtless readily suggest themselves to those skilled in the art to which it appertains, and I therefore do not desire to limit my invention to the specific construction herein shown and described.

I claim as new and desire to secure by Letters Patent:

1. In a device of the character described, the combination of means for advancing open containers in procession to permanent closing mechanism, means for retaining a supply of tops or covers, means for automatically applying one of said tops or covers to each container in transit, and means for rendering said advancing and applying means inoperative when the supply of tops or covers has become depleted.

2. In a device of the character described, the combination of means for advancing open containers in succession to the seaming mechanism, means for retaining a supply of tops or covers, means for automatically applying one of said tops or covers to each container in transit, and means for rendering said advancing and applying means inoperative when said supply of can tops has become depleted and in the absence of a container in position to be advanced.

3. In a device of the character described, the combination of means for advancing open containers in succession to the seaming mechanism, means for retaining a supply of tops or covers, a reciprocating member adapted to engage one of said tops or covers upon each forward stroke of reciprocation thereof and deliver the same in proper adjustment to an open container in transit, means for actuating said reciprocating member, said actuating means normally operating ineffectively, and means controlled by

each moving container in turn to render operations of said actuating means effective.

4. In a device of the character described, the combination of means for advancing open containers in succession to the seaming mechanism, means for retaining a supply of tops or covers, a reciprocating member adapted to engage one of said tops or covers upon each forward stroke of reciprocation thereof and deliver the same in proper adjustment to an open container in transit, means for actuating said reciprocating member, and means for rendering operations of said actuating means ineffective upon depletion of the supply of tops or covers within said retaining means.

5. In a device of the character described, the combination of means for advancing open containers in succession to the seaming mechanism, means for retaining a supply of tops or covers, a reciprocating member adapted to engage one of said tops or covers upon each forward stroke of reciprocation thereof and deliver the same in proper adjustment to an open container in transit, means normally operating ineffectively for actuating said reciprocating member, means controlled by each moving container in turn to render operations of said actuating means effective and means for rendering the same again ineffective upon depletion of the supply of tops or covers in said retaining means.

6. In a device of the character described, the combination of means for advancing open containers in succession to the seaming mechanism, means for retaining a supply of tops or covers in stacked arrangement, a reciprocating member adapted to engage and withdraw the lowermost top or cover of said stack upon each forward stroke of reciprocation thereof and deliver the same in proper adjustment to an open container in transit, means for actuating said reciprocating member, operations of said actuating means being normally ineffective, and means controlled by each moving container in turn to render operations of said actuating means effective.

7. In a device of the character described, the combination of means for advancing open containers in succession to the seaming mechanism, means for retaining a supply of tops or covers in stacked arrangement, a reciprocating member adapted to engage and withdraw the lowermost top or cover of said stack upon each forward stroke of reciprocation thereof and deliver the same in proper adjustment to an open container in transit, means for actuating said reciprocating member, and means for rendering operations of said actuating means ineffective upon the depletion of the supply of said tops or covers.

8. In a device of the character described, the combination of means for advancing open containers in succession to the seaming mechanism, means for retaining a supply of tops or covers in stacked arrangement, a reciprocating member adapted to engage and withdraw the lowermost top or cover of said stack upon each forward stroke of reciprocation thereof and deliver the same in proper adjustment to an open container in transit, means for actuating said reciprocating member and means for rendering operations of said actuating means ineffective upon the depletion of the supply of said tops or covers and in the absence of a container in a position to be advanced.

9. In a device of the character described, the combination, with means for advancing open containers in succession to the seaming mechanism, of means for retaining a plurality of tops or covers in stacked arrangement, a reciprocating pusher adapted to engage the lowermost top or cover only and advance the same to proper position over a container in transit and during such advancement support said stack, means for reciprocating said pusher, means for rendering operations of said reciprocating means ineffective when the stack of tops or covers has become depleted, means for adjusting said top or cover on said container, and means for retaining such adjustment during transit of the assembled parts to the seaming mechanism.

10. In a device of the character described, the combination, with means for intermittently advancing open containers in succession to the seaming mechanism, of means for retaining a plurality of tops or covers in stacked arrangement, a reciprocating pusher adapted to engage the lowermost top or cover only and advance the same to proper position over a container in transit and during such advancement support said stack, means for reciprocating said pusher, means for rendering operations of said reciprocating means ineffective when a container is not being positioned to receive its top or cover, means for adjusting said top or cover on said container, and means for retaining such adjustment during transit of the assembled parts to the seaming mechanism.

11. In a device of the character described, the combination, with means for advancing open containers in succession to the seaming mechanism, of means for retaining a plurality of tops or covers in stacked arrangement, a reciprocating pusher adapted to engage the lowermost top or cover only and advance the same to proper position over a container in transit and during such advancement support said stack, means for reciprocating said pusher, means for rendering operations of said reciprocating means ineffective when said stack of tops or covers has become depleted and when a container

is not being positioned to receive its top or cover, means for adjusting said top or cover on said container, and means for retaining such adjustment during transit of the assembled parts to the seaming mechanism.

12. In a device of the character described, the combination, with a suitable guide-way for can bodies leading to permanent closing mechanism, means for retaining a supply of tops or end portions for said can bodies, and means for delivering said can bodies successively to said guide-way, of means for intermittently advancing each can body along said guide-way, means for automatically delivering thereto and positioning thereon a top or end portion from said supply, common means normally operating ineffectively to actuate both said advancing and said delivering and positioning means, and means operated through the medium of a can body being positioned on said guide-way to render operations of said actuating means effective.

13. In a device of the character described, the combination, with a suitable guide-way for can bodies leading to permanent closing mechanism, means for retaining a supply of tops or end portions for said can bodies, and means for delivering said can bodies successively to said guide-way, of means for intermittently advancing each can body along said guide-way, means for automatically delivering thereto and positioning thereon a top or end portion from said supply, common means for actuating said advancing and said delivering and positioning means, and means for rendering operations of said actuating means ineffective upon depletion of the supply of tops or end portions in said retaining means.

14. In a device of the character described, the combination, with a suitable guide-way for can bodies leading to permanent closing mechanism, means for retaining a supply of tops or end portions for said can bodies, and means for delivering said can bodies successively to said guide-way, of means for intermittently advancing each can body along said guide-way, means for automatically delivering thereto and positioning thereon a top or end portion from said supply, common means normally operating ineffectively to actuate both said advancing and said delivering and positioning means, and means for rendering operations of said actuating means effective through the medium of a can body being delivered to proper position on said guide-way.

15. In a device of the character described, the combination, with a suitable guide-way for can bodies leading to permanent closing mechanism, means for retaining a supply of tops or end portions for said can bodies, and means for delivering said can bodies successively to said guide-way, of means for intermittently advancing each can body along said guide-way, means for automatically delivering thereto and positioning thereon a top or end portion from said supply, common means normally operating ineffectively to actuate both said advancing and said delivering and positioning means, means for rendering operations of said actuating means effective through the medium of a can body delivered to proper position on said guide-way, and means for restoring the condition of ineffective operation of said actuating means upon depletion of the supply of tops or end portions in said retaining means.

16. In a device of the character, the combination, with means for successively positioning the assembled parts of can bodies in the seaming mechanism, of a member adapted to be reciprocated to successively advance open can bodies to said positioning means and means for delivering tops or end portions in proper position thereon, a constantly reciprocating driving member common to both said advancing and said delivering means, means operable to connect said members, and means for rendering said connecting means operative through the medium of a can body being positioned for advancement.

17. In a device of the character described, the combination, with means for successively positioning the assembled parts of can bodies in the seaming mechanism, of a member adapted to be reciprocated to successively advance open can bodies to said positioning means and means for delivering tops or end portions in proper position thereon, a constantly reciprocating driving member common to both said advancing and said delivering means, means operable to connect said members, means for rendering said connecting means operative through the medium, a can body being positioned for advancement, and means for successively conveying said bodies into position for advancement.

18. In a device of the character described, the combination, with means for successively positioning the assembled parts of can bodies in the seaming mechanism, of a member adapted to be reciprocated to successively advance open can bodies to said positioning means and means for delivering tops or end portions in proper position thereon, said deliveries being made successively from a supply of said covers in stacked arrangement, a constantly reciprocating driving member common to both said advancing and said delivering means, means operable to connect said members, means for rendering said connecting means operative through the medium of a can body being positioned for advancement, and means for again rendering said connecting

means inoperative when said supply of tops or end portions has become depleted.

19. In a device of the character described, the combination, with means for successively positioning the assembled parts of can bodies in the seaming mechanism, of a member adapted to be reciprocated to successively advance open can bodies to said positioning means and means for delivering tops or end portions in proper position thereon, said deliveries being made successively from a supply of said covers in stacked arrangement, a constantly reciprocating driving member common to both said advancing and said delivering means, means operable to connect said members, means for rendering said connecting means operative through the medium of a can body being positioned for advancement, means for again rendering said connecting means inoperative when said supply of tops or end portions has become depleted, and means for successively conveying said bodies into position for advancement.

20. In a device of the character described, the combination, with means for successively positioning the assembled parts of can bodies in the seaming mechanism, a guideway for open can bodies leading to said positioning means, and means for retaining a supply of can tops or end portions in stacked arrangement, of a reciprocable member having one part adapted to engage and advance a can body along said guideway and to said positioning means and another part adapted to engage the bottom cover in said stack and deliver the same in proper position upon the advanced can body, a reciprocating bar pivoted at one end to its actuating means and its other end being free, said reciprocable member lying in the path of movement of free end of said reciprocating member and being provided with a suitable opening, and said reciprocating member having a lug at the free end thereof adapted to enter said opening under action of gravity, a member spring-pressed to position to bridge said opening and prevent the entrance of said lug thereinto, and means actuated through the medium of a can body being positioned on said guideway to withdraw said last-mentioned member against the action of its spring.

21. In a device of the character described, the combination, with means for successively positioning the assembled parts of can bodies in the seaming mechanism, a guideway for open can bodies leading to said positioning means, and means for retaining a supply of can tops or end portions in stacked arrangement, of a reciprocable member having one part adapted to engage and advance a can body along said guideway and to said positioning means and another part adapted to engage the bottom cover in said stack and deliver the same in proper position upon the advanced can body, a reciprocating bar pivoted at one end to its actuating means and its other end being free, said reciprocable member lying in the path of movement of the free end of said reciprocating member and being provided with a suitable opening, and said reciprocating member having a lug at the free end thereof adapted to enter said opening under action of gravity, a member spring-pressed to position to bridge said opening and prevent the entrance of said lug thereinto, means actuated through the medium of a can body being positioned on said guideway to withdraw said last-mentioned member against the action of its spring, and means for preventing the lug from entering the opening when said supply of tops or end portions has become depleted.

In testimony of the foregoing, I have hereunto set my hand in the presence of two witnesses.

JULIUS BRENZINGER.

Witnesses:
C. H. STECKER,
M. I. ARMSTRONG.