

March 19, 1957

J. A. NEUMAIR

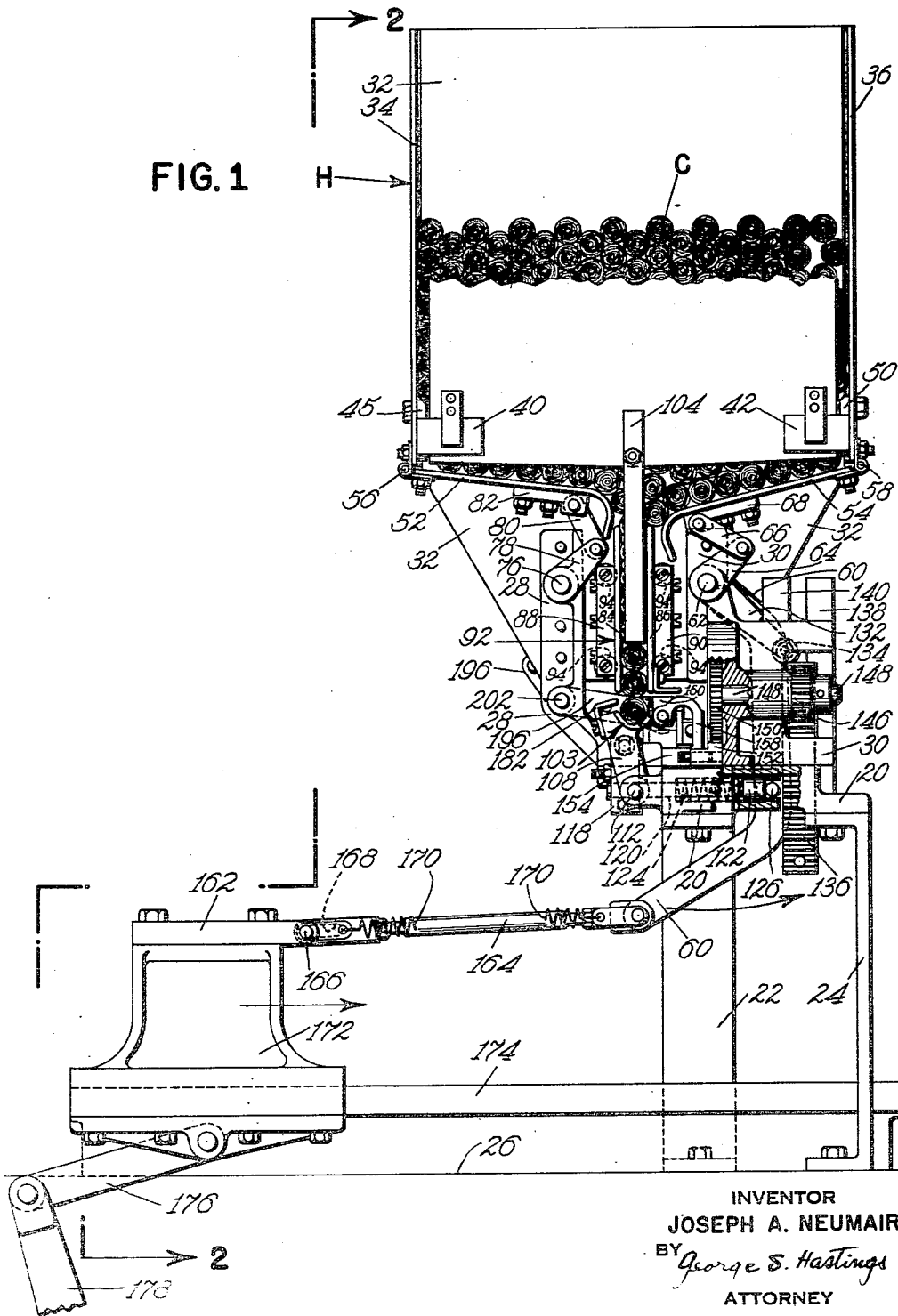
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APPARATUS FOR CIGAR MACHINES

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FIG. 1

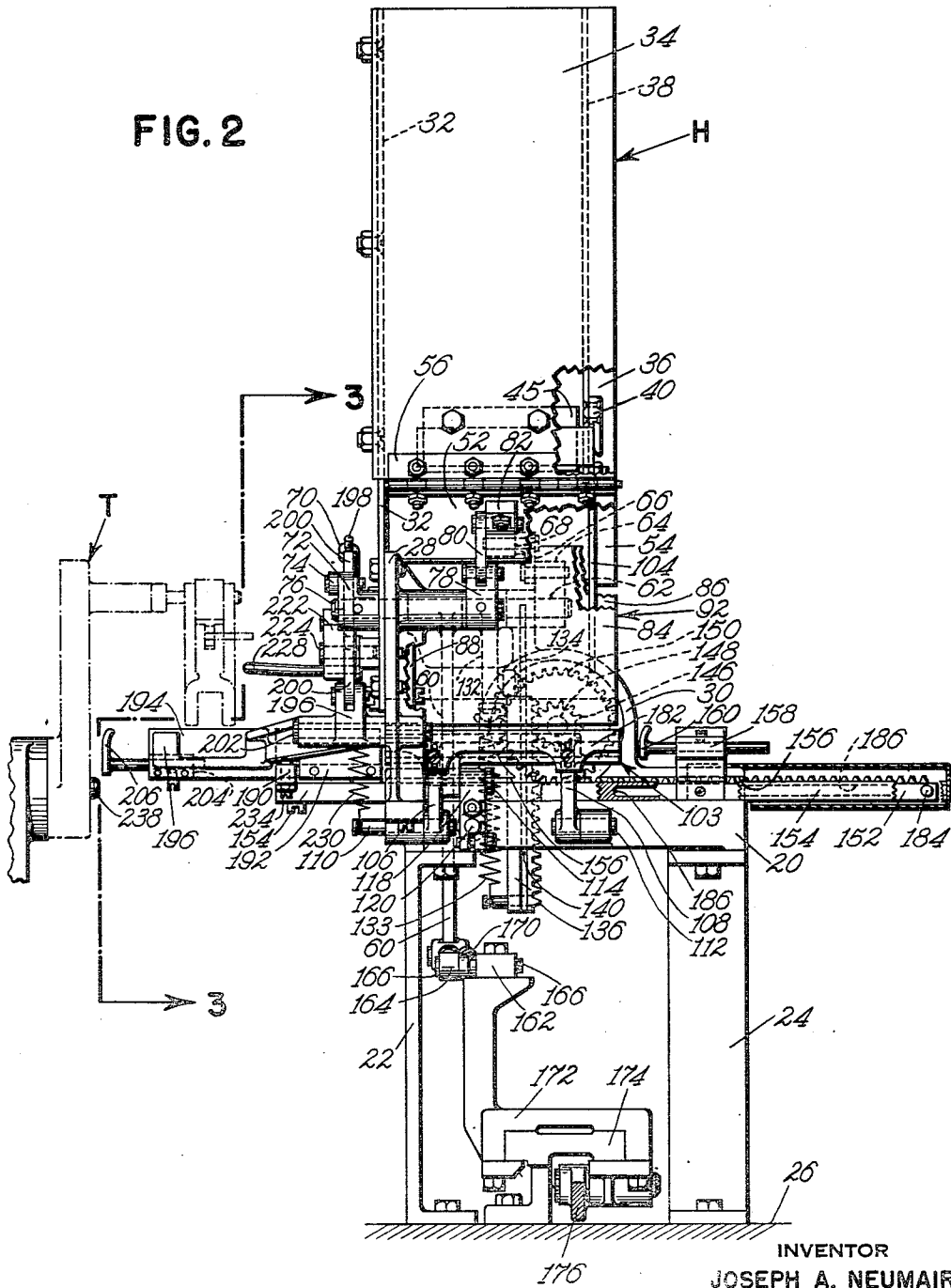


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INVENTOR

JOSEPH A. NEUMAIR

BY *George S. Hastings*
ATTORNEY

March 19, 1957

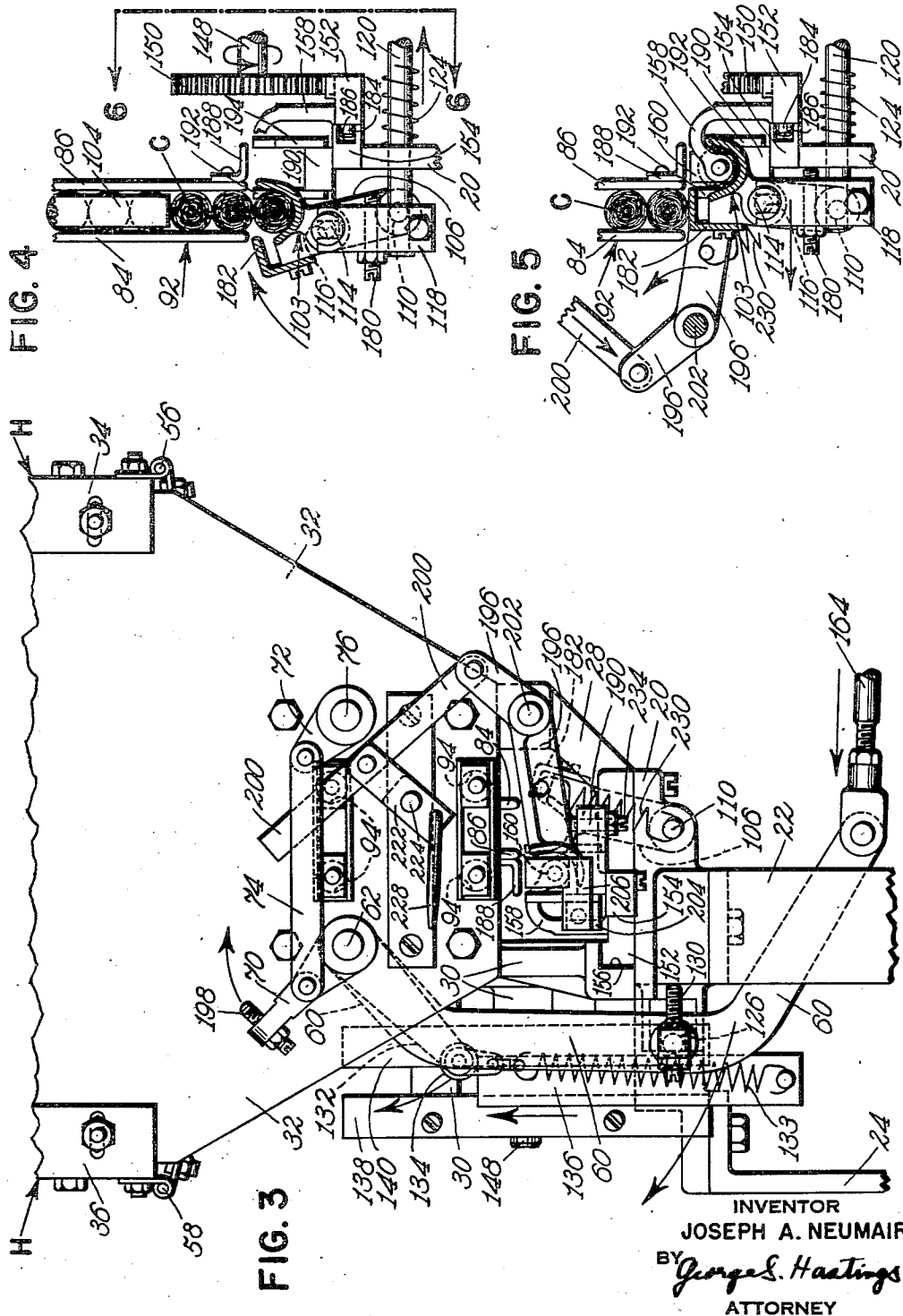
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FIG. 6

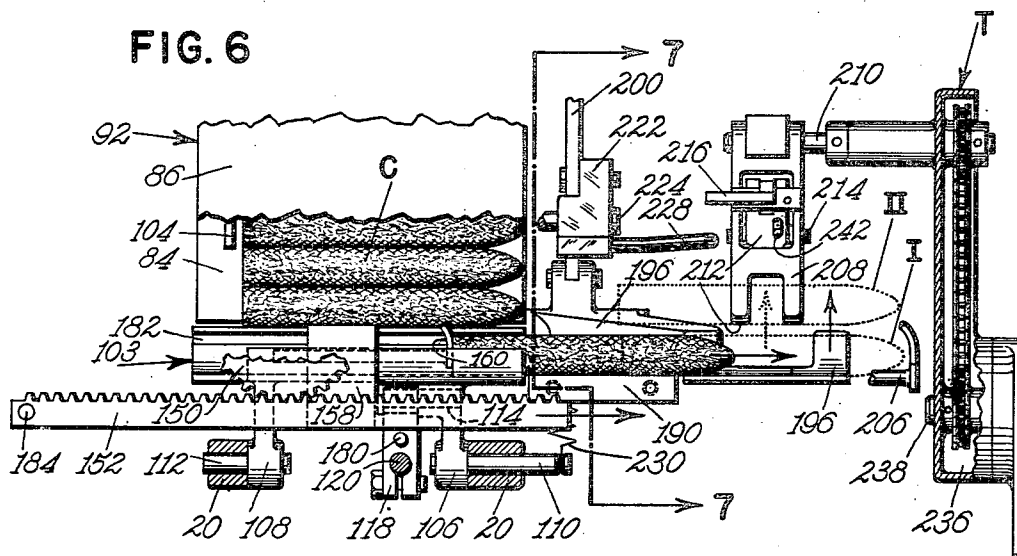
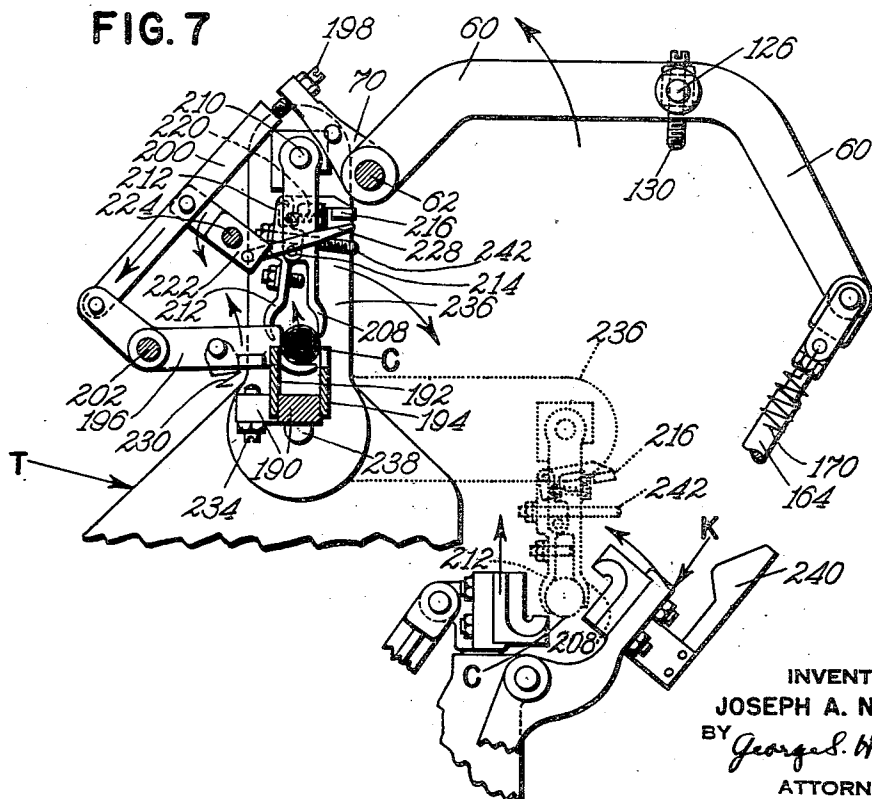


FIG. 7



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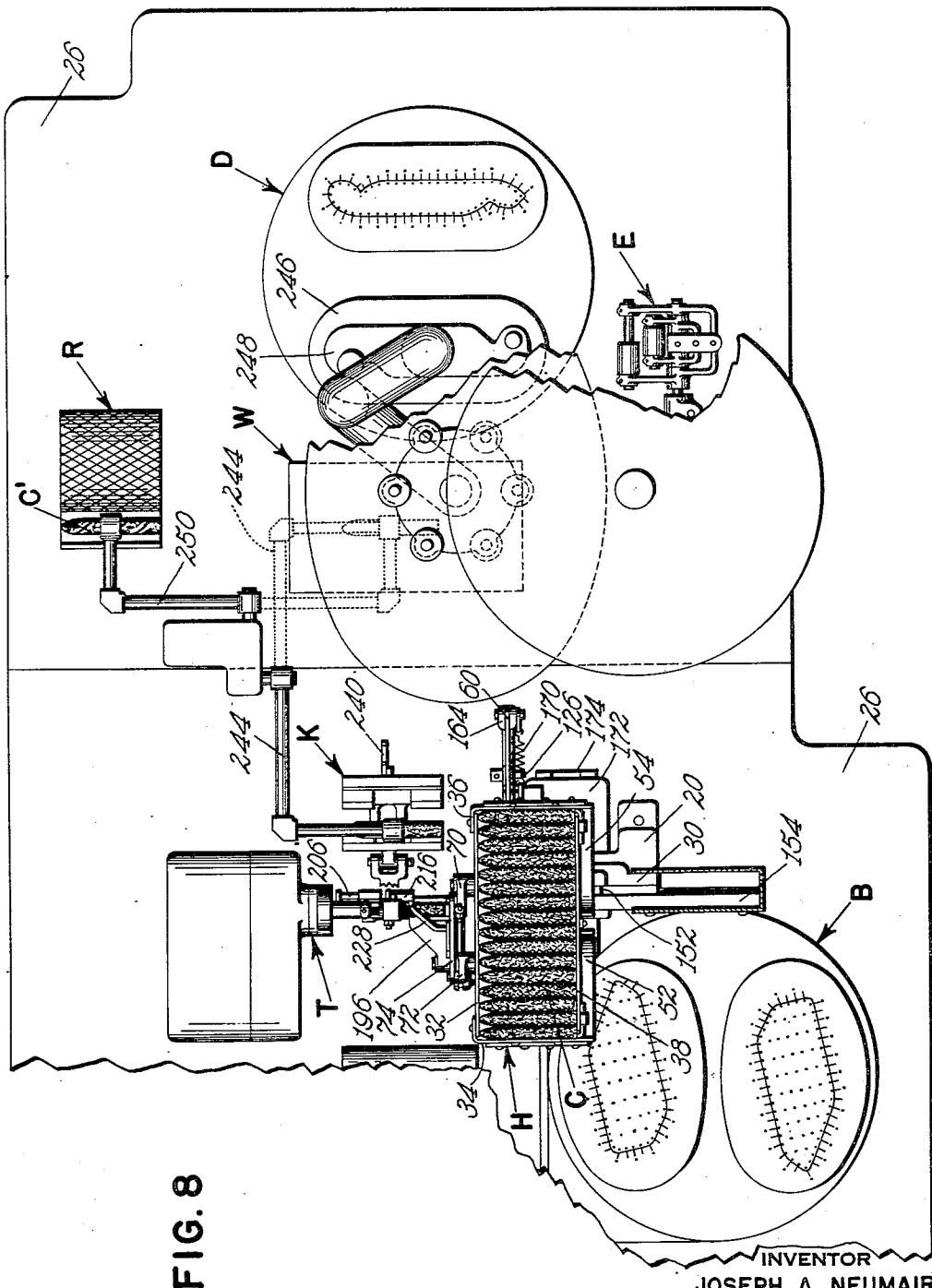
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2,785,682

APPARATUS FOR CIGAR MACHINES

Joseph A. Neumair, Hollis, N. Y., assignor to International Cigar Machinery Co., a corporation of New Jersey

Application March 17, 1951, Serial No. 216,129

16 Claims. (Cl. 131—38)

This invention relates to a method of and apparatus for feeding cigar bunches or defectively wrapped cigars, and more specifically for feeding such articles to the wrapper applying section of a cigar machine.

The invention provides an efficient method of re-wrapping cigars originally rejected for wrapper defects. These rejected cigars are now either sold as "seconds" or manually re-fed into the wrapping mechanism of cigar machines for re-wrapping. This latter method is hazardous from the safety viewpoint. It is also slow and costly since an operator cannot manually supply a machine at full capacity. She will either miss some of its cycles or stop and start the machine for each cigar. Moreover, each machine requires a "feed" operator. With my invention, rejects may be accumulated and then quickly and safely re-wrapped on several machines operating at full capacity and supplied by but one feed operator.

The invention consists in mechanically feeding cigar bunches to an existing cigar machine to utilize at full capacity the wrapper applying mechanisms thereof. The feed device may be transferred from one machine to another and is therefore readily adaptable to as many types of cigars as desired.

It is an object of my invention to provide an apparatus for automatically feeding cigar bunches from a source of supply that may be readily and quickly attached to and detached from existing cigar machines without material alteration.

It is a further object of my invention to utilize the existing movement of the cigar machine for motive power and to thereby coordinate the mechanical feeding of the cigar bunches with the normal cycle of the machine.

It is another object of my invention to provide a method and an apparatus for feeding group lots of cigar bunches to the end that one feed operator may supply several machines at the same time.

It is still another object of my invention to provide feeding apparatus capable of handling the various shapes and sizes of cigars without employing costly model parts. The apparatus can thus be moved from a cigar machine for one size and/or shape of cigar to another machine of different size and/or shape.

In the accompanying drawings which form a part of this specification I have illustrated an embodiment of my invention.

Fig. 1 is a front elevation of the automatic cigar feeding mechanism;

Fig. 2 is a side elevation of the same as seen from line 2—2 of Fig. 1;

Fig. 3 is a partial rear elevation of the same taken on line 3—3 of Fig. 2;

Figs. 4 and 5 are detailed end elevations illustrating the successive steps of removing cigars from the feeding mechanism and forwarding same to a suitable transfer device;

Fig. 6 is a sectional side elevation illustrating the transfer of a cigar from a hopper to a transfer cradle;

Fig. 7 is a detailed end elevation illustrating the trans-

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fer of a cigar from a cradle into a cigar transfer mechanism of the cigar machine; and

Fig. 8 is a plan view illustrating the automatic cigar feeding device in conjunction with an existing cigar machine.

With reference to Figs. 1, 2 and 3, the cigar feeding mechanism consists of a base 20 supported by legs 22, 24 which are secured to the main body of a cigar machine of the type disclosed in the patent to Wheeler 2,316,828, granted April 20, 1943. Projecting from the top of the base 20 are a pair of bearing brackets 28, 30 which support a vertical plate 32. This plate 32 forms the rear wall of a rectangular shaped hopper H wherein are stacked the cigar bunches C that are to be wrapped or re-wrapped as the case may be.

The sides of this hopper H are formed by a pair of L-shaped plates 34 and 36. The short legs of these side plates are adjustably secured to the rear plate 32. The front wall of the hopper H consists of a removable plate 38 slidably secured to the side walls by means of the brackets 45, 50 and the L-shaped members 40, 42 respectively. The bottom of the hopper H is formed by agitator plates 52, 54 pivotally attached by hinges 56, 58 to the side plates 34, 36 respectively.

On the bottom side of agitator plate 52 (54) is a bracket 82 (68) connected to a crank arm 78 (64) by a link 80 (66). The crank arm 78 (64) is secured to a shaft 76 (62) supported in a suitable bearing of the bracket 28 (30).

The cranks 70, 72 are secured to the shafts 62, 76 respectively at their other end (Fig. 3) and the link 74 connects these cranks so that rotary movement of the shaft 62 will affect a similar movement of the shaft 76, causing the bottom plates 52, 54 to move up and down. The movement of these bottom plates funnels cigars from the hopper into a vertical guide chute 92 consisting of side plates 84, 86 mounted on bars 88, 90 respectively and front end strip 104 (Fig. 1). The bars 88, 90 are adjustably held against plate 32 by screws passing through enlarged holes 94.

The bottom cigar in the chute 92 rests on the receiving trough-like arm 103. Referring to Figs. 2 and 6, the receiving arm 103 has integral legs 106, 108 pivotally supported on pins 110, 112, which are mounted in integral bearing lugs of the base 20.

The arm 103 is operated by pin 114 extending into the leg 106 and engaging a slot 116 in a block 118, adjustably mounted on a piston rod 120. The rod 120 is supported in a suitable bore of the base 20. The compression spring 124 bearing against the piston 122 moves the receiving arm to the position illustrated in Fig. 5. A pin 126, whose movement will be later described, moves the piston against spring 124.

There is also secured to the shaft 62 a crank arm 132 having on its free end a roller 134. This roller is held in engagement with the top of vertical sliding rack 136 by a tension spring 133 anchored on its one end to the rack and its other end to the arm 132. The rack 136 is slidably supported by two tracks 138, 140 mounted on bearing bracket 30. The rack 136 drives a pinion gear 146 secured to one end of shaft 148 freely supported in suitable bearings of bracket 30. A gear 150 mounted on the other end of the shaft 148 engages a horizontally sliding rack 152 mounted to slide on the base 20 in a track 156 formed by bar 154 and the bracket 30. Attached to the mid-portion of the rack 152 is a bracket 158 adjustably supporting the pusher arm or finger 160.

The entire movement of my new cigar feed is taken from an already existing reciprocating carriage 172 on a track 174 and activated by a cam lever 178 to which it is connected by the link 176. This carriage is normally used to carry binder cutter rollers similar to those dis-

closed in the patent to Wheeler 2,287,004, granted June 16, 1942. The binder cutter rollers, not shown, are removed from the carriage 172 to which the member 162 is then secured by screws. An adjustable connecting rod 164 is coupled to the member 162 by a pin 166 engaging a slot 168 in the connecting rod. The connecting rod 164 is fastened to the free end of an arm 60 secured to the shaft 62. The pin 126 is secured to the midportion of the arm 60.

As the carriage moves in the direction of the arrow in Fig. 1, the pin 166 engages the forward end of the slot 168 and the arm 60 begins to rotate in the direction of the arrow. As the arm 60 moves, two different operations start simultaneously. The shaft 62 is rotated and with it the shaft 76 by virtue of the linkage 70—74—72. The rotation of these two shafts oscillates the plates 52 and 54 through the linkage associated with the crank arms 78 and 64 respectively.

At the same time, the pin 126 moves out of contact with the head of piston 122, and the spring 124 urges the piston forward so that the block 118 will move from the position shown in Fig. 4 to that of Fig. 5.

This movement is arrested by the adjustable stop screw 180 contacting the base 20 as shown in Fig. 5. As the block 118 moves to its new position the pin 114 moves the receiving arm 103 and the cigar therein to a position directly in line with the pusher arm 160 as shown in Fig. 5.

Referring to Figs. 4 and 5 it will be seen that as the receiving arm 103 pivots to its new position, the plate 182 adjustably secured to said arm moves beneath the chute 92 to support the cigars therein. Meanwhile, shaft 62 is rotating so that the arm 132 moves its roller 134 away from the rack 136. Because of the tension of the spring 133, the rack 136 will follow the roller upwards as indicated by the arrow in Fig. 3. This movement, by means of the gears 146 and 150, advances rack 152 and the pusher arm 160 attached thereto.

Referring to Fig. 6, further movement of the arm 60 causes the pusher 160 to move the cigar from arm 103 through a U-shaped channel formed by side plates 192 and 194 and bridge block 190 secured to side bar 154. During this movement of the cigar from the receiving arm 103 the upper retaining plate 188 secured to plate 86 prevents any tendency of the cigar to move upward, rather than forward, under the compulsion of the pushing arm 160.

The pusher arm 160 continues its motion until the cigar has moved through the channel and onto the delivery arm 196 to come to rest as shown in Fig. 6 at dotted position I. The motion of the transfer rack 152 is then arrested when the pin 184 (Fig. 2) contacts the end of a slot 186 in the side bar 154. During the remaining motion of the arm 60, the tension spring 133 yields as the rack 136 cannot then follow its roller 134.

As the arm 60 continues to rotate the shaft 62, an adjustable stop screw 198 threaded in an integral extension of the crank arm 70 contacts and pushes bar 200 (Fig. 7) pivoted to one end of delivery arm 196. The latter arm is freely mounted on a pin 202 held by the bracket 28. As the arm 60 reaches the limit of its travel, the delivery arm 196 with the cigar on it will lift the same from the position I shown in Fig. 6 to the dotted line position II. As the cigar is elevated to position II the head end is located in a predetermined position by contact with the short leg of an L-shaped guide 206 mounted in a block 204 secured to plate 194 (Figs. 2 and 3).

At this point, the transfer mechanism T of the cigar machine dwells in the position illustrated in Figs. 6 and 7. This transfer mechanism consists of the stationary jaw 208 secured to the shaft 210 and movable jaw 212 supported by a pin 214 in the stationary jaw 208.

A compression spring 220 is mounted in a position to close the movable jaw 212 held open by a latch 216 as shown in Fig. 7. As the bar 200 reaches the end of its

stroke, the cigar is moved by the delivery arm into the jaws of the transfer mechanism T.

The bar 200 is also pivotally connected to one end of a lever 222 pivoted on a pin 224 and carrying a finger 228 on its free end. As the bar 200 reaches the end of its stroke and the delivery arm 196 raises the cigar into the jaws of the transfer mechanism, the finger 228 trips the latch 216 so that the transfer jaws may close under the compulsion of compression spring 220.

As the carriage 172 returns toward the position shown in Fig. 1, the arm 196 with its associated linkage is returned by the spring 230 to the receiving position against the adjustable stop screw 234 in the bridge block 190.

The pusher arm 160 returns to its original position as the roller 134 contacts the upper edge of the rack 136 through the gear train previously described. Receiving arm 103 moves back to its receiving position (Fig. 1) as the returning pin 126 re-engages the piston 122.

The return movement of the arm 60 itself is finally arrested when an adjustable stop screw 130 mounted on one end of the pin 126 contacts the edge of the base 20, as shown in Fig. 3.

During the return stroke of the carriage 172 the position of the pin 166 with respect to the slot 168 in connecting rod 164 is maintained under the influence of spring 170. However, as the stop screw 130 arrests the return movement of the arm 60 the spring yields and the pin 166 moves in the slot 168 until the carriage 172 completes its return stroke as shown in Fig. 1.

With the cigar in the transfer T, the transfer arm 236 is rotated by shaft 238 by means not shown to the dotted line position of Fig. 7. The crimper jaws close on the cigar thereby locating the cam piece 240 in the path of a screw 242 threaded in one end of the jaw 212. As the arm 236 starts to return, a screw 242 rides on the cam piece 240 to open the jaw 212 whereupon the latch 216 drops back into latching position and the cigar is released into the crimper jaws. The crimper jaws may, of course, be adjusted so as not to crimp, if so desired.

Referring to Fig. 8, the relative position of these various units of a cigar machine is illustrated. The hopper H and the feed mechanism are mounted on the bed of the machine adjacent the binder die turret B and in front of the transfer T. The crimper K is located between and slightly to the right of the feed mechanism and the transfer T.

After the cigar is placed in the crimper K, the jaws of the crimper open and another transfer arm 244 removes the cigar and forwards it to a wrapping device W, such as is disclosed in the patent to Durning 2,290,171 granted July 21, 1942. Here the cigar wrapper cut on die 246 of the wrapper turret D by the cutting rollers E is forwarded on carrier 248 to the wrapping station W where it is wound around the cigar C.

Cigar transfer arm 250 then moves the wrapped cigar C' to re-roll device R where the wrapper is smoothed. It then continues through the machine to the discharge station after trimming and knurling by means not shown.

This invention is designed principally for re-wrapping cigars having defective wrappers. The defective wrappers may or may not still be on the "cigar." Accordingly, the terms cigar, cigar bunch or unfinished cigar as used herein and in the claims shall include such defective cigars or cigar bunches.

What I claim is:

1. A device, suitable for attachment to a cigar machine having at least one reciprocating part movable each time a cigar is operated upon by said machine, said device comprising a hopper for loosely stacking unfinished cigars and means operable when moved to carry one cigar from said hopper, a ram movable along said means to longitudinally feed a cigar from said means, said reciprocating part being the prime mover for said means and said ram whereby said device may be attached to a cigar machine to feed a cigar in time with said cigar machine.

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2. A device, suitable for attachment to a cigar machine having parts movable each time a cigar is operated upon by said machine, comprising a hopper having side and end walls and a bottom, said bottom having a slotted opening therein for discharging cigars stacked in said hopper, a chute beneath said opening to receive a single row of cigars, a substantially horizontal channel adapted to support and longitudinally guide a single cigar, carriage means adapted to transfer one cigar at a time from said chute to said channel, a finger resiliently driven along said channel and adapted to engage and move a single cigar to the discharge end of said channel, a single drive member in said device, said drive member being operatively attached to said transfer means and said finger to move said transfer means and said finger, said drive member being moved by a unitary instrumentality to deliver a single cigar, said drive member having attachment means for connection to said unitary instrumentality of said cigar machine whereby said device may be conveniently attached to a cigar machine and operated therefrom.

3. A device, suitable for attachment to a cigar machine having a part that reciprocates each time a cigar is operated upon by said machine, said device comprising a hopper having side and end walls and a bottom, said bottom having movable sections, at least one of said sections being spaced sufficiently from another section to form an opening through which an unfinished cigar may be discharged during movement of said movable sections, and a mechanism operative to receive a cigar discharged through said opening and move it to a predetermined position, a pivoted lever, means to connect one end of said lever to said reciprocating part, other means to connect said lever to said transfer mechanism to operatively move it, and a crank movable about the pivot point of said lever to oscillate said bottom sections whereby said device is entirely operated from said reciprocating part of a cigar machine when said lever is secured thereto to deliver cigars in timed relation to a predetermined section of said machine.

4. An accessory device, suitable for attachment to a cigar machine, comprising a hopper for stacking a supply of cigar bunches, said hopper having adjustable side and end walls and a bottom having an opening therein sufficient to discharge a cigar bunch, agitation devices in said hopper operative to aid the passage of a cigar bunch through said opening, delivery means suitable for feeding one cigar, a channel through which cigar bunches discharged from said opening may be fed to said delivery means, and a driven member mounted to be driven from an outside source of mechanical movement, and means operatively connected to said driven member to move said agitation devices, and further means operated by said driven member to operate said delivery means.

5. A device, suitable for attachment to a cigar machine, comprising a hopper having side and end walls and a bottom having movable sections, one of said sections being spaced from an adjacent section to define an opening of predetermined size, a chute positioned beneath said opening having four side walls only, a movable cradle suitable to support a cigar bunch positioned beneath said chute, a horizontal channel, a member slidable along said horizontal channel, a positionable delivery member at the end of said channel, and driven means operatively mounted to oscillate the movable section of said hopper bottom, and to move said cradle from the bottom of said chute to said horizontal channel, and to slide said slidable member along said horizontal channel, and to position said delivery member at the end of said channel, whereby cigar bunches placed in said hopper will be agitated by the oscillation of said bottom plates to pass through said opening and be aligned in said chute, transferred one at a time by said cradle from said chute to said horizontal channel, individually moved along said horizontal channel by said slidable member and positioned on said delivery member.

6. In combination with a cigar machine having parts

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movable each time a cigar is operated upon, a cigar feed mechanism comprising a hopper having side and end walls and a bottom having movable plates separated from each other a predetermined distance greater than the diameter of a cigar to define an opening through which a cigar may pass, a substantially vertical feed chute positioned beneath said opening and adapted to receive a single column of cigars, said chute having side and end walls, a movable receiving arm having a U-shaped portion adapted to receive a cigar from said vertical chute, a substantially horizontal U-shaped channel positioned to receive a cigar from said receiving arm, a pusher finger operatively mounted to move an individual cigar along said horizontal channel, a delivery arm positioned at the end of said horizontal channel to receive the cigar moved along by said finger, a transfer claw on said cigar machine, means to position said delivery arm so said cigar may engage the transfer claw of said cigar machine while it is open, means on said delivery arm operative to close said transfer claw as it engages said cigar, a connecting link connected to said movable parts of said cigar machine, means, engaged by said connecting link, operative to oscillate said bottom plates to re-position cigars in said hopper and to move said receiving arm and said pusher finger and said delivery arm in timed relation to the movable parts of the cigar machine whereby said feed mechanism will deliver one cigar to said transfer claw on each cycle of said cigar machine.

7. In combination, a cigar machine having a transfer mechanism, a part movable on said cigar machine in timed relation to the cycle of said machine, a cigar feeding device operative from said movable part, said device comprising a hopper having end and side walls and a bottom comprising oscillating plates movably secured adjacent the bottom of opposing walls of said hopper, said plates being separated from each other a distance corresponding to the diameter of a cigar whereby upon oscillation of said plates cigars will pass between said plates and from said hopper, a vertical chute having side and end walls positioned beneath said hopper to receive cigars in single stacked alignment, a movable receiving arm positioned beneath said vertical chute having a U-shaped member adapted to receive one cigar at a time from said chute, a horizontal U-shaped channel positioned to receive a cigar from said receiving arm, a member positioned on said receiving arm to move beneath cigars in said vertical chute when said receiving arm moves to transport a cigar to said horizontal channel, a pusher finger slidably mounted to move along said U-shaped channel to push a cigar horizontally along and beyond said channel, a delivery arm positioned at the end of said channel having a U-shaped member co-extensive with said channel and adapted to receive a cigar moved by said pusher finger, and a single means operated by the movable parts of the cigar machine to oscillate said bottom plates and move said receiving arm, said pusher finger and said delivery arm in timed relation to said cigar machine to feed cigars to the transfer mechanism of said cigar machine.

8. In combination a cigar machine having a wrapper applying station, a cigar transfer mechanism forwardly of said wrapper applying station, said transfer mechanism having gripping means and an instrumentality thereon for operating said gripping means, a driven mechanism on said cigar machine, a cigar feeding device attached to said driven mechanism and motivated thereby, said device comprising a source of loosely stacked cigar bunches, a movable delivery member having a finger to engage the instrumentality on said transfer mechanism to close said gripping means as said delivery member moves into proximity with said transfer mechanism, means operative to feed cigar bunches one at a time from said source onto said movable delivery member, said delivery member being operatively connected to the driven member of said cigar machine so that it is moved thereby in timed relation to said transfer mechanism to close said gripping

means on a cigar delivered thereby whereby a cigar bunch is fed into said cigar machine prior to the wrapper applying station of said machine.

9. The combination with a cigar machine, of a transfer mechanism to transfer cigars one at a time, said transfer mechanism having gripping means, a trip to close said gripping means, a drive mechanism, a device for feeding cigar bunches to said transfer mechanism, said device comprising a hopper having side and end walls and a bottom comprising a sectional plate movably mounted, said plate being spaced from an adjacent portion of the bottom so as to define an opening through which a cigar bunch may pass, a channel wherein cigar bunches delivered from said opening may be aligned, a delivery arm adapted to transfer one cigar at a time from said channel to the transfer mechanism of said cigar machine, an instrument on said delivery arm to contact said trip and close the gripping means of said transfer mechanism when delivering a cigar bunch thereto, and means in said device connected to the driving mechanism of said cigar machine to oscillate said movable plate and to move said delivery arm in timed relation to said cigar machine.

10. The combination with a cigar machine having a wrapper applying station, a transfer mechanism for moving cigar bunches one by one forwardly toward said station, of a source of loosely stacked cigar bunches and means operated from said cigar machine to feed cigar bunches one at a time from said source to said transfer mechanism, said means including a bunch supporting arm movable to said transfer means, and a curved stationary cam piece operatively mounted to engage one end of said cigar bunch during movement of said arm to accurately shift said cigar bunch longitudinally in said arm and relative to said transfer mechanism during the movement of said cradle.

11. In combination with a cigar machine having parts movable each time the cigar is operated upon, a cigar feed mechanism comprising a hopper having side and end walls and a bottom, said bottom having a slot formed therein of size and configuration sufficient to pass a cigar, a feed chute wherein cigars delivered from said slot may be aligned, gate means at the end of said chute, a substantially horizontal channel positioned to receive a cigar passed by said gate means, a pusher finger operatively mounted to move said cigar along said channel, a transfer claw on said cigar machine, a delivery device positioned to receive a cigar from said channel and deliver it to said transfer claw, said transfer claw being normally open when adjacent the position of said delivery device, instrumentalities on said delivery device operative to close said transfer claw to engage a cigar delivered by said delivery means to said transfer claw when it is adjacent said delivery means, a single link connected to said movable parts of said machine, means engaged by said single link, operative to move said pusher finger and operate said delivery device in timed relation to the movable parts of the cigar machine whereby said feed mechanism will deliver one cigar to said transfer claw on each cycle of said cigar machine.

12. The combination with a cigar machine having a wrapper applying station, a transfer mechanism positioned before said wrapper applying station to transfer cigars one at a time toward said wrapper applying station, said transfer means having gripping means, of a device for feeding cigar bunches to said transfer mechanism, said device comprising a hopper having side and end walls and a bottom comprising a sectional plate movably mounted, said plate being spaced from an adjacent portion of the bottom so as to define an opening through which a cigar may pass, gate means operative to control the passage of cigars through said opening, a delivery device positioned to receive a cigar from said opening and deliver it to said transfer mechanism, gripping means on said transfer claw being normally opened when adjacent said delivery device, instrumentalities on said de-

livery device operative to activate said gripping means, and at least one link connected to the driving mechanism of said cigar machine to oscillate said movable plate, and to operate said gate means and said delivery device in timed relation to said cigar machine.

13. The combination with a cigar machine having a wrapper applying station, a transfer mechanism positioned before said wrapper applying station to transfer cigars one at a time toward said wrapper applying station, said transfer means having gripping means, of a device for feeding cigar bunches to said transfer mechanism, said device comprising a hopper having side and end walls and a bottom comprising a sectional plate movably mounted, said plate being spaced from an adjacent portion of the bottom so as to define an opening through which a cigar may pass, gate means operative to control the passage of cigar bunches through said opening, a channel positioned to receive a cigar from said gate means, a delivery device positioned to receive a cigar from said channel and deliver it to said transfer mechanism, gripping means on said transfer claw being normally opened when adjacent said delivery device, instrumentalities on said delivery device operative to activate said gripping means, and at least one link connected to the driving mechanism of said cigar machine to oscillate said movable plate, and to operate said gate means and said delivery device in timed relation to said cigar machine.

14. The combination with a cigar machine having a wrapper applying station, a transfer mechanism positioned before said wrapper applying station to transfer cigars one at a time toward said wrapper applying station, said transfer means having gripping means, of a device for feeding cigar bunches to said transfer mechanism, said device comprising a hopper having side and end walls and a bottom comprising a sectional plate movably mounted, said plate being spaced from an adjacent portion of the bottom so as to define an opening through which a cigar may pass, gate means operative to control the passage of cigar bunches through said opening, a channel positioned to receive a cigar from said gate means, a pusher finger operatively mounted to push a cigar along said channel to said transfer mechanism, gripping means on said transfer claw being normally opened when adjacent said channel, instrumentalities operative to activate said gripping means, and at least one link connected to the driving mechanism of said cigar machine to oscillate said movable plate, and to operate said gate means, said fingers and said instrumentalities in timed relation to said cigar machine.

15. The combination with a cigar machine having a bunch transfer mechanism to transfer cigar bunches to a subsequent station, said transfer mechanism having cigar bunch gripping means and instrumentalities for moving said means into gripping position, of a device for feeding cigar bunches to said transfer mechanism, said device comprising a hopper wherein cigar bunches may be loosely stacked, implement means operative to remove cigar bunches one at a time from said hopper, delivery means to deliver said bunches to said transfer mechanism of said cigar machine, said delivery means including a device movable to operate said instrumentalities of said gripping means to move said gripping means in gripping position as said delivery means delivers said bunch to said transfer mechanism.

16. In combination with a cigar machine having a drive mechanism, a cigar bunch feeding device operated from said machine, said device comprising a loosely stacked source of supply of cigar bunches, a unitary driven member in said device operatively connected to the driving mechanism of said machine, said machine including a mechanical transfer having gripping elements, said device having means driven from said driven member to positively move cigars one by one from said source of supply to said mechanical transfer, said means having

a member movable to engage said mechanical transfer to operate its gripping elements.

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