J. H. GREER.

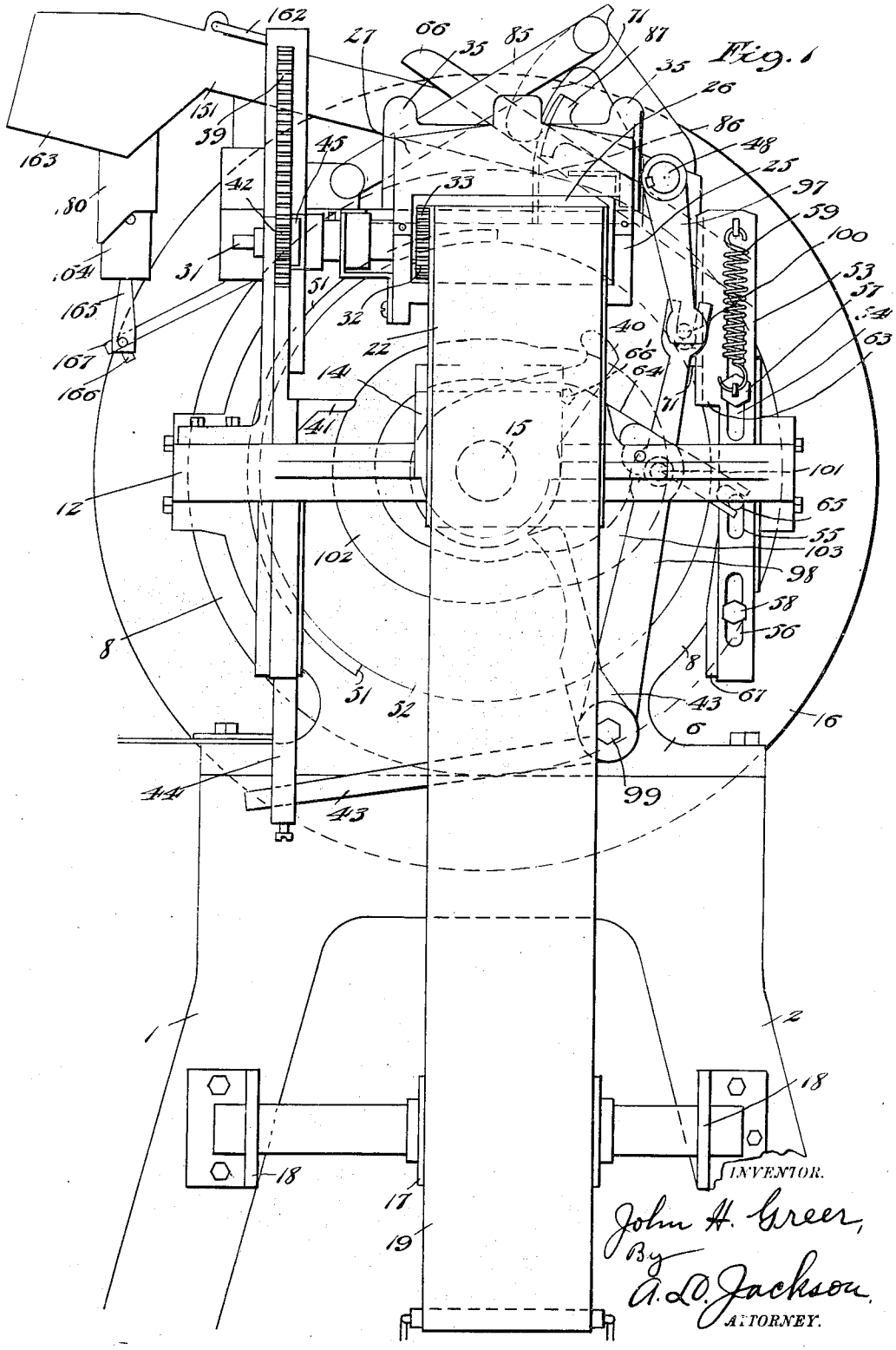
CANDY WRAPPING MACHINE.

APPLICATION FILED JAN. 3, 1916.

1,272,799.

Patented July 16, 1918.

8 SHEETS—SHEET 1.



J. H. GREER.

CANDY WRAPPING MACHINE.

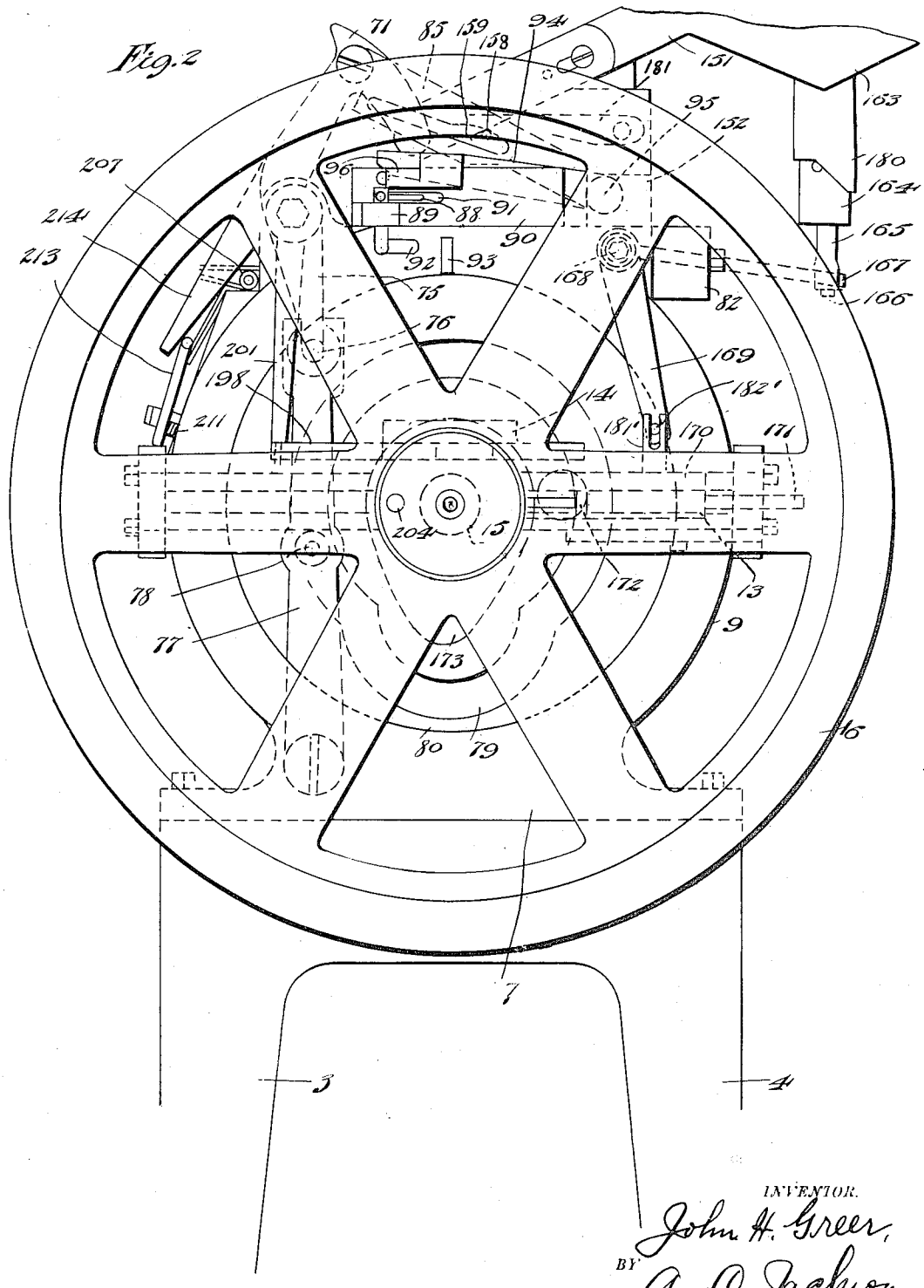
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8 SHEETS—SHEET 2.

Fig. 2



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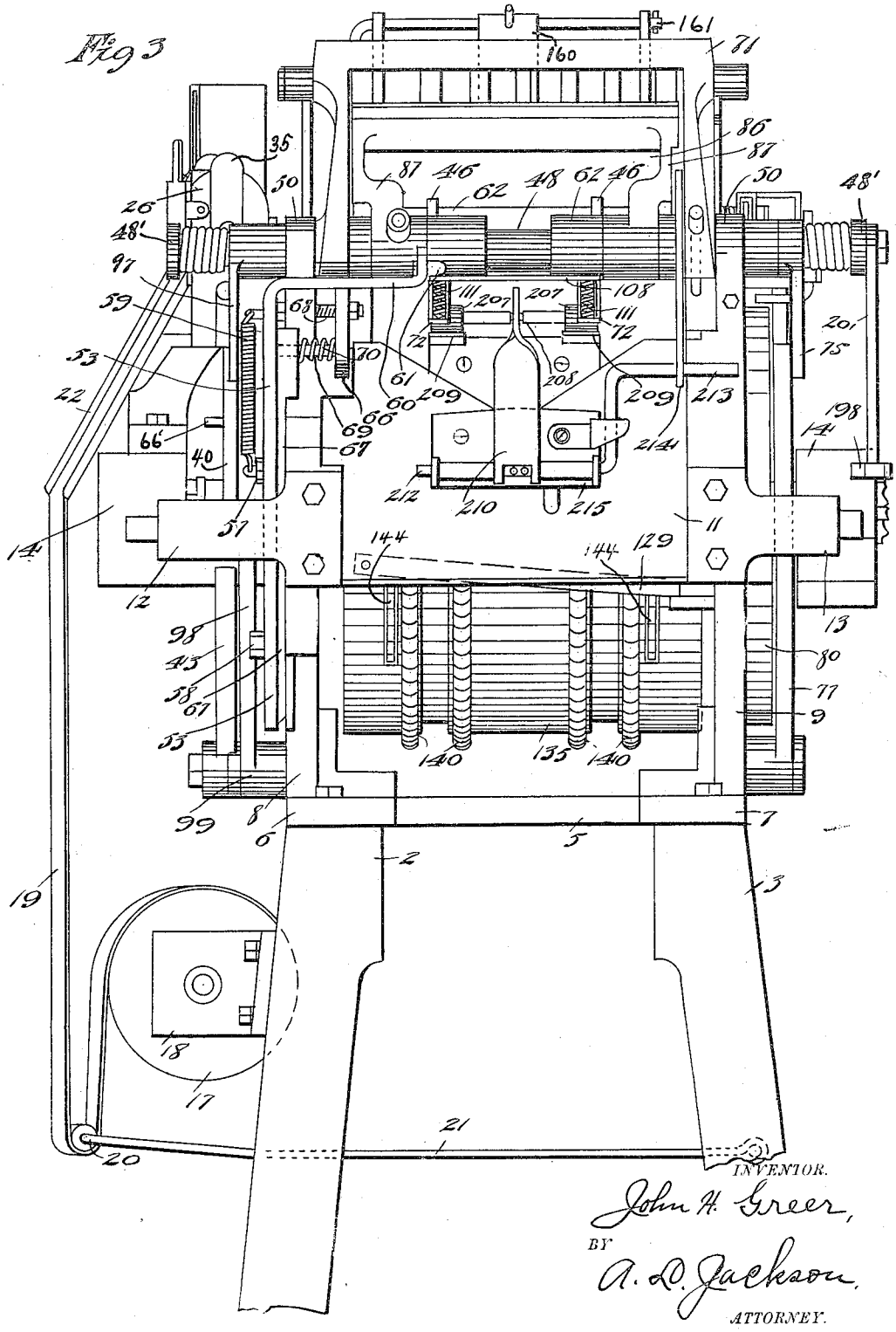
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8 SHEETS—SHEET 3.

Fig 3



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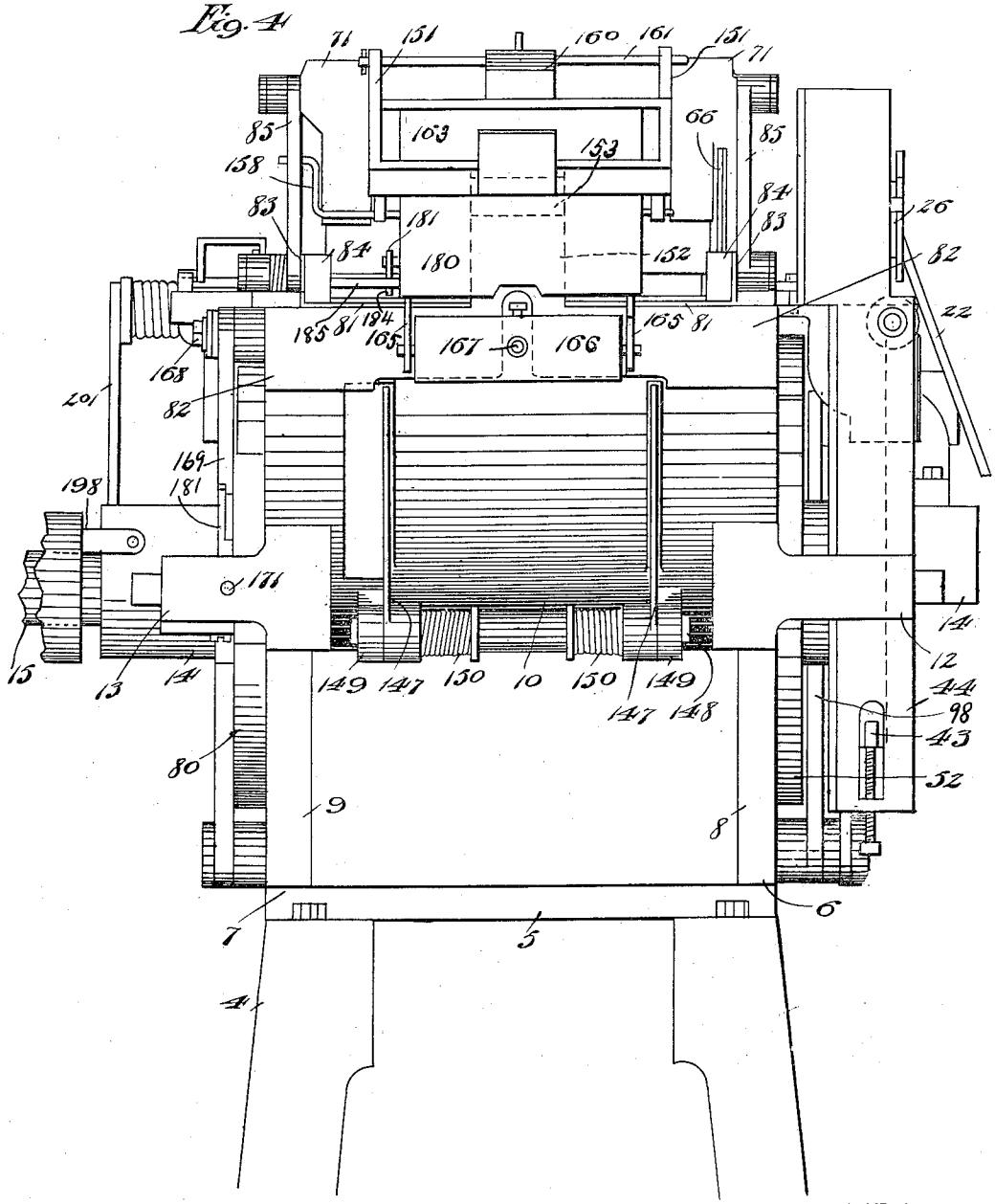
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8 SHEETS—SHEET 4.

Fig. 4



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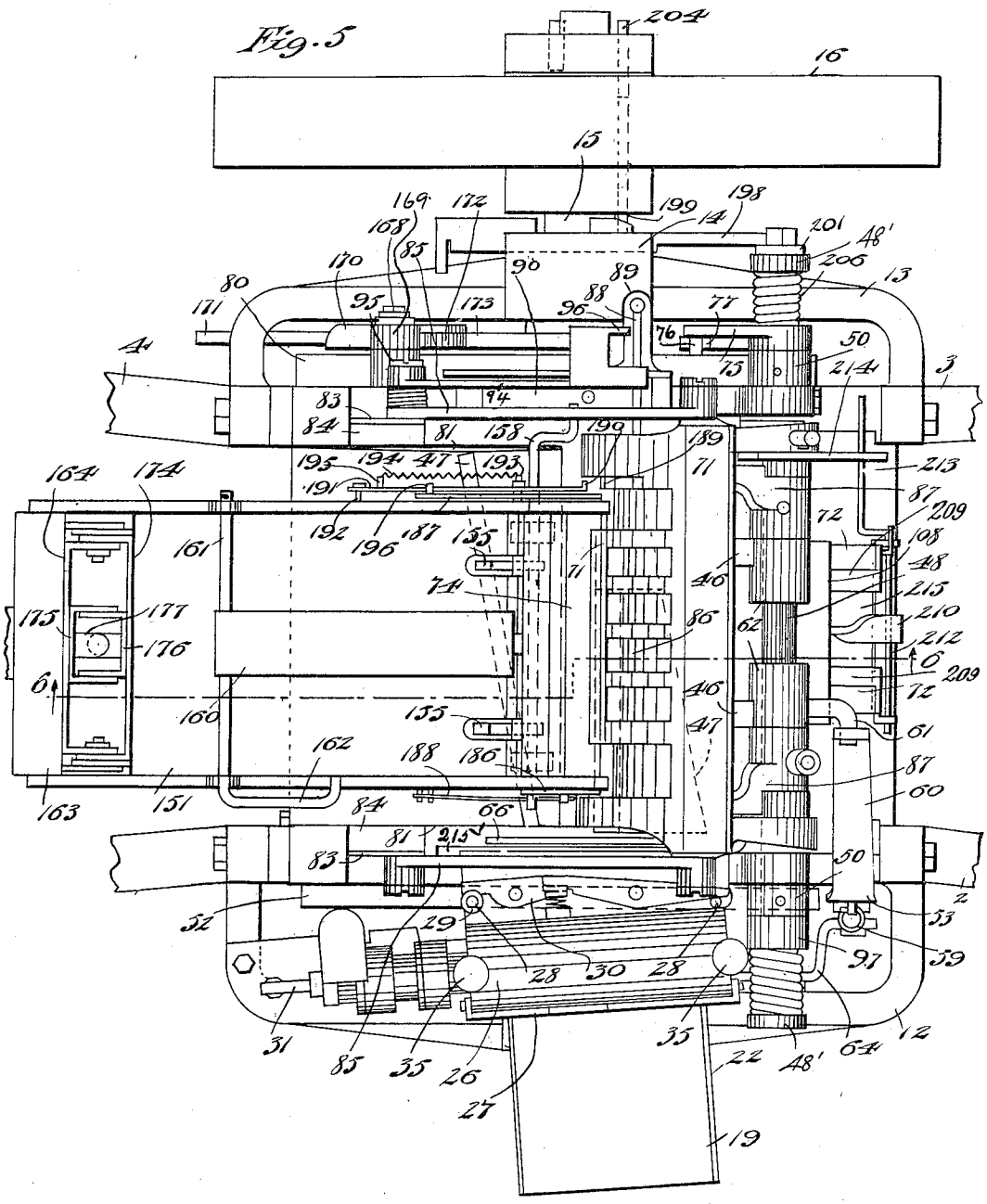
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8 SHEETS—SHEET 5.

Fig. 5



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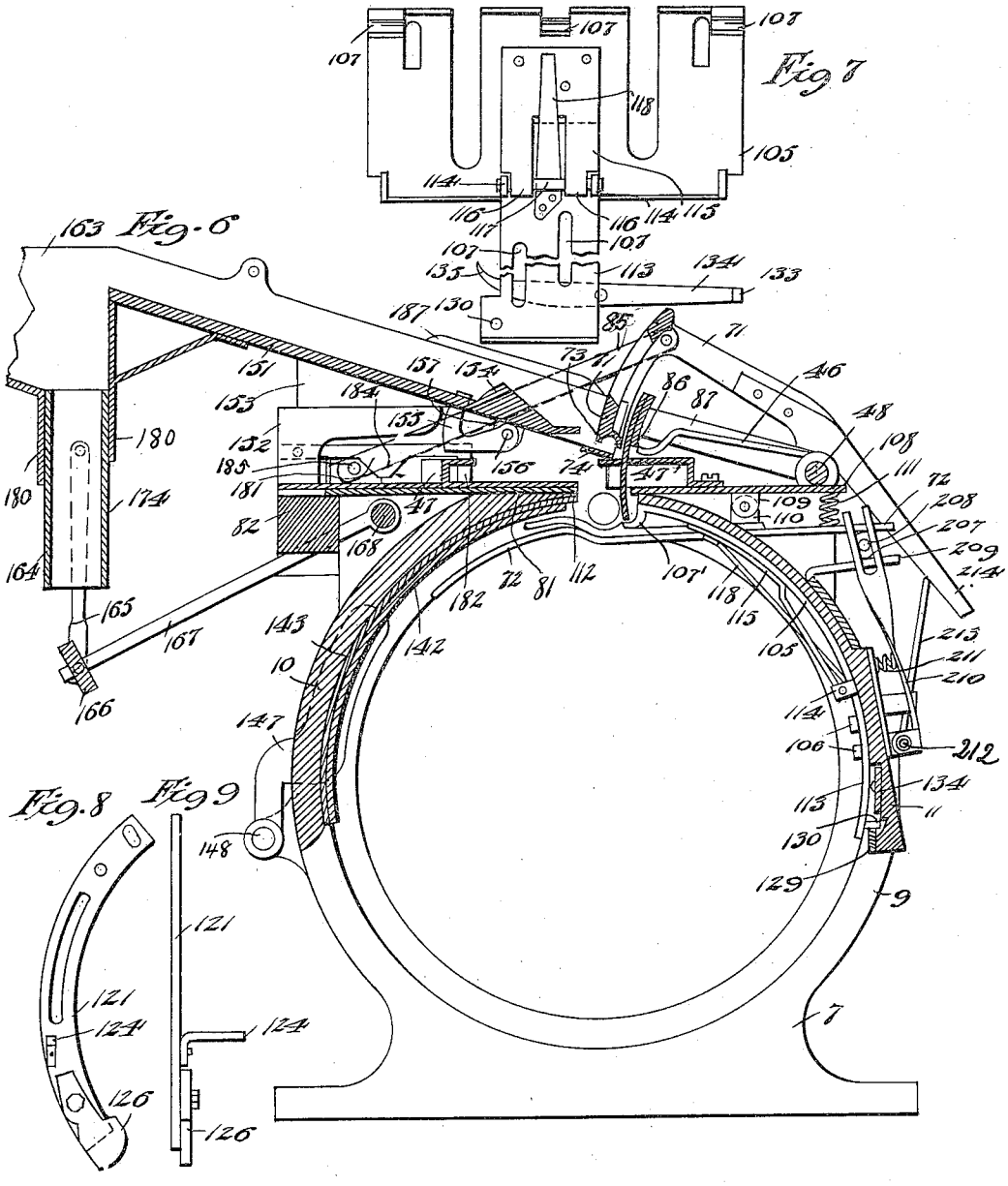
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8 SHEETS—SHEET 6.



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8 SHEETS—SHEET 7.

Fig. 10

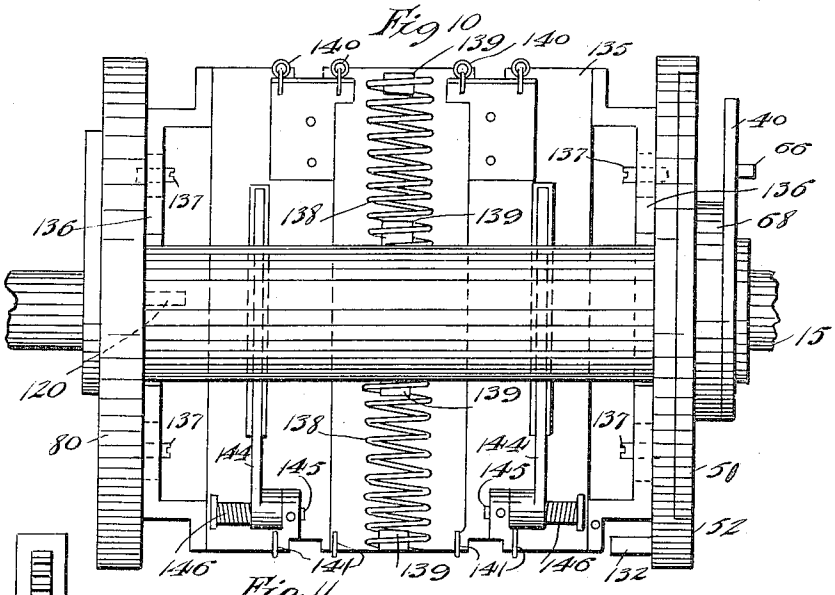


Fig. 11

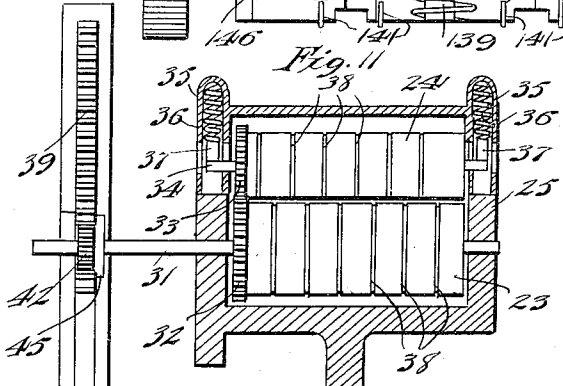
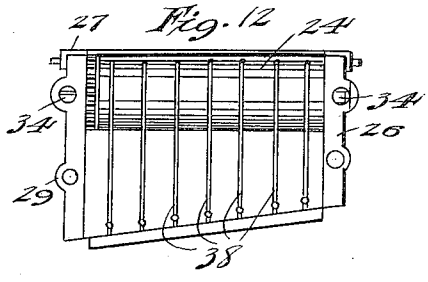


Fig. 12



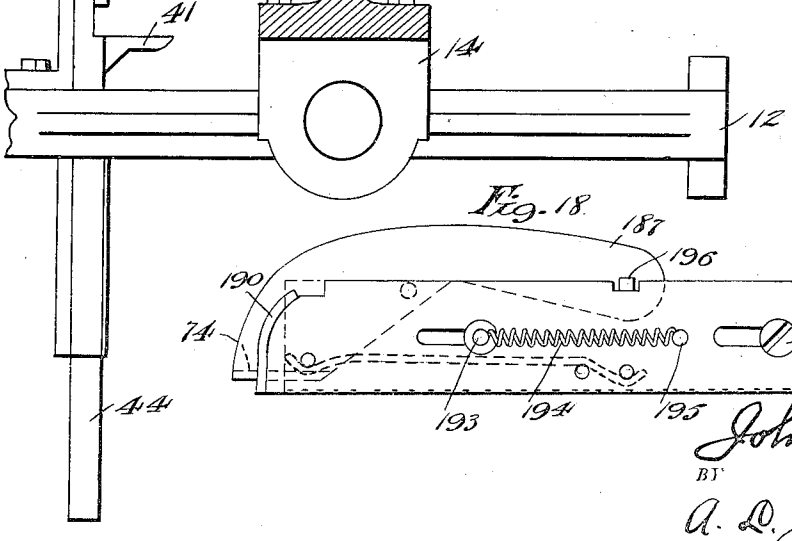


Fig. 18

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Patented July 16, 1918.

8 SHEETS—SHEET 8.

Fig. 13

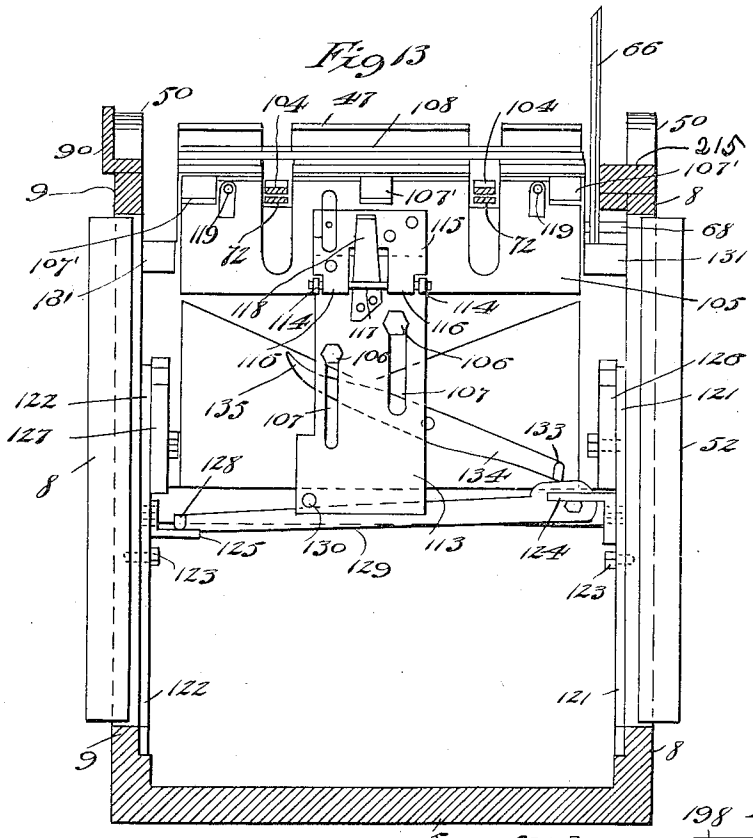


Fig. 15

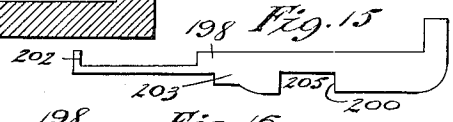


Fig. 16

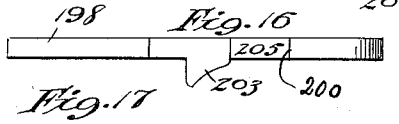


Fig. 14

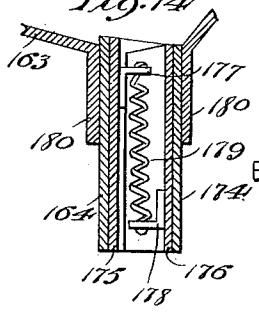
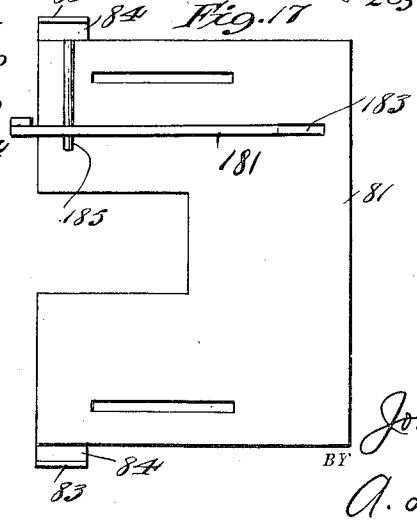


Fig. 17



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UNITED STATES PATENT OFFICE.

JOHN H. GREER, OF FORT WORTH, TEXAS.

CANDY-WRAPPING MACHINE.

1,272,799. Specification of Letters Patent. Patented July 16, 1918.

Application filed January 3, 1916. Serial No. 69,921.

To all whom it may concern:

Be it known that I, JOHN H. GREER, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Candy-Wrapping Machines, of which the following is a specification.

My invention relates to wrapping machines and particularly to machines which will wrap small articles of goods; and the object is to provide a machine which will automatically feed the articles to be wrapped to the wrapping mechanism, which will feed the wrapping paper to the machine, cut the paper into proper lengths, place the paper about the article to be wrapped, and secure the wrapping paper on the article to be wrapped; and to provide a machine which will wrap paper and secure the paper on sticks of candy, cigars, and other articles of merchandise. Another object is to provide a machine which will wrap the articles with great rapidity for the purpose of avoiding loss of time and expenses. Another object is to provide a machine which can be operated by any suitable power and which will not need the constant attention of an operator. Other objects and advantages will be fully explained in the following description and the invention will be more particularly pointed out in the claims.

Reference is had to the accompanying drawings which form a part of this application.

Figure 1 is a side elevation of the right side of the machine, portions of the lower part of the frame being broken away. Fig. 2 is a similar view of the left side of the machine. Fig. 3 is a rear elevation of the machine. Fig. 4 is a front elevation of the machine. Fig. 5 is a plan view of the machine. Fig. 6 is a vertical section of the working mechanism in part and a portion of the frame, taken on the line 6—6 of Fig. 5. Fig. 7 is an interior view of the shifting mechanism. Fig. 8 is a face view of one of the shifting brackets and Fig. 9 is an edge view of the same. Fig. 10 is an interior view of the rolling plate. Fig. 11 is a vertical section of the casing which contains the wrapping paper feed rollers, showing the rollers and the gearing for operating the rollers. Fig. 12 is a bottom plan view of the upper feed roller. Fig. 13 is a vertical section of the bearing frame, showing the interior candy shifting mechanism. Fig. 14 is a vertical section of the reciprocating feeding plunger. Fig. 15 is a plan veiw of a bar which effects the release of the power wheel from the main shaft. Fig. 16 is a side elevation of the same. Fig. 17 is a plan view of the folder. Fig. 18 is a side elevation of a locking bar.

Similar characters of reference are used to indicate the same parts throughout the several views.

The machine herein set forth is provided with mechanism for feeding the goods to the machine; mechanism for feeding wrapping paper to the machine, mechanism for guiding the goods to be wrapped in position to be wrapped; mechanism for clamping the sheet of wrapping paper in place to receive the article to be wrapped; a blade and mechanism for operating the blade to cut the sheet of paper of the correct length; mechanism for pressing the candy or other article to be wrapped down in position to be wrapped; mechanism for yieldingly holding the stick of candy in position until the wrapping operation begins; mechanism for folding the paper on the stick of candy; mechanism for tucking the paper about the candy stick; mechanism for shoving the candy stick from the yielding holders; mechanism for rolling the candy stick; and mechanism for securing the paper on the candy stick.

The machine is provided with a rigid supporting frame, having legs 1, 2, 3, and 4, the upper parts of the frame being connected by a cross bar 5 which is an integral part of the main frame. The main frame has base members 6 and 7 which are bolted to the supporting frame. The main frame has circular bearing members 8 and 9 which are integral with the base members 6 and 7 and which are connected by irregular shaped members 10 and 11 and which are integral with the end or bearing members 8 and 9. Bearing yokes 12 and 13 are bolted to the main frame and carry the bearings 14 for the main shaft 15. The shaft 15 is driven by a power pulley 16. All the operating mechanism is actuated from the main shaft 15.

Means are provided for feeding the wrapping paper to the machine. A spool 17 is journaled in bearings 18 which are bolted to the legs 1 and 2. The sheet of paper 19, when leaving the spool 17, passes down under an

idler 20 which is swingingly mounted in a bracket 21 which is pivotally mounted on the main frame. The object in passing the paper under the idler 20 is to regulate the feeding of the paper to the machine. The paper might be torn by sudden jerks unless there is a provision for a yielding motion of the paper when the mechanism starts to feed the paper for each wrapping operation. The paper 19 passes up a chute 22 and then to feed rollers 23 and 24 which are journaled in a bearing casing 25 and 26. The feed roller casing is a casting in two parts, the lower part 25 being attached to the bearing casting 14 and being provided with upstanding lugs 28 integral therewith. The part 26 is detachably mounted on the part 25. The part 26 has a flange through which the lugs 28 pass and also has a boss 29 through which one of the lugs 28 passes. A spring actuated lever catch 30 operates through the slot in the boss and engages the notch in the lug 28 to hold the lug within the boss. The shaft 31 carries a spur gear wheel 32 rigid therewith and this spur gear wheel drives a spur gear wheel 33 which is rigid with the shaft 34 of roller 24. The roller 24 is held yieldingly on the paper 19 as the paper passes between the rollers. The casing 26 has upward tubular extensions 35 and spiral springs 36 are mounted in these extensions and bear against blocks 37 which bear against the shaft 34. Small wires 38 guide the paper 19 through the paper feeding rollers and the accompanying mechanism. The shaft 31 is driven by a rack 39 and the rack 39 is actuated by the arm 40 on shaft 15 which, in Fig. 1, turns opposite the hands of a clock and the arm 40 engages the lug 41 and forces the rack 39 downwardly to drive the pinion 42 which is rigid with shaft 31 on the down stroke. The same arm 40 restores the rack 39 to normal or elevated position by actuating a ball-crank lever 43 which is pivoted on the machine frame and which engages the lower end 44 of the rack 39 and forces the rack back upwardly. The pinion 42 is provided with an ordinary dog and ratchet 45 for locking the pinion to the shaft 31 on the downward movement of the rack and for releasing the pinion 42 from shaft 31 on the upward movement of the rack 39. The rack 39 during each operation drives the rollers 23 and 24 enough to feed the required length of paper. The rack 39 is actuated once during each revolution of the shaft 15.

The next operation of the machine is to clamp the paper in place and this is accomplished by the fingers 46. The paper 19 runs in a guide 47 which is placed at an angle across the machine. The fingers 46 are rigid with the rocker-shaft 48, which is journaled in bearings 50 which are integral with the frame pieces 8 and 9. The shaft 48 is rocked by the following described elements: A cam 51 is rigid with a disk 52 which is rigid with the shaft 15. A bracket 53 is slidably mounted on the frame piece 8. This bracket has slots 54, 55, and 56 for bolts 57 and 58 and a stud 65 and the bracket 53 is held against displacement by the heads of bolts 57 and 58 and held in the elevated position by a spiral spring 59. The bracket 53 has an arm 60 which is pivotally engaged by a bent lug 61 which is rigid with shaft 48 and sleeves 62. The fingers 46 are clamped down on the paper when the cam 51 is revolved and engages the shoulder 63 and lifts the bracket 53. The bracket 53 will move by reason of the slots 54, 55, and 56. The bracket will be drawn back to normal position by the spiral spring 59.

The paper cutter 66 will be actuated by the same cam 51. A slidable bracket 67 is mounted between the bracket 53 and the frame 8 and moves on the bolt or studs 57 and 58. The cutter 66 is fulcrumed on a stud 68 and is connected with the bracket 67 by a bolt 69 and held in position by a spiral spring 70, the bracket 67 being slotted to permit the necessary movement of the bolt 69 relative to the bracket 67. The cam 51 will first act on the shoulder 63 and throw the fingers 46 down on the paper and then on further movement the cam 51 will engage the lug 71 on the bracket 67 and move this bracket which operation will actuate the blade or cutter 66 by means of bolt 69. The cutter 66 is brought back to inoperative position by a lever 64 which is fulcrumed on the yoke 12. The lever 64 has a slotted end which engages a stud 65 which is rigid with bracket 67 and projects through the slot 55 in bracket 53. The arm 40 by means of a lug 66′ will engage the other end of the lever 64 and this will force the cutter back to inoperative position. A block 215′ is rigid with the frame 8 for coöperating with the blade 66 to shear the wrapping paper.

Immediately following the cutting of the paper and before the fingers 46 leave the paper, the feeder 71 operates to force a stick of candy down on the paper so that the paper will not be displaced while the candy stick is being carried down and deposited on the yielding fingers 72. The feeder which is pivotally mounted on the rocker shaft 48 consists of an angular frame 71 having a curved edge 73 for engaging a stick of candy which has been temporarily deposited on the swinging holder 74. A crank 75 is rigid with the frame 71 and is provided with a stud 76 rigid therewith and which stud engages the slotted end of the lever 77 which is fulcrumed on the frame 9. The lever 77 is provided with a stud 78 which projects into a cam groove 79 in the disk 80. When the disk 80 is revolved, the lever 77 will, by means of the cam in groove 79, rock the

feeder 73 downwardly to force the candy down on the supporting fingers 72,—the forward outward curve in the groove 79 forcing the feeder downward and the rear inward part of the curve bringing the feeder back to normal or inoperative position and reciprocating the folder hereinafter described.

A folder 81 is automatically operated by the movement of the feeder 71. The folder consists of a flat piece of metal which moves or is reciprocated on the frame 10. At the forward end of the folder 81, portions of the metal of the folder are bent upwardly at right angles to the plane of the folder and bearing blocks 84 are attached thereto. Link bars 85 are pivotally connected to the blocks 84 and to the feeder 71 so that when the feeder is moved the folder 81 will be reciprocated. The folder shoves one edge of the wrapping paper over the stick of candy. A vibratable arm 88 is pivotally mounted in a lug 89 which projects from a bracket 90 which is bolted to frame 9, the bracket 90 having a slot 91 for the movement of arm 88. The arm 88 is operated by a crank 92 below the lug 89. A lug 93 is rigid with the disk 80 and this lug 93 actuates the arm 88 every time the disk 80 revolves once. The arm 88 is brought back to starting position by the lug 93. The arm 94 is pivotally connected to the pivot bolt 95 of the link bar 85. The bracket arm 94 has a lug 96 which engages the arm 88 to assist the folder 81 by preventing the paper from bending backwardly while being folded. The arm 88 prevents the sheet of paper from bending backwardly when the folder is operating the paper to fold the paper over the stick of candy.

The next operation of the machine is tucking the paper down on one side of the stick of candy to start the wrapping. The tucker consists of a frame 87 and a curved metal plate 86 carried thereby. A crank 97 is rigid with the frame 87 which is pivotally mounted on the shaft 48. A lever 98 is fulcrumed on the frame 6 at 99 and the upper end of lever 98 is slotted to receive stud 100 which is rigid with crank 97. A spiral spring 97′ bears against the crank 97 to hold the same in place and a collar 48′ holds spring 97′ in place. A stud 101 is rigid with the lever 98 and projects into a cam groove in the disk 52. There are two cams 102 and 103 in the groove in disk 52 and the object is to cause two motions of the crank 97 on each revolution of the disk 52,—one motion greater than the other. The tucker plate 86 is used both as a tucking device and as a guard for the candy. When the candy falls down on the temporary support 74, the feeder 73 has not been brought low enough to stop the candy and keep the candy from falling on the paper 19 too soon. Cam 102, being the smaller cam, will operate the crank 97 and this crank will cause the plate 86 to swing downwardly until the lower edge of the plate is about even with the support 74. The plate 86 will hold the candy in position until the feeder 73 is actuated to press the candy down on the paper. The outward curve in the cam 102 causes the plate to move to this position and the inward curve of the cam 102 will bring the plate or tucker plate 86 back to normal position. This describes one function of the plate 86. The cam 103 will, after the folder 81 has folded the paper, cause the crank 97 to bring the tucker 86 to the position shown in Fig. 6 and thus tuck the paper down by the side of the stick of candy before the stick of candy is to be rolled for wrapping purposes. The cam 103 will thus cause a greater movement of the tucker plate 86.

After the paper 19 has been tucked down about the candy, the candy is ready to be rolled for wrapping the paper entirely around the candy and also for twisting the paper at the ends of the candy. The candy is lying on the yielding fingers 72. A shifting plate 105 is slidably mounted on the interior of the machine frame and is held in place by two bolts 106 which are screwed into the frame and slots 107 are made in the plate so that the plate can be shifted. This plate 105 has three curved lugs 107′ for engaging the candy to move the same along on the fingers 72. The fingers 72 are pivotally mounted on a plate 108 which is mounted rigidly on the machine frame. Lugs 109 project down from plate 108 and lugs 110 project up from the fingers 104 and lugs 109 and 110 are pivotally connected together. At the rear ends of the fingers 72, spiral springs 111 hold the fingers 72 and the plate 108 yieldingly apart so that the fingers 72 may be pressed down toward the front to let the candy pass under the frame at 112. The fingers 72 are made yielding also for adjustment to different sizes of candy. The plate 105 is made yielding by its pivotal connection with the lower part 113. Pivot lugs 114 are struck up from part 113. A plate 115 is riveted to the plate 105 and tongues 116 are struck from plate 115 and curved to form bearings. A pivot shaft or bolt 117 connects the lugs 114 and bearings 116. A spring tongue 118 is attached to the part 113 and bears against the plate 105 and tends to hold the plate 105 yieldingly in place, allowing the plate 105 to adjust itself to sticks of candy of different sizes. Just after the lugs 107 engage the candy and is forcing the candy under the frame at 112, the plate 105 must yield downwardly slightly to prevent the paper from slipping on the candy. Two pins 119 which are rigid with the frame are used to force the plate 105 downwardly at the proper time and the spring tongue 118

will return the plate 105 to its proper position.

The plate 105 is shifted by the turning of the main shaft 15 and the disks 52 and 80. A lug 120 is rigid with disk 80. Curved shifting brackets 121 and 122 are mounted on the machine frame and slotted and held against displacement by stud bolts 123. Lugs 124 and 125 are rigid with brackets 121 and 122 respectively. Dogs 126 and 127 are pivotally mounted on the brackets 121 and 122 respectively. When the disks are revolved, the lug 120 will engage dog 127 and this operation will cause the lug 125 to engage a lug 128 on a lever 129 which is fulcrumed on the interior of the frame of the machine. The part 113 of the shifting plate 105 has a pin 130 projecting in the path of the lever 129. By this arrangement the plate 105 is shifted to perform its function. The dog 127 is held in engagement with the lug 120 by the interior wall of the machine until time for the dog to be released from the lug 120. The machine frame is cut away at 131 on both sides. When the dog reaches the cut out 131, it will drop outwardly in the cut-out and release the lug 120 and the plate 105, having reached the end of its beat, is ready to be shifted back to starting position. A lug 132 is rigid with disk 52 and is farther around on the disk 52 than the lug 120 is positioned on disk 80 so that the lug 132 will engage the dog 126 just as the dog 127 releases the lug 120. The lug 132 will shift the bracket 121 and the lug 124 will engage a lug 133 rigid with a lever 134 which is fulcrumed on the interior of the machine frame. The lever 134 will be actuated and the end 135 will strike the pin 130 and thus throw the shifting plate 105 back down to starting point. The operations described in this paragraph place the candy in position to be rolled.

The candy is rolled by a segmental rolling plate 135 which is carried by the disks 80 and 52. The plate 135 is cut away at each end to form passageways for the lugs 120 and 132 and the dogs 126 and 127. The plate 135 has inwardly projecting flanges 136 and lugs 137 are rigid with the disks 80 and 52. The flanges 136 are slotted so that the rolling plate 135 will have a limited movement relative to the disks 80 and 52, the slots in the flanges being indicated by dotted outline on each side of each lug 137. The disks 80 and 52 are rigid with the shaft 15 and spiral springs 138 are used to connect the plate 135 to the shaft 15. Lugs 139 are formed on the shaft 15 and on the plate 135 and the springs 138 are attached to the lugs 139. The plate 135 is provided with rubber bearings 140 which are attached to the periphery of the plate 135 by small wires 141 which run through the rubber 140. The rubber bearings 140 roll the candy against a felt pad 142 which is mounted on the interior of the frame by means of a sheet metal holder 143 and discharge the candy at the lower side of the frame 10.

Means are provided for twisting the candy wrapping paper at the ends of the stick of candy. The plate 135 carries yielding fingers 144 which are mounted on pivot bolts 145 which are provided with suitable bearings, and made rigid therewith. Spiral springs 146 are attached to the pivot bolts 145 and to the fingers 144 to regulate the tension of the fingers 144 to make them more or less yielding. Coöperating fingers 147 are mounted on a pivot shaft 148 which is journaled in suitable bearings 149 which are rigid with frame 10. Spiral springs 150 are attached to the shaft 148 and to the bearings of fingers 147 to make the fingers 147 more or less yielding. The ends of the paper or the paper at the ends of the stick of candy are caught between the fingers 144 and 147 and held against turning while the candy is being turned to be wrapped.

Means are provided for feeding the candy sticks to the machine continuously and automatically. A hopper 151 is mounted on the machine by means of the bar 82 having an upward extension 152 and a triangular block 153. The hopper has a slanting portion or chute 151 which is adapted to hold sticks of candy one tier deep and the lowest stick rests against a rib 154. Rocking fingers 155 are provided for shoving the stick of candy over the rib 154 at regular intervals. A rocker-shaft 156 is journaled in lugs 157 which depend from the hopper 151 and this shaft has a crank extension 158 and this crank 158 extends through a cam slot 159 in the link bar 85 on the right side of the machine. When the arms 85 are reciprocated as above described, the shaft 156 will be rocked by reason of this cam slot and the fingers 155 will be thrust through the bottom of the hopper and feed the stick of candy over the rib 154 and the candy stick will roll down on the temporary swinging plate 74 against the tucker plate 86 above described. The candy sticks on the part 151 of the hopper will follow each other down the incline. Each time the shaft 156 is rocked, a stick of candy will be shoved over the rib 154. A guard 160 which is pivotally mounted on the hopper by the rocker shaft 161 will prevent the candy from being fed too fast. The shaft 161 has an extension arm 162 which rests on the side of the hopper and guard 160 prevents the displacement of the candy. The hopper has a storage portion 163 for holding quantities of candy. Means are provided for feeding or shifting the candy from part 163 to part 151. A plunger 164 is provided and means are provided for reciprocating this plunger vertically. Swinging link-rods 165 are pivotally

connected to the plunger 164 and pivotally connected to a cross-bar 166 which is mounted on the end of a swinging rod 167 which is rigid at the other end with a rocker-shaft 168. A crank 169 is rigid with the shaft 168 and has a rigid stud 182'. A reciprocating slide 170 is mounted on the machine and has an upstanding lug 181' slotted to receive a stud 182' carried by the crank 169 as the slide is moved on the machine and is guided in its reciprocal motion by a rod 171 which runs through the end of the yoke 13. A roller 172 is journaled in the inner end of the slide 170. A cam 173 which is rigid with shaft 15 reciprocates the slide 170 by bearing against the roller 172 and this serves to rock the shaft one way and to lift the rod 167 and thus raise the plunger 164. The plunger will go back to starting position by gravity. Every time the plunger 164 goes up it will feed a stick of candy to the chute or hopper 151 and if the chute 151 is full, the stick of candy will simply fall back into the hopper portion 163. The plunger 164, the main part, has a coöperating part 174. Normally both of these parts operate together and they are operatively connected together by two double flanged interlocking guides 175 and 176. A lug 177 is attached to the guide 175 and a lug 178 is attached to the guide 176. A spiral spring 179 is connected to the lugs 177 and 178 and holds these parts in their normal positions relative to each other. The part 164, being yieldingly connected to the part 174, will prevent jarring the parts when the rod 167 is thrust upwardly and this upward thrust of the part 164 will shove the stick of candy onto the chute 151. The hopper 163 has a downward extension 180 which serves to guide the plunger 164 in its vertical motion.

Certain safety devices are provided to prevent the machine from running when there is no wrapping paper in the machine or candy in the machine. The safety devices include means for stopping the feeder 71 and the folder 81 from operating. A dog 181 is pivoted at its forward end and has a lug 182 at its rear end which is adapted to fall into a slot or opening 183 in the folder 81 which reciprocates just under the path of the paper. If there is paper in place, the lug 182 will simply ride on the paper, but if there is no paper in the machine the lug 182 will drop in the slot 183 and stop the reciprocation of the folder 81 and consequently stop the movement of the feeder 71. The dog 181 must be raised up in order to raise the lug 182 out of the path of the paper. The dog has a beveled depending lug 184 and a pin 185 which is carried by the bearing block 84 is adapted to engage the lug 184 and raise the same out of the way of the paper when the feeder 71 is going back to its normal position,

If there is no candy in the machine, the machine will be locked against operation. The swinging plate 74 is suspended on arms 186 and 187 which are pivotally mounted on the candy chute 151. The arms 186 and 187 are brought back to and held in the elevated position by a spring 188. When a stick of candy is lying on the plate 74, the feeder will press on the candy and so press the plate 74 downwardly. If there is no candy stick on the plate 74, there is nothing to depress the plate 74 and the feeder will come down to the position shown in Fig. 6. At this point, a shoulder 189 on the feeder frame 71 strikes a lug 190 and prevents the feeder from going any farther down, consequently the plate 74 remains in the elevated position. The lug 190 is carried by a sliding plate 191 which reciprocates on the bolts 192 and 193 and is held in its normal position by a spring 194 which is attached to bolt 193 and to a lug 195 rigid with the sliding plate 191. The arm 187 carries a lug 196 which engages a notch in the sliding plate 191 and holds this plate stationary as long as the arm 187 is not raised up by the depressing of plate 74. Consequently if there is no candy on the plate 74 by which the feeder 73 can depress the plate 74, the shoulder 189 will be locked against the lug 190. But when there is a stick of candy on the plate 74, the feeder 73 will depress the plate 74 and consequently raise the lug 196 out of engagement with the notch in sliding plate 191. This will release the plate 191 and the shoulder 189 will push the lug 190 forward so that the feeder 73 can perform its function. The operations set forth in the last two paragraphs will throw the driving mechanism out of operation.

A reciprocating bar 198 moves in a groove in the bearing block 14 on the left side of the machine. In the ordinary working of the machine, the sliding pin 199 will engage the shoulder 200 of bar 198 and thrust the bar 198 forward with each revolution of the drive wheel 16 and a vibrating crank arm 201 will restore the bar 198 to starting position by engaging the lug 202. The crank arm 201 is operated by the feeder frame 71 If the feeder mechanism is stopped, the arm 201 will not bring the bar 198 to starting position, but will leave this bar in the position left by the pin 199. The bar 198 has a wedge-shaped flange 203. If the bar 198 has not been carried back to starting position, the pin 199 will strike the wedge 203 and the wedge will move the pin axially in the hub of wheel 16 and pin 199 will force the pin 204 out of the hub of wheel 16 and thus release the wheel from the shaft 15. The pin 204 locks the wheel to the shaft 15 for driving purposes. In the ordinary driving operation, the pin 199 will pass through the notch 205 without being moved by the

wedge 203, but will engage the shoulder 200 and move the bar 198. The arm 201 has a limited movement relative to the feeder frame 71, but it is operated by the feeder frame sufficiently to move the bar 198 back to starting position. The crank arm 201 is held in position relative to the bar 198 by a spiral spring 206. The spiral spring 206 is held in place by the collar 48'.

The feeder 73 will press down on the candy stick and thus press the fingers 72 downwardly far enough for the candy to pass under the upper edge of the pad 142. These fingers will remain in the depressed position until restored to normal or starting position. A pair of rollers 207 mounted on a shaft 208 move between the outer ends of the fingers 72 and rigid lugs or bearing plates 209 and tend to hold the fingers 72 spread or separated from the plates 209 and a pivoted, forked lever 210 engages the shaft 208 and tends to press the rollers 207 outwardly. A spiral spring 211 presses the lever 210 outwardly. The lever 210 is mounted on a crank shaft 212 which has a crank 213. An arm 214 is rigid with the feeder frame 71. When the feeder frame 71 comes back to starting position, it will actuate the arm 214 and the arm 214 will force the crank arm 213 inwardly and this will force the lever 210 inwardly and this lever will carry the rollers 207 inwardly, releasing the fingers 72. The springs 111 will then restore the fingers 72 to their normal positions. The crank-shaft 212 is journaled in a bracket 215 which is bolted to the machine frame.

The wrapping paper is fed to the machine into the guide 47 and clamped down on the plate 108 and is there cut by the paper cutter. The candy is fed to the machine piece by piece and a stick of candy is deposited temporarily on the swinging plate 74 and held there by a guard member, and during a continuous operation of the machine, the feeder 73 comes down and presses the stick of candy down together with the paper through the plate 108 on the yielding fingers 72. The plate 81 will push one side of the paper over the candy and the tucker 86 will then come down and press both sides of the paper down by the candy. The shifting plate 105 with lugs 107' will engage the candy, the guard member having gone back to normal position, and push the same under the frame at 112. The gripping devices will catch the end of the paper and prevent the same from turning while the rolling plate 135 will be revolved and roll the candy against the felt 142 and on out of the machine.

What I claim, is,

1. A candy wrapping machine having a frame, a shaft journaled in said frame, a disk rigid with said shaft, a cam carried by said disk, means for feeding paper to said machine, a paper guide mounted on said machine, fingers for clamping the paper in said guide, means operatively connected with the said fingers and standing in the path of said cam to be actuated by said cam, means for restoring said fingers to inoperative position, a blade fulcrumed on said frame, and an actuating mechanism operatively connected with said blade and standing in the path of said cam to be actuated by said cam.

2. A candy wrapping machine having a frame, means for feeding paper to said machine periodically, a paper guide mounted in said machine, a shaft journaled in said frame, a disk rigid with said shaft, a cam carried by said disk, fingers for clamping paper in said guide, actuating mechanism operatively connected with said fingers and standing in the path of said cam to be actuated by said cam, a blade fulcrumed on said frame, a sliding bracket operatively connected to said blade and having a lug projecting in the path of said cam to be actuated by said cam, an arm rigid with said shaft and a lever fulcrumed on said frame and operatively connected with said bracket at one end and having the other end standing in the path of said arm to be actuated by said arm.

3. A candy wrapping machine having a frame, means for feeding paper to said machine periodically, a guide mounted in said machine for the paper, means for clamping the paper in place, means for cutting the paper in wrapping lengths, means for feeding the candy on the paper consisting of a chute, a yielding plate operatively connected with said chute for holding the candy prior to depositing the candy on the paper, a rocking frame for pressing the candy down on the paper, a horizontally reciprocating plate for folding the paper over the candy, means for starting the paper on the candy and means for rolling the candy on the paper.

4. A candy wrapping machine comprising a frame, means for feeding paper periodically to said machine, a paper guide mounted on the machine having a slot therein, means for clamping the paper in place, means for cutting the paper in wrapping lengths, means for feeding candy to the machine, means for positioning the candy on the paper, means for pressing the candy down on the paper and through said slot, a horizontally reciprocating plate for folding and a rocking frame carrying a curved bar for tucking the paper about the candy, and means for revolving the candy for wrapping the paper about the candy.

5. A candy wrapping machine compris-

ing a frame, means for feeding paper periodically to the machine, a paper guide mounted on the machine and having a slot therein, means for clamping the paper in place in said guide, means for cutting the paper into wrapping lengths, means for feeding the candy to the machine, means for positioning the candy on the paper, means for pressing the candy down on the paper and through said slot, yielding fingers for receiving the candy with the paper thereon, and means for rolling the candy for wrapping the paper about the candy.

6. A candy wrapping machine comprising a frame, means for feeding paper periodically to said machine, means for clamping the paper in place, means for cutting the paper in wrapping lengths, means for feeding the candy to the machine, means for positioning the candy on the paper, means for starting the paper on the candy, yielding fingers for receiving the candy prior to a wrapping operation, means for revolving the candy for wrapping the paper thereon and means for holding the paper at the ends of the sticks of candy while being revolved for twisting the paper at the ends of the sticks of candy, and means for shifting the candy from said fingers to said revolving means.

7. A candy wrapping machine comprising a frame, means for feeding paper periodically to said machine, means for cutting paper in wrapping lengths, means for feeding the candy to the machine, guarding members for holding the candy in position temporarily, a feeding member for pressing the candy down on the paper, folding and tucking members for starting the paper on the candy, a curved frame, yielding fingers within said frame for receiving the candy with the paper thereon, shifting devices for moving the candy with the paper thereon in position to be wrapped, said frame having a cylindrical member, and a revolving member within said cylindrical member for rolling the candy against said member.

8. A candy wrapping machine comprising a frame having circular members, a shaft journaled in said frame, a pair of disks rigid with said shaft and revolving in said circular members, cams formed in said disks, means for feeding the paper to the machine periodically, means for feeding the candy to the machine piece by piece, a feeding member for positioning each piece of candy on the paper, operative connections between said feeding member and said cams for operating the feeding member, means for starting the paper on the candy, and means for revolving the candy to wrap the paper thereon including a substantially cylindrical frame member and a rolling plate revolving within said frame.

9. A candy wrapping machine comprising a frame having circular bearing members, a shaft journaled in said frame, a disk rigid with said shaft and revolving in said circular members, means for feeding paper to the machine periodically, means for feeding candy piece by piece on the paper in the machine, a feeding member, actuating devices operatively connected with said feeding member and with said disk for operating the feeding member, a folding member operatively connected with said feeding member for starting the paper on the candy, a substantially cylindrical member, and a roller plate carried by said disk revolving within said cylindrical member for rolling the candy to wrap the paper thereon by rolling the same against the interior of said frame.

10. A candy wrapping machine comprising a frame having circular bearing members, a shaft journaled in said frame, disks having cams therein rigid with said shaft journaled in said bearing members, means for feeding paper to the machine periodically, means for feeding candy piece by piece on the paper in the machine, folding and tucking devices for starting the paper on the candy, actuating mechanism operatively connected with said folding and tucking members and with the cams in said disks and means within said frame for rolling the candy to wrap the paper thereon by rolling the same against the interior of said frame.

11. A candy wrapping machine comprising a curved frame, means for feeding wrapping paper to the machine periodically, means for feeding candy to the machine piece by piece, a feeding member for positioning the candy on the paper and for depressing the candy to operative position, yielding fingers within said frame for receiving the candy in operative position, means for starting the paper on the candy, means for restoring the feeding member to normal position, means operatively connected with said fingers and with said feeding member for restoring said fingers to normal position, a substantially cylindrical member rigid with said frame, and a rolling member revolving within said cylindrical member for rolling the candy to wrap the paper thereon by rolling the same against the interior of said frame.

12. A candy wrapping machine comprising a curved frame having circular members, a shaft journaled in said frame, disks journaled in said circular members and having cams therein rigid with said shaft, means for feeding paper to the machine periodically, means for feeding candy to the machine, a feeding member for positioning the candy on the paper, a folder operatively connected with said member for starting the

paper around the candy, operative connections between said feeding member and the cam in one of said disks for actuating the feeding member, a tucking member coöperating with said folding member, operative connections between said tucking member and the cam in the other disk for actuating said tucking member, a substantially cylindrical member rigid with said frame and a curved plate revolving within said cylindrical member for rolling the candy to wrap the paper thereon.

13. A candy wrapping machine comprising a curved frame having circular members, a shaft journaled in said frame, disks rigid with said shaft and moving in said circular members, means for feeding the wrapping paper to the machine, means for feeding candy to the machine, means for positioning the candy on the paper including a yielding support and a guard member arresting the candy temporarily and a curved feeder for pressing the candy stick down on the paper, yielding fingers for receiving the candy, shifting devices for moving the candy into operative position and actuating devices operatively connected to said shifting devices and to said disks for operating said shifting devices, and means for rolling the candy to wrap the paper thereon.

14. A candy wrapping machine comprising a curved frame having circular members, a shaft journaled in said frame, disks rigid with said shaft and moving in said circular members, means for feeding the wrapping paper to the machine, means for feeding candy to the machine, means for positioning the candy on the paper including a yielding support and a guard member arresting the candy temporarily and a curved feeder for pressing the candy stick down on the paper, yielding fingers for receiving the candy, shifting devices for moving the candy into operative position and actuating devices operatively connected to said shifting devices and to said disk for operating said shifting devices, operative mechanism connected to said shifting devices and to said disks for restoring said shifting devices to normal position, and means for rolling the candy to wrap the paper thereon.

15. A candy wrapping machine comprising a curved frame having circular members, a shaft journaled in said frame, disks rigid with said shaft and moving in said circular members, means for feeding the wrapping paper to the machine, means for feeding candy to the machine, means for positioning the candy on the paper, yielding fingers for receiving the candy, shifting devices for moving the candy into operative position and actuating devices operatively connected to said shifting devices and to said disks for operating said shifting devices, means for adjusting said shifting devices during the operation thereof and means consisting of a cylindrical member rigid with said frame and a curved plate revolving within said cylindrical member for rolling the candy to wrap the paper thereon.

16. A candy wrapping machine comprising a curved frame having circular members, a shaft journaled in said frame, disks having cams therein rigid with said shaft and moving in said circular members, means for feeding wrapping paper to the machine, means for feeding candy to the machine, means for holding the candy in position prior to depositing the same on the paper, including a guard member and a yielding support pivotally mounted, means for pressing the candy down on the paper into operative position including an automatically actuated feeder mechanism having a curved member for engaging the candy, means for starting the paper on the candy including said guard member, operative connections between said guard member and the cams in one of said disks for actuating said guard member, and means for rolling the candy to wrap the paper thereon.

17. A candy wrapping machine comprising a frame having circular members, a shaft journaled in said frame, disks rigid with said shaft and having cams therein and moving in said circular members, means for feeding the wrapping paper to the machine, means for feeding candy to the machine, feeding devices for placing the candy on the paper and forcing the candy into operative position, yielding fingers for receiving the candy into operative position, a rolling plate for revolving the candy to wrap the paper thereon, yielding fingers carried in said rolling plate and yielding fingers mounted in said frame and coöperating with the fingers of said rolling plate for holding the paper at the ends of the candy while the candy is being rolled and means for operating said rolling plate.

18. A candy wrapping machine comprising a frame having circular members, a shaft journaled in said frame, disks rigid with said shaft and having cams therein and moving in said circular members, means for feeding the wrapping paper to the machine, means for feeding candy to the machine, feeding devices for placing the candy on the paper and forcing the candy into operative position, yielding fingers for receiving the candy into operative position, a rolling plate for revolving the candy to wrap the paper thereon, yielding fingers carried in said rolling plate and yielding fingers mounted in said frame and coöperating with the fingers of said rolling plate for holding the paper at the ends of the candy while

the candy is being rolled, operative connection between said rolling plate and said disks for operating said rolling plate.

19. A candy wrapping machine having a frame, a shaft journaled in said frame, a power-wheel mounted on said shaft, means for feeding wrapping paper to the machine periodically, means for feeding candy to the machine, a feeder for positioning the candy upon the paper, a reciprocating folder operatively connected with said feeder and actuated by said feeder, said folder having a slot therein, a gravity dog pivoted at one end and having a lug at the other end resting normally on the wrapping paper and adapted to fall in said slot when there is no wrapping paper and to lock the folder and feeder against movement, operative connections between said feeder and said power-wheel for holding said power wheel in operative relation to said shaft during normal operations and adapted to disconnect said power wheel from said shaft when said feeder ceases to operate.

20. A candy wrapping machine having a frame, a power shaft journaled in said frame and a power wheel mounted on said shaft, means for feeding paper to the machine, means for feeding candy to the machine, a temporary holder swingingly mounted for receiving the candy, a feeder for removing the candy from said temporary holder and positioning the same on paper, operative connections between said temporary holder and said feeder whereby the normal operations of the machine are maintained but adapted to lock the feeder against movement when there is no candy in the machine, and operative connections between said feeder and said power wheel whereby said power wheel is maintained in operative connection with said shaft, but adapted to disconnect said power wheel from said shaft when said feeder ceases to operate.

21. A candy wrapping machine having a curved frame, means for feeding wrapping paper to the machine, means for feeding candy to the machine, a feeder for positioning the candy on the paper, a reciprocating folder actuated by said feeder for folding the paper on the candy, a vibrating arm automatically actuated for coöperating with said folder in folding the paper, and means for rolling the candy to wrap the paper thereon including a cylindrical frame member and a curved plate revolving within said cylindrical member.

22. A candy wrapping machine having a frame, means for feeding wrapping paper to the machine periodically, means for feeding candy to the machine consisting of a hopper and a chute in connection therewith, said chute having a rib for holding candy in position to be fed to the wrapping mechanism, a reciprocating plunger in connection with said hopper adapted to feed candy piece by piece to said chute, a feeder for positioning candy on paper, rocking fingers operatively connected with said feeder and actuated by said feeder and adapted to shove the candy piece by piece over said rib to said feeder, said chute having slots for the passage of said fingers, means for folding and tucking the paper on the candy, and means for rolling the candy to wrap the paper thereon.

23 A candy wrapping machine having a frame provided with circular members, disks revolving in said members for maintaining the working parts of the machine in operative position, a shaft journaled in said frame, a cam rigid with said shaft, means for feeding paper to the machine, means for feeding candy to the machine consisting of a chute and a hopper in connection with said chute, a reciprocating plunger movable vertically in said hopper and composed of two parts yieldingly connected together and one part telescoping within the other part for feeding candy piece by piece from said hopper to chute, and means for wrapping the candy.

24. A candy wrapping machine having a curved frame, a shaft journaled in said frame, disks rigid with said shaft and moving in said curved frame, means for feeding paper to the machine, means for feeding candy to the machine, means for positioning the candy on the paper, said frame having a cylindrical portion and a felt lining therein, a rolling plate loosely connected to said disks and revolving within said cylindrical portion, and means for revolving said plate in close proximity to said felt lining for rolling the candy against the interior of said frame.

25. A candy wrapping machine comprising a frame provided with circular members, a shaft journaled in said frame, disks rigid with said frame and moving in said circular members, said frame having a curved portion, fingers mounted yieldingly on said curved portion and projecting through slots therein, means for feeding paper to the machine, means for feeding candy to the machine, a rolling plate loosely and yieldingly connected to said disks and to said shaft, fingers mounted yieldingly on said rolling plate and adapted to project through slots in said rolling plate for cooperating with the fingers in said curved frame for holding the paper at the ends of the candy while the candy is being rolled by said rolling plate.

26. A candy wrapping machine comprising a curved frame, a shaft journaled in said frame, disks rigid with said frame and revolving in said circular members, lugs rigid with said disks, means for feeding pa-

per to the machine, means for feeding candy to the machine, yielding fingers for holding the candy in position for the candy wrapping mechanism, a cylindrical member rigid with said frame, shifting devices mounted in said cylindrical member for delivering the candy to the candy wrapping mechanism, and operative connections between said shifting devices and said lugs whereby said shifting devices are reciprocated, and a rolling plate revolving in said cylindrical member for wrapping the paper about the candy by rolling the candy against the interior of said frame.

In testimony whereof, I set my hand this 21st day of December, 1915.

JOHN H. GREER.