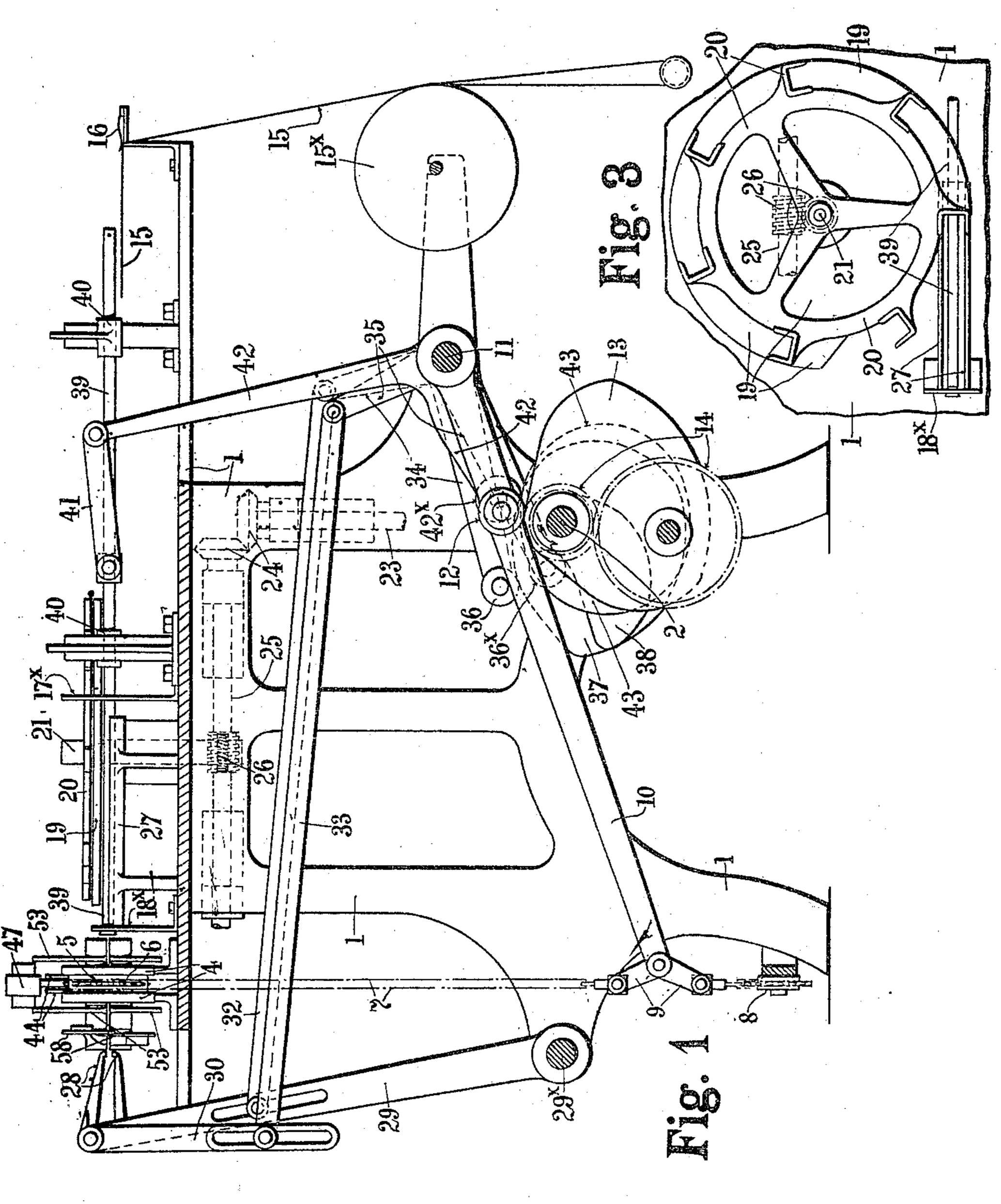
F. GROVER.

MACHINE FOR WRAPPING SWEETMEATS OR OTHER ARTICLES, APPLICATION FILED MAR 27, 1911.

997,667.

Patented July 11, 1911.

4 SHEETS-SHEET 1.



Witnesses Choch Smith alloser, ell

Trederick Grover. Harold Serrell his city.

F. GROVER.

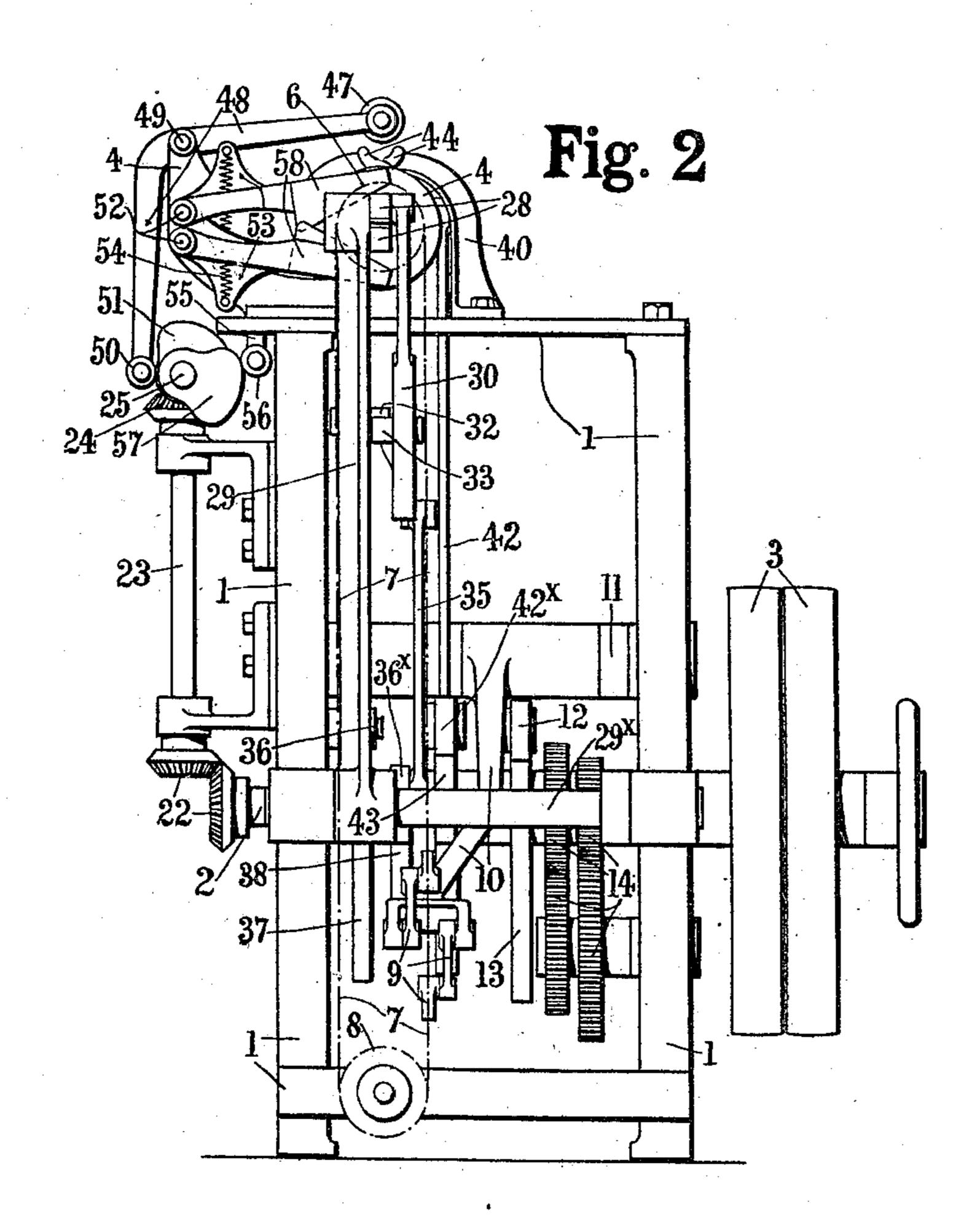
MACHINE FOR WRAPPING SWEETMEATS OR OTHER ARTICLES.

APPLICATION FILED MAR 27, 1911.

997,667.

Patented July 11, 1911.

4 SHEETS-SHEET 2.



Witnesses Chook Smith a.D. Derre De Inventor
Frederick Grover

by Harold Terrell

his city.

F. GROVER.

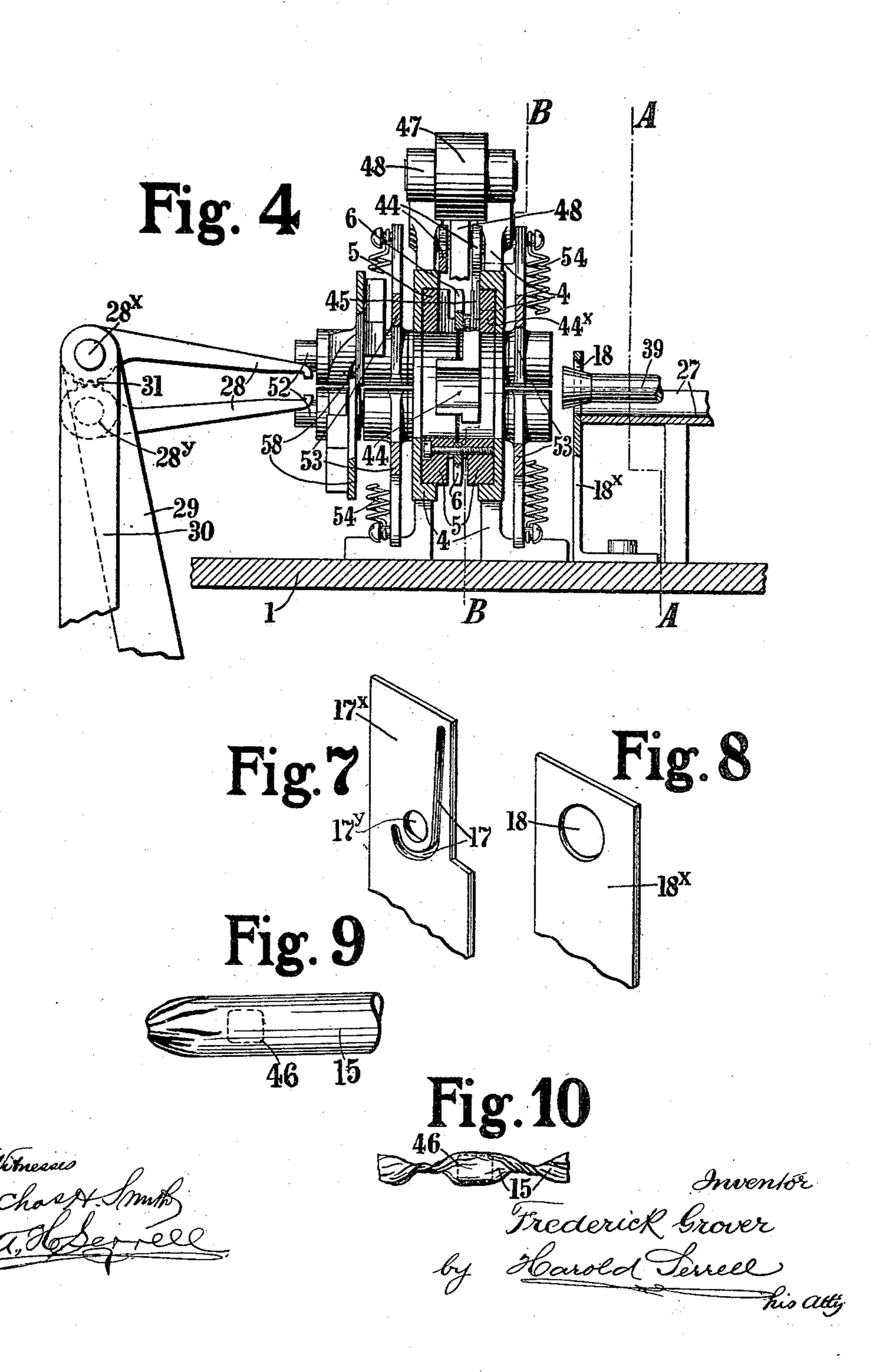
MACHINE FOR WRAPPING SWEETMEATS OR OTHER ARTICLES.

APPLICATION FILED MAR 27, 1911.

997,667.

Patented July 11, 1911.

4 SHEETS-SHEET 3.



F. GROVER.

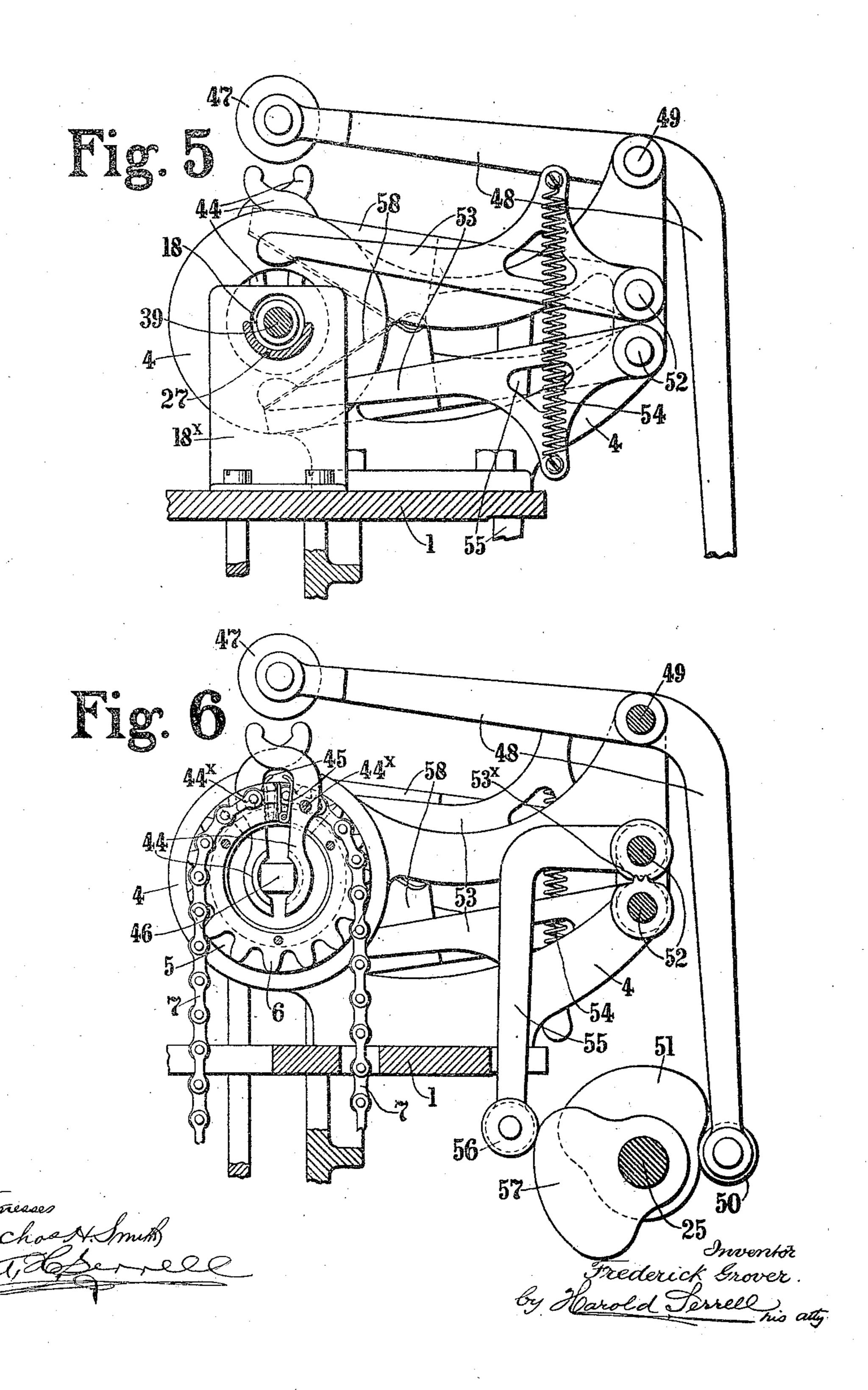
MACHINE FOR WRAPPING SWEETMEATS OR OTHER ARTICLES.

APPLICATION FILED MAR 27, 1911.

997,667.

Patented July 11, 1911.

4 SHEETS-SHEET 4.



UNITED STATES PATENT OFFICE.

FREDERICK GROVER, OF LEEDS, ENGLAND, ASSIGNOR TO THE FORGROVE MACHINERY COMPANY LIMITED, OF LEEDS, ENGLAND.

MACHINE FOR WRAPPING SWEETMEATS OR OTHER ARTICLES.

997,667.

Specification of Letters Patent. Patented July 11, 1911.

Application filed March 27, 1911. Serial No. 617,034.

To all whom it may concern:

Be it known that I, Frederick Grover, a subject of the King of Great Britain, residing at Leeds, in the county of York, England, have invented a certain new and useful Improved Machine for Wrapping Sweetmeats or other Articles, and of which the

following is a specification.

The present invention refers to a machine 10 for wrapping sweetmeats and other articles, of that kind in which the leading end of the wrapper is formed into tubular formation, the sweetmeat inserted therein, the portion of the wrapper surrounding the sweetmeat ¹⁵ and the sweetmeat itself held by a rotative carrier through which the tubular wrapper passes, while the paper tubular wrapper at a distance from each end of the sweetmeat is gripped by stationary grippers, whereby upon the carrier being rotated the wrapper becomes twisted at each end of the said sweetmeat, and the wrapper then cut at the twisted part. In such known machines, in order to enable the rotative carrier when re-²⁵ volving to hold the portion of the tubular wrapper surrounding the sweetmeat, and the sweetmeat also, the tubular part of the wrapper has been passed through a flattened tube carried in the ring-shaped rotative car-30 rier, the opposite walls of which tube are at a distance apart to exactly fit the sweetmeat and intended thereby to hold the latter and the surrounding part of the wrapper tube during the rotative action, while at the 35 same time the wrapper tube at a distance from either end of the sweetmeat was to be gripped by stationary grippers, so that the wrapper tube became twisted at either end of the sweetmeat and the latter so inclosed. ⁴⁰ Such a known device presents disadvantages in operation, in that the sweetmeat to be wrapped must first of all be of an exact size to fit between the walls of the flattened tube, and even then the sweetmeat must also 45 be of such a shape that it will not turn within the flattened tube. Now according to the present invention this disadvantage is entirely obviated, by providing the ringshaped carrier with jaws pivoted thereto, ⁵⁰ the gripping mouth of the jaws being concentric with the carrier and being made with scissors-like or cross tails extending beyond the periphery of the ring-shaped carrier, such jaws being held closed by spring action

and being opened by mechanical means. With such an apparatus it will be clear that when the jaws are opened by mechanical means, the sweetmeat can be slid into the wrapper tube which passes through the open 60 jaws of the carrier, and upon the jaws being closed they will grip the wrapper and the sweetmeat within same, whatever may be the precise shape or size, within reasonable limits, of the said sweetmeat. Since, 65 however, the jaws must be opened by mechanism which does not rotate with the carrier, it will be obvious that the tails of the gripping jaws must at each stoppage of the rotative motion of the carrier be in one and 70 the same particular angular position so as to be opposite the opening device, and moreover, since in the wrapping operation it is desired that the rotative carrier shall revolve in one direction for the twisting of 75 the tails of one package, and shall revolve in the opposite direction for the twisting of the tails of the next package, and so on, mechanism must be provided which will accomplish this result, and accordingly in 80 carrying out the present invention the rotative carrier is made in two parts, fixed together and clamping between them a sprocket toothed ring to receive an endless chain for communicating the rotary motion, 85 while at the same time one gripping jaw is pivoted to one member of the rotative carrier and the other gripping jaw to the opposite member, so that the chain and sprocket ring may pass between them. The chain 90 (which is endless) passes over an idle sprocket wheel and is connected to the end of a cam-operated lever arm by which first the chain is moved a measured distance in one direction, and at the next operation the 95 same measured distance in the return direction, consequently operating the rotative carrier through the same angular distance at one operation in one direction as it does in the other direction. Thus the tail ends of 100 the gripping jaws are always brought to rest in the same angular position and opposite to the operative mechanism by which those jaws are opened at the proper times.

the gripping mouth of the jaws being concentric with the carrier and being made with scissors-like or cross tails extending beyond the periphery of the ring-shaped carrier, such jaws being held closed by spring action to grip the tube and its contained sweetmeat.

In known machines of the kind to which 105 this invention relates, the leading end of the wrapper strip is brought into tubular form by passing the strip through a space between the surfaces of adjacent stationary plates, which are gradually curved so that 110

at the exit end the strip is brought into tubular form, and then to introduce the sweetmeat it is dropped on to one of the curved plates, and then pushed by a plunger 5 along such a plate until it is brought into the wrapper tube in the proper position. Now the disadvantage which is incident to the known machines referred to, is that the sweetmeats dealt with are frequently of an 10 adhesive nature, and consequently are liable to stick to the end of the plunger by which they are forced into the wrapper tube, and therefore are liable to be drawn out again upon the retrograde movement of the 15 plunger. Of course any chance of such withdrawal with a machine according to this invention with positively acting grippers in the rotative carrier, is greatly lessened, because the grippers exert a positive 20 pressure upon the sweetmeat which is generally greater than the tenacity of the adhesive sweetmeat to the plunger, but in the known machines wherein the sweetmeats are dropped as aforesaid one after the other on 25 to one and the same plate beneath which the paper strip is passing, it will be understood that the surface of that plate is liable to become thickly coated with adhesive matter which collects thereon from the succession 30 of sweetmeats which have been passed over it; a sweetmeat passing over such a coated surface collects adhesive matter as well as itself being adhesive to some extent, and therefore is liable to adhere to the end of 35 the plunger with some considerable force and so might possibly be drawn back upon the retreat of the plunger instead of being left between the gripping jaws. To obviate entirely any such difficulties and disadvan-40 tages, the present invention provides that the sweetmeat shall be dropped, in the first place, directly upon the surface of the wrapper and not pass one after the other over the same plate, and when thus carried out 45 as hereafter explained by this invention, each sweetmeat is only moved along a portion of the wrapper and the next sweetmeat along another portion of the wrapper, and so on, so that no collection of adhesive mat-50 ter takes place to add to the adhesiveness of any kind of sweetmeat. To attain this technical effect, the wrapper strip first passes through a slot of J shape in a stationary plate and so brought into a channel section, and when so formed has an under-support consisting of a stationary channel-shaped bed. It is when so supported and of such a shape that the sweetmeat is dropped into the channel of the wrapper; further on the 60 wrapper strip passes through a circular aperture in a stationary plate and is so brought into tubular form. The reciprocating plunger then passes along the channel of the wrapper and carries the sweetmeat through the hole into the stationary plate,

and along the tubular part of the wrapper to position within the field of action of the gripping jaws carried by the rotative carrier. The said jaws then close on the sweetmeat, hold it firmly, and the plunger retires 70 leaving the sweetmeat with certainty in the grip of the said jaws. The wrapper is drawn through the machine by means of gripping delivery fingers at the delivery end hereafter described.

An example of construction of the machine according to the present invention is shown on the accompanying drawings

whereon:—

Figure 1 is a sectional front elevation and 80 Fig. 2 an end elevation looking from the left of Fig. 1, and Fig. 3 is a plan view showing a suitable feed mechanism for delivering sweetmeats to the machine. Fig. 4 is a sectional front elevation, and Figs. 5 85 and 6 sectional end elevations of the wrapping mechanism, the latter two figures being taken on the lines A, A and B, B of Fig. 4 looking from the right hand side of the latter figure. Figs. 7 and 8 are views show- 90 ing two guide plates. Fig. 9 is a view of the end of the wrapper tube with a sweetmeat in position, and Fig. 10 shows the wrapped article.

The framework 1 of the machine carries a 95 motion shaft 2 driven by belt pulleys 3, and on the framework there are two brackets 4, which carry between them the rotative carrier 5 composed of two parts fixed together, (Fig. 4), and gripping between them a 100 sprocket wheel 6 engaging an endless chain 7 (Fig. 6) passing over an idle sprocket wheel 8 (Fig. 1); links 9 (Fig. 1) on the end of a lever 10, pivoted on a spindle 11, are fixed to one length of the chain 7 (Fig. 105) 1), and the lever 10 carries a bowl 12 contacting with a cam 13 loose on the main shaft 2 and driven by spur gearing 14 at half the speed of the main shaft 2. The gripping jaws 44 (Fig. 6) which are carried by 110 the rotative carrier 5, are pivoted respectively to opposite side parts of the said carrier at 44x, and each jaw 44 is acted upon by a spring 45 tending to keep the mouth of the jaws closed, which mouth is concentric 115 with the said carrier 5. The jaws 44 thus pass upon opposite sides of the chain 7 and its sprocket wheel, and the tail ends of the jaws are crossed, and the extent of rotative motion in either direction given to the rota- 120 tive carrier 5 by means of the chain 7 before described, is such that at the termination of a motion in either direction, the crossed ends of the jaws 44 always stand vertically in the position shown at Fig. 6, 125 and as will be observed the tail ends stand up beyond the rotative carrier, 5. In order to open the jaws 44 against the action of the closure springs 45, a roller 47 (Fig. 6) acts on the tails of the jaws 44 to open them, 130

being carried by a lever 48 (Fig. 6) fulcrumed at 49, a cam 51 on a rotative shaft 25 hereafter mentioned acting on a bowl 50 at the end of the lever 48, so as to rock the 5 lever and cause the roller 47 to open the jaws 44 when required and permit the said

jaws to close at proper times.

Carried from the framework 1 of the machine is a reel 15x from which a strip of paper 10 passes beneath a spring clip 16, and then extends forward to within the rotative carrier 5, although not so shown in the drawings, since the illustration of the paper passing through same would confuse the draw-15 ings. During its passage from the clip 16, Fig. 1, the paper passes first through a Jshaped aperture 17 (Fig. 7) in a plate 17x (Fig. 1) by which the paper is formed into a channel shape, and then the paper passes 20 over a stationary curved trough 27 (Fig. 1) by which it is supported, and then through a circular aperture 18 (Fig. 8) in a stationary vertical plate 18x (Fig. 1), by which the paper is formed into a tube and so the 25 paper passes in tubular form through the jaws 44 of the rotative carrier 5 to be gripped at the proper times by gripping fingers 28 at the delivery end of the machine (Fig. 1). During the passage of the strip 15 30 over the trough 27, that is when the strip is of J-shaped section, the sweetmeat to be wrapped is dropped on to the said strip 15 | of wrapping material by means of an auto- | the rotative carrier 5, and the shafts 52 (Fig. matic feed device. An example of a suitable 35 feed device is shown at Figs. 1 and 3; it consists of a stationary table 19 over which turns the wheel 20 mounted on a vertical shaft 21, which is driven from the main shaft 2 (Fig. 1) by bevel gearing 22 (Fig. 40 2), vertical shaft 23, bevel gearing 24, cross shaft 25, and worm gearing 26 (Fig. 3), so that sweetmeats placed in the trough-shaped projections of the feed wheel 20 are carried around on the stationary table 19, and ⁴⁵ are dropped one by one on to the wrapper strip 15 in the stationary trough 27 as they are forced by the wheel 20 over the edge formed by the cut-away part of the table 19. The shaft 25 above referred to carries also ⁵⁰ the cam 51 previously mentioned, for operating the opening device of the grippers of the carrier 5. The wrapper strip 15 after being passed through the rotative carrier, is drawn forward the requisite distance by a | 15 between the now open jaws 44 (Fig. 6) pair of intermittently operated gripping of the rotative carrier 5 into the position in 120 ⁵⁵ pair of intermittently operated gripping fingers 28, (Figs. 1 and 4). The upper finger 28 is pivoted at 28x to an arm 29, which latter is itself pivoted at 29x to the framework, said pivot 28x being fixed in addition, to the end of an arm 30, while the lower finger 28 is pivoted at 28^y (Fig. 4) to the arm 29 and meshed with the upper finger 28 by segmental gearing 31. The two arms 29, 30 are respectively connected, by connecting rods 32, 33, to bell crank levers 34, both sides of the rotative carrier 5 are caused 130

35 pivoted at 11 to the framework, said levers 34, 35 having bowls 36, 36x in contact with cams 37, 38 situated on the main shaft 2, by the operation of which the fingers 28 are caused to take hold of the paper tube 15 and 70

draw forward a suitable length.

When a sweetmeat is dropped on to the wrapper strip 15 upon the trough 27 (Fig. 1), it is pushed forward by a plunger 39 which is free to pass through a hole 17^y in the 75 plate 17x (Fig. 7), and the plunger is shown at Figs. 1 and 4, and it forces the sweetmeat between the jaws 44 (Fig. 4) within the paper tube. The plunger 39 is carried in bearings 40, connected by link 41 to bell 80 crank lever 42 pivoted at 11 to the framework, said lever having a bowl 42x operated by a cam 43 on the main shaft 2, whereby the plunger 39 receives its reciprocative motions at proper times.

In order to grip the paper tube 15 at each end of the rotative carrier 5 during the twisting action upon the wrapper effected by the rotary motion of the said carrier 5, a pair of gripping levers 53 is provided on 90 each side of the said rotative carrier 5. Each pair of gripping levers is held in its closed position upon the wrapper tube 15 by springs 54, and the said levers 53 are fixed upon rockshafts 52 (Figs. 5 and 6). These 95 rockshafts are carried by extensions of the brackets 4 which also form the bearings for 6) are connected together by segmental gearing 53x so that by partially rotating one of 100 the shafts 52, both sets of gripping levers 53 are opened against the action of the springs 54. This is effected by an arm 55 (Fig. 6) having a bowl 56 contacting with a cam 57 on shaft 25. On the outer ends of the rock- 105 shafts 52 there is fixed the two members of scissor blades 58 (Figs. 4 and 5), which consequently are operated to cut the twisted part of the wrapper tube 15 simultaneously with the closure of the gripping levers 53. 110

The machine operates as follows:—The wrapper strip 15 having been drawn through the parts of the machine before described, and a sweetmeat having been dropped upon the wrapper tube where it is supported by 115 the trough 27 (Fig. 1), the plunger 39 advances the sweetmeat through the aperture 18 of the plate 18x and into the wrapper tube fact which is shown at 46 (Fig. 6). The gripper jaws 44 (Fig. 6) of the rotative carrier 5 are immediately released by the roller 47 and closed upon the wrapper tube 15 around the sweetmeat and hold both firmly, even 125 though the size and shape of the sweetmeat are not precisely the same as the size and shape of the next sweetmeat to be treated. Simultaneously the gripping levers 53 upon

to close upon the wrapper tube 15, while also simultaneously the scissor blades are operated and sever the preceding wrapped article which has been previously drawn out 5 by the fingers 28 (Fig. 4). The rotative carrier 5 is then immediately revolved in one direction from the position Fig. 6, and thereby the portions of the wrapper tube between the grippers 44 and the gripping levers 53 10 become twisted in reverse directions, and the rotative carrier 5 is brought to rest in a positive manner by the action of the chain in the position shown at Fig. 6. The gripping jaws 44 are then opened by the roller 15 47, and the fingers 28 advance and seize the end of the wrapper and draw out one step through the machine, bringing out the wrapped sweetmeat inclosed in its twisted wrapper. The operations are then repeated. 20 excepting that on the next occasion the rotative carrier 5 is revolved from the position, Fig. 6, in the reverse direction to that in which it was previously revolved, and so on. Fig. 9 shows the end of the wrapper 25 tube 15 which has just been cut off on the left hand side by the scissor blades 58, and Fig. 10 shows the completely wrapped article.

What I claim as my invention and desire

30 to secure by Patent is:—

1. In a machine of the type specified for inclosing sweetmeats or other articles in wrappers; the combination with withdrawal fingers at the delivery end of machine, and 35 means for operating same to intermittently pull the wrapper strip through said machine, means for forming the wrapper strip firstly into gutter section and finally into tubular form, a rotative annular carrier 40 through and into which said tubular-formed wrapper is drawn, and means for inserting said sweetmeat to be wrapped into said tubular wrapper within said annular carrier; of a pair of pivoted gripping jaws car-45 ried by said carrier with the gripping ends of said jaws located concentrically of said annular carrier and adapted to grip said tubular wrapper and sweetmeat located therein, means for intermittently rotating 50 said carrier carrying said gripping jaws, springs to maintain said pivoted jaws normally closed, means for opening said jaws of said carrier during the interval between each rotation of same, means for gripping said 55 tubular wrapper and holding same stationary at both ends of said rotative carrier during the rotation of the latter to effect the twisting of the parts of said wrapper at each end of said sweetmeat, and means for divid-60 ing the wrapper of the forward wrapped sweetmeat from the wrapper of the next sweetmeat simultaneously with the gripping of said tubular wrapper at opposite ends of said rotative carrier. 2. In a machine of the type specified for

inclosing sweetmeats or other articles in wrappers; the combination with withdrawal fingers at the delivery end of machine, and means for operating same to intermittently pull the wrapper strip through said ma- 70 chine, means for forming the wrapper strip firstly into gutter section and finally into tubular form, a rotative annular carrier through and into which said tubular-formed wrapper is drawn, and means for inserting 75 said sweetmeat to be wrapped into said tubular wrapper within said annular carrier; of a pair of pivoted gripping jaws carried by said carrier with the gripping ends of said jaws located concentrically of said an- 80 nular carrier and adapted to grip said tubular wrapper and sweetmeat located therein, means for intermittently rotating said carrier carrying said gripping jaws, springs to maintain said pivoted jaws of said 85 carrier normally closed, crossed tail ends to said gripping jaws extending beyond the periphery of said rotative carrier, a pivoted two-armed lever carried from the framework of the machine, a roller on one 90 arm of said lever located above said crossed tails of said pivoted jaws carried by said rotative carrier when the latter is stationary, a driven shaft, a cam on said shaft to act on the other arm of said lever to cause 95 said roller on said lever to contact with said crossed tails of said pivoted jaws to open same to release said wrapper tube and sweetmeat, means for gripping said tubular wrapper at both ends of said rotative carrier 100 during the rotation of the latter, and means for dividing the wrapper of the forward wrapped sweetmeat from the wrapper of the next sweetmeat simultaneously with the gripping of said tubular wrapper at oppo- 105 site ends of said rotative carrier.

3. In a machine of the type specified for inclosing sweetmeats or other articles in wrappers; the combination with withdrawal fingers at the delivery end of ma- 110 chine, and means for operating same to intermittently pull the wrapper strip through said machine, means for forming the wrapper strip firstly into gutter section and finally into tubular form, a rotative annular 115 carrier through and into which said tubular-formed wrapper is drawn by said withdrawal fingers, and means for inserting said sweetmeat to be wrapped into said tubular wrapper within said annular carrier; of a 129 pair of pivoted gripping jaws carried by said carrier with the gripping ends of said jaws located concentrically of said annular carrier and adapted to grip said tubular wrapper and sweetmeat located therein, 125 means for rotating said rotative carrier at one time in one direction for twisting the wrapper at the ends of one sweetmeat held by said gripping jaws of said rotative carrier and at the next time rotating said car- 130

rier in the opposite direction to twist the wrapper at the ends of the next succeeding sweetmeat, springs to maintain said pivoted jaws normally closed, means for opening 5 said jaws of said carrier during the interval between each rotation of same, means for gripping said tubular wrapper to hold same stationary at both ends of said rotative carrier during rotation of the latter, and means 10 for dividing the wrapper of the forward wrapped sweetmeat from the wrapper of the next sweetmeat simultaneously with the gripping of said tubular wrapper at oppo-

site ends of said rotative carrier. 4. In a machine of the type specified for inclosing sweetmeats or other articles in wrappers; the combination with withdrawal fingers at the delivery end of machine, means for operating same to intermittently ·20 pull the wrapper strip through said machine, means for forming the wrapper strip firstly into gutter section and finally into tubular form, an annular carrier through. which the tubular-formed wrapper passes, 25 comprising two ring members, a sprocket toothed ring located between said two ring members of said carrier, and means for holding the ring members and the sprocket toothed ring composing said carrier to-30 gether, bearing brackets for supporting said carrier and permitting of its rotation, and means for inserting the sweetmeat to be wrapped into such tubular wrapper within said annular carrier; a pair of gripping jaws carried by said carrier, a pivot on one ring member of said carrier to carry one jaw and a pivot on the opposite ring member of said carrier to carry the opposite jaw, the gripping ends of said jaws being located concentrically of said annular carrier, crossed tail ends to said jaws extending beyond the periphery of said rotative carrier and upon each side of said sprocket toothed ring of said carrier, an endless chain passing over and engaging said sprocket ring of said carrier, an idle pulley on the framework of machine over which said endless chain passes, and means for traversing said chain first in one direction and then in 50 the other through a regulated distance to rotate said rotative carrier first in one direction and then in the other, springs to maintain said pivoted jaws of said carrier normally closed, means for opening said 55 jaws of said carrier during the interval between each rotation of same, means for gripping said tubular wrapper and holding same stationary at both ends of said rotative carrier during rotation of the latter, and means for dividing the wrapper of the forward wrapped sweetmeat from the wrap-

. per of the next succeeding sweetmeat. 5. In a machine of the type specified for inclosing sweetmeats or other articles in wrappers; the combination with withdrawal

fingers at the delivery end of the machine, and means for operating same to intermittently pull the wrapper strip through said machine, means for forming the wrapper strip into gutter-shaped section near its 70 leading end, a stationary curved trough for supporting the length of such gutter section wrapper strip, means for dropping a sweetmeat at proper intervals into the gutter channel of such wrapper strip, means for 75 forming said wrapper strip into tubular form, a rotative annular carrier through and into which said tubular-formed wrapper is drawn, and means for inserting said sweetmeat to be wrapped into said tubular wrap- 80 per within said annular carrier; of a pair of pivoted gripping jaws carried by said carrier with the gripping ends of said jaws located concentrically of said annular carrier and adapted to grip said tubular wrapper and 85 sweetmeat located therein, means for intermittently rotating said carrier carrying said gripping jaws, springs to maintain said pivoted jaws normally closed, means for opening said jaws of said carrier during the in- 90 terval between each rotation of same, means for gripping said tubular wrapper and holding same stationary at both ends of said rotative carrier during the rotation of the latter to effect the twisting of the parts of 95 said wrapper at each end of said sweetmeat, and means for dividing the wrapper of the forward wrapped sweetmeat from the wrapper of the next sweetmeat simultaneously with the gripping of said tubular wrapper 100 at opposite ends of said rotative carrier.

6. In a machine of the type specified for inclosing sweetmeats or other articles in wrappers; the combination with withdrawal fingers at the delivery end of machine, and 105 means for operating same to intermittently pull the wrapper strip through said machine, a first stationary vertical plate fixed on the framework of the machine and having an aperture of J shape through which 110 aperture the wrapper first passes to bring the latter into trough shape, a stationary curved trough carried by the framework and located beneath the trough-shaped wrapper to support the same, means for 115 dropping a sweetmeat to be wrapped at proper intervals into the gutter channel of such wrapper strip above said stationary curved trough, a second stationary vertical plate carried by the framework and having 120 a circular aperture through which the trough-shaped wrapper passes to thereby convert it into tubular form, a rotative annular carrier through and into which said tubular-formed wrapper is drawn, and 125 means for inserting said sweetmeat to be wrapped into said tubular wrapper within said annular carrier; of a pair of pivoted gripping jaws carried by said carrier with the gripping ends of said jaws located 130

concentrically of said annular carrier and adapted to grip said tubular wrapper and sweetmeat located therein, means for intermittently rotating said carrier carrying said 5 gripping jaws, springs to maintain said pivoted jaws normally closed, means for opening said jaws of said carrier during the interval between each rotation of same, means for gripping said tubular wrapper and hold-10 ing same stationary at both ends of said rotative carrier during the rotation of the late ter, and means for dividing the wrapper of the forward wrapped sweetmeat from the wrapper of the next sweetmeat simultane-15 ously with the gripping of said tubular wrapper at opposite ends of said rotative

carrier. 7. In a machine of the type specified for inclosing sweetmeats or other articles in 20 wrappers; the combination of a rocking arm at the delivery end of the machine, means for rocking said arm, an upper and a lower finger pivoted at the upper end of said arm, toothed gear connecting the pivot 25 of one finger to the pivot of the other finger to cause the fingers to move in opposite directions when one of said pivots is rocked, a second arm fixed to the pivot of the upper finger to rock said pivot to open and close 30 said fingers, and means for operating the second arm to cause the fingers to close on the end of the wrapper to draw same from the machine when the first arm is rocked and to release said wrapper at the 35 proper time, means for forming the wrapper strip into gutter section and finally into tubular form, a rotative annular carrier through which said tubular-formed wrapper is drawn by said fingers, and means for 40 inserting said sweetmeat to be wrapped into said tubular wrapper within said annular carrier; of a pair of pivoted gripping jaws carried by said carrier with the gripping ends thereof located concentrically of said 45 carrier, means for intermittently rotating said carrier, springs to maintain said pivoted jaws normally closed, means for opening said jaws when said carrier is stationary, means for gripping said tubular wrap-50 per and holding same stationary at both ends of said rotative carrier, and means for dividing the wrapper of the forward wrapped sweetmeat from the wrapper of the next sweetmeat simultaneously with the

gripping of said tubular wrapper at oppo- 55 site ends of said rotative carrier.

8. In a machine of the type specified for inclosing sweetmeats or other articles in wrappers: the combination with withdrawal fingers at the delivery end of machine, and 60 means for operating same to intermittently pull the wrapper strip through said machine, means for forming the wrapper strip firstly into gutter section and finally into tubular form, a rotative annular carrier 65 through and into which said tubular-formed wrapper is drawn, and means for inserting said sweetmeat to be wrapped into said tubular wrapper within said annular carrier; of a pair of pivoted gripping jaws 70 carried by said carrier with the gripping ends of said jaws located concentrically of said annular carrier and adapted to grip said tubular wrapper and sweetmeat located therein, means for intermittently rotating 75 said carrier carrying said gripping jaws, springs to maintain said pivoted jaws normally closed, means for opening said jaws of said carrier during the interval between each rotation of same, a pair of pivoted 80 gripping levers located at the receiving end of said rotative carrier and carried from the framework of the machine, and a similar pair of gripping levers located at the delivery end of said rotative carrier, springs 85 to hold the gripping ends of said levers normally closed to grip the tubular wrapper during the rotation of the rotative carrier, and a pivoted pair of scissor blades carried by the framework of the machine and 90 located between said pivoted gripping levers at the delivery end of the machine and said drawing-out fingers, means for closing said scissor blades to divide the wrapped article from the article being wrapped simultane- 95 ously with the closure of the two pairs of said gripping levers, and means for simultaneously opening said two pairs of gripping levers and said scissor blades at the completion of the wrapping operation to 100 permit said gripping fingers to draw through the length of the already wrapped article.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

FREDERICK GROVER.

Witnesses:

JOHN JOWETT, VANCE EWART GALLOWAY.