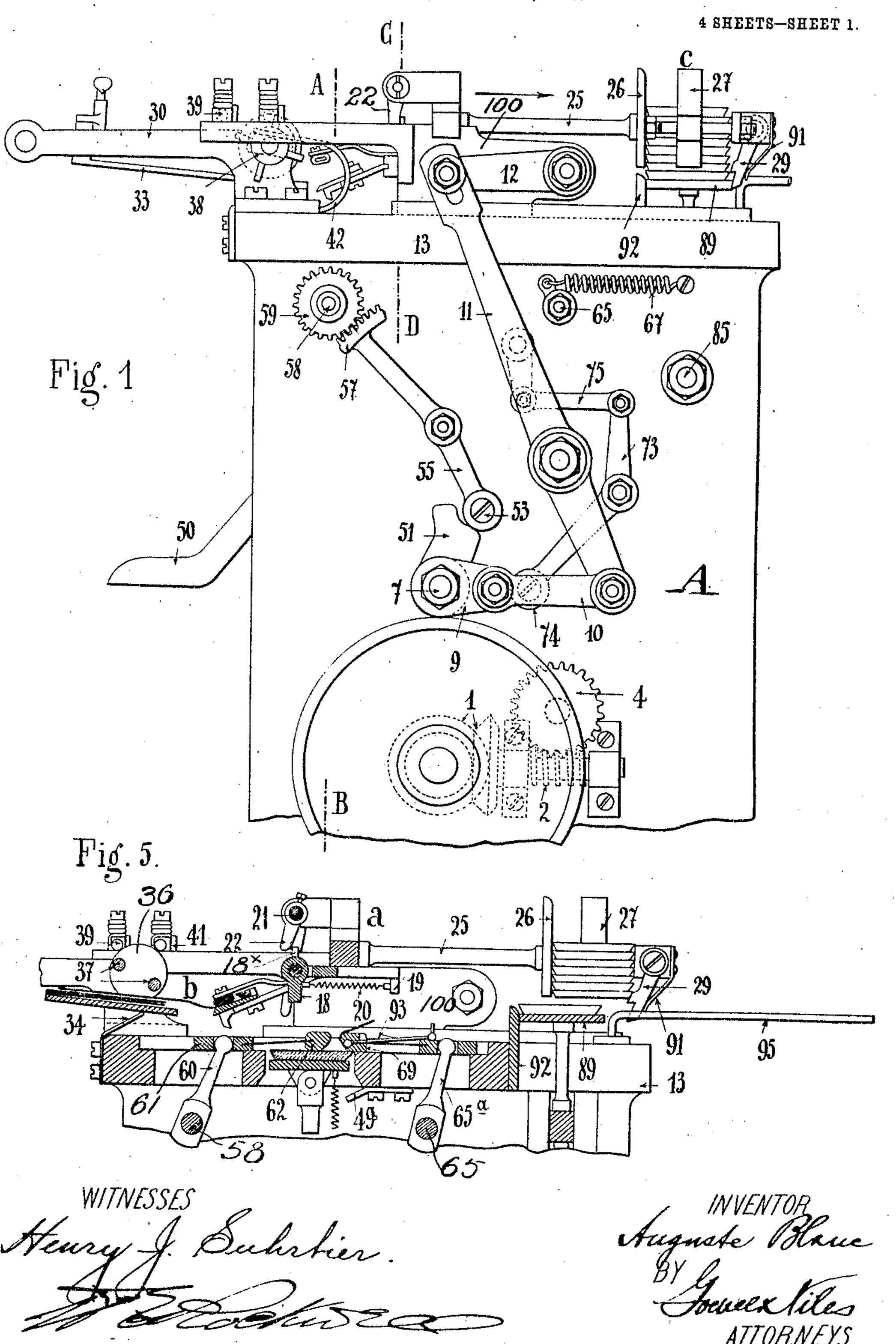
A. BLANC.

MACHINE FOR WRAPPING CHOCOLATE TABLETS OR SIMILAR ARTICLES.

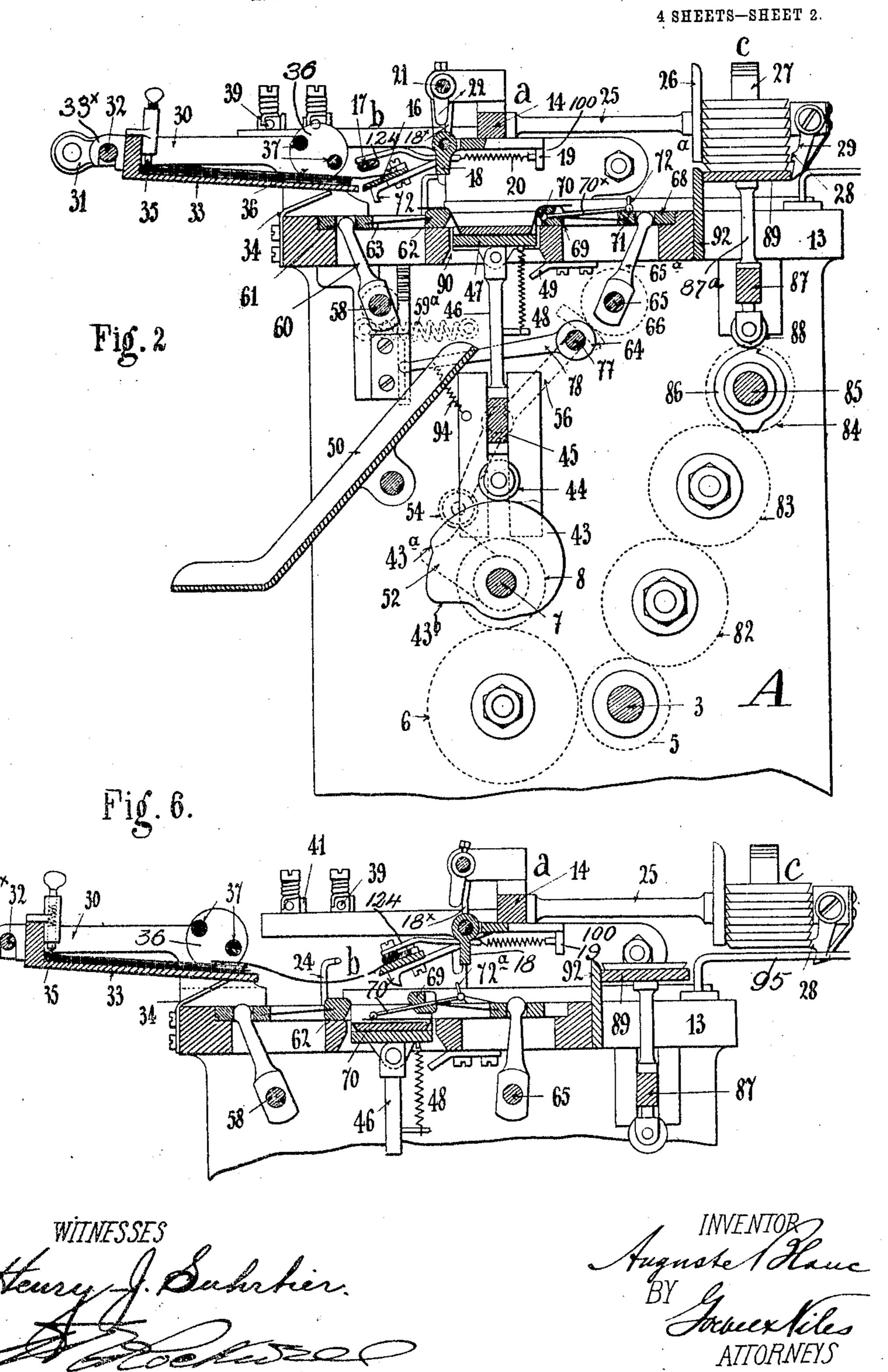
APPLICATION FILED FEB. 7, 1905.



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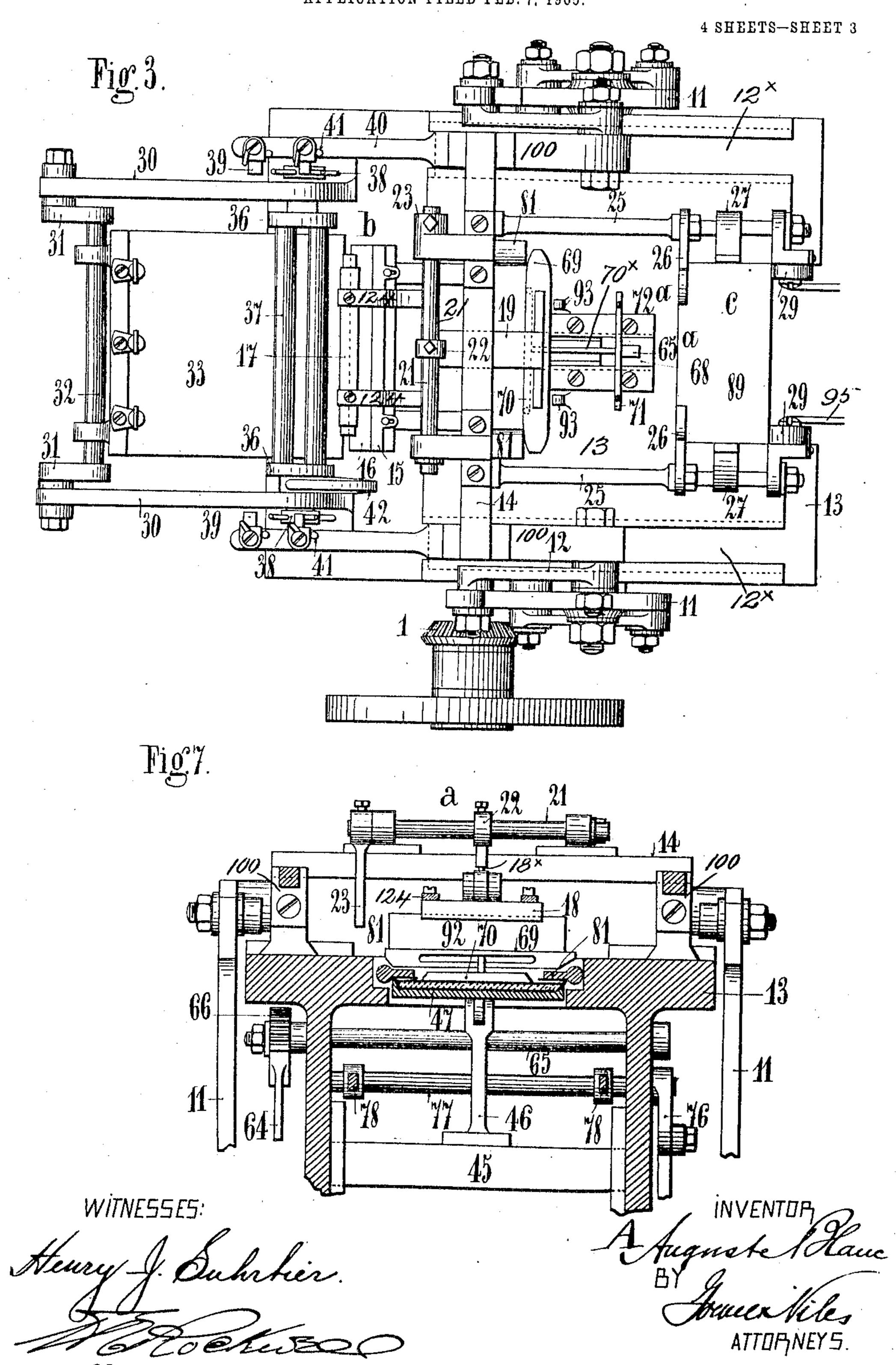
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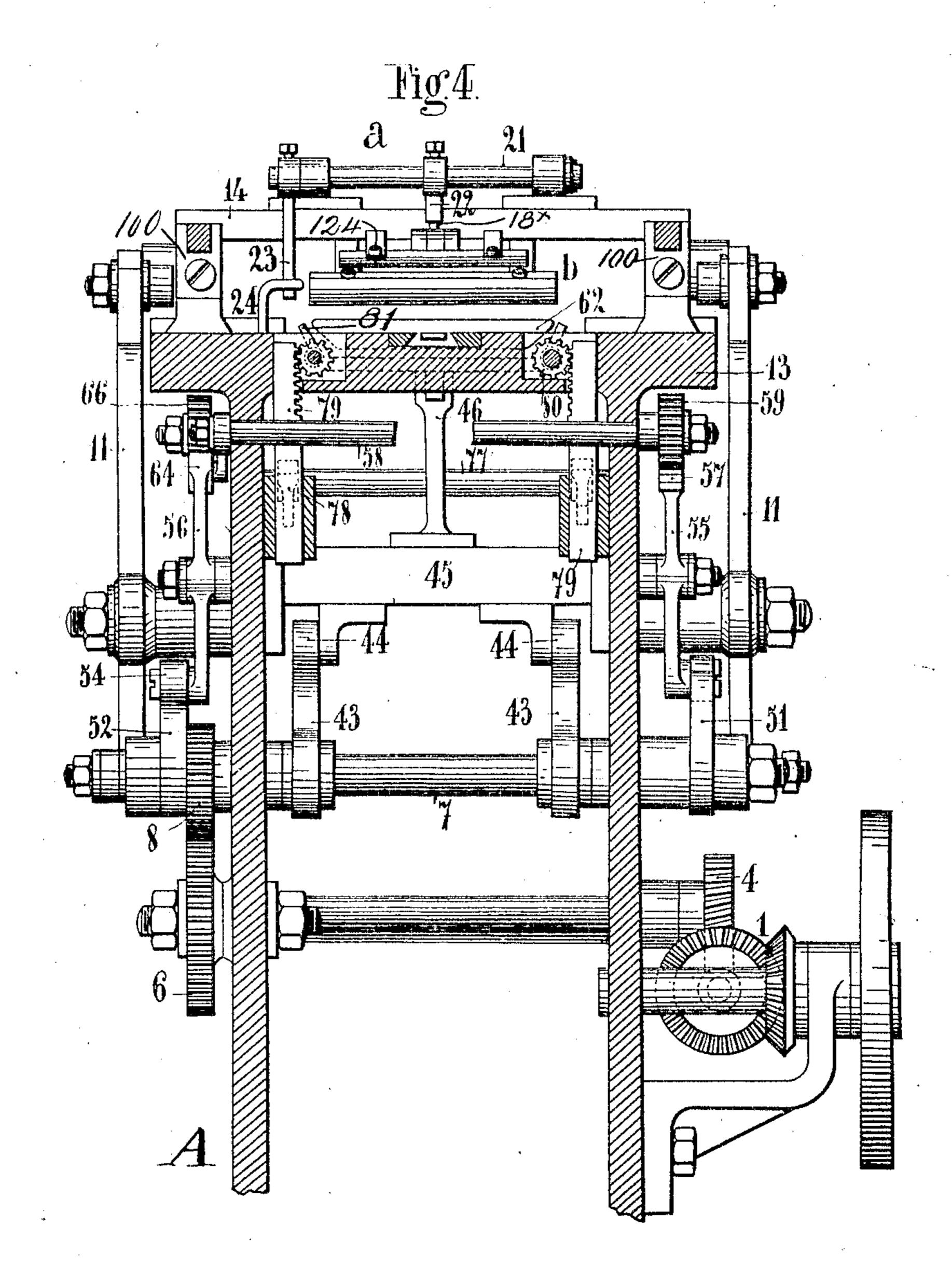


## A. BLANC.

MACHINE FOR WRAPPING CHOCOLATE TABLETS OR SIMILAR ARTICLES.

APPLICATION FILED FEB. 7, 1905.

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WITNESSES:

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Auguste Rucce BY Gueek liles ATTOPNEYS.

## UNITED STATES PATENT OFFICE.

AUGUSTE BLANC, OF ST. CROIX, SWITZERLAND, ASSIGNOR TO LA SOCIÉTÉ SAVY JEANJEAN ET CIE., OF PARIS, FRANCE.

## MACHINE FOR WRAPPING CHOCOLATE TABLETS OR SIMILAR ARTICLES.

No. 815,675.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed February 7, 1905. Serial No. 244,608.

To all whom it may concern:

Be it known that I, Auguste Blanc, a citizen of the Republic of Switzerland, residing in St. Croix, Switzerland, have invested certain new and useful Improvements in Machines for Wrapping Chocolate Tablets or Similar Articles, of which the following is a specification.

This invention relates to a machine for wrapping up chocolate or other tablets or other articles of similar shape in a suitable

wrapper, such as paper or tin-foil.

Among the objects of the invention is the provision of a machine of this type embodying improved wrapping devices and improved means for feeding the sheets of wrapping material to such wrapping devices.

The invention also aims to provide improved means for feeding the tablets or other

20 articles to the wrapping devices.

A further object of the invention is to improve the general construction and increase the efficiency and capacity of machines of this type.

With these and other ends in view the invention consists in the novel features, combinations, and arrangements of parts to be hereinafter described and finally recited in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a machine constructed in accordance with the invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a top plan view. Fig. 4 is a vertical transverse section taken on the line A B, Fig. 1. Figs. 5 and 6 are vertical langitudinal.

1. Figs. 5 and 6 are vertical longitudinal sections of the upper portion of the machine, showing two different positions of the parts; and Fig. 7 is a vertical transverse section on the line C D, Fig. 1.

Similar characters of reference denote corresponding parts throughout the several

views.

In the drawings, A indicates the frame or table of the machine, which carries at one side bevel-gears 1 in operative connection with a worm 2, meshing with worm-gear 4, which is secured to a shaft 3, extending transversely of said frame or table and journaled in the sides thereof. At one side of the machine the shaft 3 is provided with a gear 5, which drives through the intermediate gearing of a wheel 6 a wheel 8, secured to a second transversely-extending shaft 7, jour-

naled in the sides of the table A above the 55 shaft 3, as shown. The shaft 7 is provided at both ends with a crank 9, connected by links 10 to rocking levers 11, pivoted intermediately to the sides of the frame. The rocking levers 11 are connected by cranks 12 60 to the side members 100 of a carriage a, which is guided in ways 12×, extending longitudinally of the table top or bed 13 at either side of the machine. The carriage a embodies a cross-bar 14, which connects the side mem- 65 bers 100 and carries a wrapper gripping and feeding device b, including a presser-plate 16, provided with a stop 15. Above the plate 16 and disposed parallel to the same is a gripper-bar 17, covered with elastic material-- 7c such, for instance, as rubber—and connected by rods 124 to a rocking plate 18, provided at the top thereof with a stop 18 and hinged to an angle-piece 19, secured to the under face of the cross-bar 14. A helical spring 20, 75 one end of which is secured to the rocking plate 18 and the other end to the depending leg of the angle-piece 19, has the tendency to force said rocking plate against said anglepiece, and consequently to force the gripper- 80 bar 17 against the presser-plate 16. Supported in brackets attached to the cross-bar 14 and extending parallel to the latter is a spindle 21, provided intermediately with a depending finger 22, resting against the stop 85 18<sup>×</sup> of the rocking plate 18, and also with an arm 23, adapted to strike a stop 24 on the bed 13, as shown in Fig. 4, in order to rock said finger, and thereby said rocking plate.

The carriage a is provided with two longitudinally-extending bars 25, carrying a device c, intended to receive the tablets or other articles to be wrapped. This device consists, essentially, of fixed vertical guides 26 and 27, between which the tablets are retained, and spring-actuated pawls 29, provided with projections or teeth 28, the function of which will hereinafter appear.

Upon the bed 13 of the machine are arranged at what will be termed for purposes of description the "front" of the latter two arms 30, extending outwardly from said bed and carrying at their outer ends angularly-adjustable cranks or levers, connected at their ends by a rod 32, on which is suspended to receive the wrappers. The opposite or front end of the plate 33 is

supported resiliently on a leaf-spring 34, secured to the bed 13, as shorn in Fig. 2. The rear edge of the plate 33 is provided with sleeves in which are guided spring-actuated 5 pins 35, directed toward said plate and intended to press up and keep back the pack of wrappers. Journaled between the arms 30 above the bed-plate 13 are two disks 36, the spindles of which extend through said arms, 10 as shown in Fig. 3. Between the disks 36 and connecting diametrically opposite points of the same are arranged relatively fixed feed-rods 37, covered with elastic material. The spindles of the disks 36 carry smaller 15 disks 38 at their ends, and said smaller disks are provided upon their peripheries with radially-extending pins adapted to abut against laterally-disposed pins 39, carried by parallel arms 40 of the carriage a, said arms 40 ex-20 tending longitudinally of the machine and being connected with the side members 100 of the carriage, as shown in Fig. 3. The pins 39 are pressed by helical springs against upright stop-pins 41 upon said arms 40, which pre-25 vent the pins 39 from turning in one direction, although they can turn in the opposite direction against the tension of said springs.

Extending upwardly from the bed 13 is a leaf-spring 42, the end of which rests on a 30 flattened portion of the hub of one of the disks 36 in such a manner as to maintain said disks against movement and to insure their stopping in the same position after their actuation by the pins'39 on the carriage a.

Two cams 43 are arranged on the shaft 7, and on them rest rollers 44 of a verticallymovable cross-bar 45, which extends transversely of the machine. Said cross-bar 45 carries an upright 46, upon the top of which 40 is arranged a wrapper-plate 47, adapted to reciprocate vertically in an opening 90 of the bed 13, as best shown in Fig. 2. The plate 47 is hinged to the upright 46, so that it may be tilted to one side, although a spring 48 has 45 the tendency to normally maintain it in horizontal position. Below the plate 47 and attached to the under part of the bed is a stop 49, against which said plate is adapted to abut at the end of its downward movement, so 50 as to be tilted against the upper edge of an inclined delivery-chute 50, arranged at the rear of the machine. The shaft 7 is further provided at each side of the machine with fingers 51 52, which are placed at different angular, 55 distances from each other. In the path of said fingers are arranged rollers 53 54, carried at the lower extremities of oppositely-inelined elbow-levers 55 56, pivoted to the sides of the frame. One of the arms of the 60 lever 55 carries a toothed segment 57, meshing with a wheel 59, secured to one end of a shaft 58, extending transversely of the machine and journaled in the sides of the frame at a point approximately below the feed-65 disks 36. Said shaft, which is controlled by I moved in a circular path. One of the latter 130

a spring 59a, carries a rocking arm 60, the rounded end of which passes through an opening in a slide-plate 61, guided longitudinally on the bed above an opening therein and to which is secured, by means of a spring 63, a 70 transverse folder-bar 62, movable in the same plane as said slide-plate. One of the arms of the lever 56 also carries a toothed segment 64, engaging with a gear-wheel 66, carried by a shaft 65, similar to the shaft 58. 75 The shaft 65, controlled by a spring 67, as shown in Fig. 1, is connected by a rocking arm 65° to a second slide-plate 68, similar to the slide-plate 61 and slidable in the same direction, the opening 90 and the plate 47 be- 80 ing disposed between said slide-plates. The plate 68 carries, by means of a spring similar to the spring 63, a folder-bar 69. Slidable through the latter is a rod 70×, attached at one end to a fold-retaining bar 70, extending 85 parallel to said folder-bar and adapted to fit in a longitudinal recess or seat therein. A second bar 71 is arranged at the opposite end of the rod 70× and provided with upwardlyextending driving-pins 72a, adapted to abut 90 upon the reciprocation of the carriage toward the right, as shown, against depending lugs or hooks 72 on the presser-plate 16. In the path of the finger 51 is also arranged a roller 74, carried at one end of a bell-crank lever 73, 95 which is in turn connected to a second bellcrank lever 75, which is connected to a thimble 77, carrying at either end levers 78, said levers being normally retained in downwardly-pointing position by springs 94. The 100 ends of said levers 78 engage racks 79, guided vertically in the sides of the frame A, said racks in turn engaging with pinions 80, secured to the pivots of folding flaps 81, pivoted upon the bed at either end of the open- 105 ing 90 and adapted to fold inwardly.

The worm-wheel shaft 3 is connected to a spindle 35 by a gear-wheel 5 and intermediate gear-wheels 82 83 and a gear-wheel 84 on said spindle, which latter carries a cam 86, 110 provided with two bosses or projections, as. shown in Fig. 2. A vertically-guided crossbar 87 rests against the cam 86 by means of a roller 88, and a plate 89 is mounted on an upright support 87ª, carried by said cross- 115

bar 87. The operation of the improved machine is as follows: The worm-wheel shaft 3 is driven by the wheels 1 2 4 and the main shaft 7 by the wheels 568. This results in the carriage 120 a receiving a laterally-reciprocating motion. When the latter moves toward the wrappersupporting plate 33, on which the sheets of tin-foil or paper are held by means of the clamps 35, the pins 39 of the supports 40 125 strike the pins of the plate 38 and being held by the stop-pins 41 bring about the rotation of the disks 36, the spring 42 being stretched and the wrapper-feeding rods 37 caused to be

seizes hold of the upper sheet of tin-foil or other wrapper and causes it to move forward to a sufficient extent to bring its end to the grippers of the gripper device b. In the described movement of the carriage a the arm 23 strikes the stop 24, which causes the spindle 21 to turn, so that the finger 22 in rocking abuts against the lug 18× on the plate 18, and thus rocks the latter against the tension of 10 the spring 20, the gripper-bar 17 thus being raised. The supply of tablets is arranged in the supporting device c of the carriage above the plate 89, and when the carriage arrives at the end of its movement toward the wrapper-5 supporting plate 33 said plate 89 is maintained in raised position by one of the bosses or projections of the cam 86. The ends of the tablet-retaining pawls 29 rest then against / the plate 89 and release the pile of tablets, so 2c that the bottom tablet can fall on the plate 89. When the carriage moves then in the direction of the arrow, Fig. 1, the projections 28 on the pawls 29 press under the action of | their springs 91 against the last but one tab-25 let, and thus retain the upper tablets in position while the plate 89 descends with the lowermost chocolate tablet released and carried by it, owing to the movement of the cam 86, which allows the roller 88 to descend. At the same time the arm 23 releases the stop 24 and the finger 22 releases the rocking plate 18, which is then moved by the spring 20 in such manner that the gripper-bar 17 is lowered and presses the wrapper-sheet against 35 the plate 16. This sheet is then carried until the carriage arrives at the end of its movement in the opposite direction, in which the plate 18 strikes a partition or stop plate 92 adjacent the plate 89 and is moved in such 40 manner as to raise the gripper-bar 17 in order to permit the wrapper-sheet to fall over the opening 90—that is to say, on the hinged folding-plate 47. At this moment the second projection of the cam 86 raises the roller 45 88 and the plate 89 until the tablet carried by the latter is pushed by the same between the engle-piece 19 and the plate 18, which constitute a carrier having an open bottom and a movable side member. When the car-5° riage a returns to its position shown in Fig. 1, the tablet taken from the support 89 is held, by the spring 20 between the plate 18 and the angle-piece 19, which together form the carrier or transporting device and which 55 carry it until the arm 23 strikes the stop 24 and rocks the tablet-clamping side member or plate 18 by means of the spindle 21 and of the finger 22, the result being that the tablet is | released and falls on the wrapper covering .60 the folding-plate 47, Fig. 2. Atteach movement of the carriage a in the direction of the arrow in Fig. 1 and after each wrapper has been seized the fingers 51 52 meet the rollers 33 54 of the levers 55 56 and by means of the 65 toothed segments 57 64 and of the cooperating 1

wheels 59 66 bring about the rotation of the spindles 58 and 65, whereby the folder-bars 62 and 69 (the ends of which are beveled) are moved by the levers 60 and the slide-plates 61 and 68. The finger 52 is of such shape 70 and arrangement relatively to the finger 51 that it only causes a small movement of the folder-bar 69 against the plate 47 until the latter finger leaves the roller 53 for the purpose of pushing the tablet, which otherwise 75 would not fall at once, owing to the resistance of, the wrapper - sheet. The folder - bar 62 falls then under the action of the finger 51 on the tablet and folds in the manner indicated in Fig. 5 one of the edges of the wrapper, 80 which, after the fall of a tablet, assumes the shape shown in Fig. 2. When the finger 51 releases the roller 53, the bar 62 is withdrawn, into its original position by the action of the spring 59a. At the same time the fin- 85 ger 52 brings about the continuation of the movement of the bar 69, so that the edge of the wrapper-sheet which is above is also folded. When the finger 52 is free of the roller 54, the bar 69 is returned to its original 90 position by the spring 67. The bar 71, connected to the bar 70, then strikes the stops 93, secured to the table top or bed 13, and thus prevents the retreat of the bar 70, which rests then against the last-folded edge of the wrap- 95 per-sheet, Fig. 6. During this movement the cams 43 on the spindle 7 have turned to a sufficient extent to enable the rollers of the cross-bar 45 to arrive at the projection 43a, which brings about the descent of the cross- 100 bar with the plate 47. At this moment the finger 51 strikes the roller 74 of the bell-crank lever 73 and through the intermediary of the bell-crank fever 75 causes the spindle 77 to turn. The levers 78, secured to the spindle 105 77, move the racks 79, which cause the pinions 80 to turn and lower the flaps 81, arranged at the ends of the opening 90, by which the wrapper, not yet folded at the said ends, is folded in its turn on the tablet, as shown in 110 Fig. 7. The fold-retaining bar 70 prevents the portion of the wrapper already folded on said tablet from rising again. In being actuated the flaps 81 abut against and slightly raise the folder-bar 69, which resumes sub- 115 sequently its position under the action of its spring 67, this being for the purpose of avoiding friction of the bar 69 on the wrapper, which would spoil the latter. When the finger 51 has released the roller 74, the springs 120 94 operate the levers 78 and bring the flaps 81 back to their original position. When the spindle 7 continues its rotation, projections 43b on the cams arrive under the rollers 44, so that he cross-bar can descend farther still 125 with the plate 47. The latter is tilted by the stop 49, whereupon the wrapped-up tablet escapes from it and slides down the chute 50. The carriage a has in the meantime advanced sufficiently toward the plate 89 to enable the 130

hooks or lugs 72 to come in contact with the pins 72° of the bar 71 and cause the latter to participate in the movement when the carriage a continues its movement above the 5 stops 93 until the rod 70 is retracted into its seat in the folder-bar 69, whereupon the carriage again reaches the end of its travel in which the wrapper-sheet carried by the gripper device b falls on the opening 90 and the ro plate 47. The same operations then begin again, a tablet being seized by the carrier (plate 18 and angle-piece 19) and brought onto the plate 47, while at the same time a tablet is deposited by the device c on the F5 plate 87. Then a new wrapper-sheet is seized and carried by the gripper device b while the tablet placed on the plate 47 is wrapped up by the wrapping devices.

Below the tablet-holding device c are two 20 parallel laterally-extending arms 95, which serve to receive any tablets which might accidentally escape from the pawls 29 and the guides when said device is not immediately

above the plate 89.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent— 1. In a tablet-wrapping machine, the combination, with the wrapping devices, of a car-30 riage movable toward and away from the same and upon which the tablets are stored, and means for successively depositing the tablets in cooperative relation with said

wrapping devices.

2. In a tablet-wrapping machine, the combination, with the wrapping mechanism, and the wrapper-feeding mechanism, of a reciprocating carriage to successively carry the wrappers from said feeding mechanism to 40 said wrapping mechanism while moving in one direction, a tablet-holder on said carriage in which the tablets are stored, and means for successively depositing the tablets in cooperative relation with the wrapping 45 mechanism during the movement of the carriage in a direction opposite to that first mentioned.

3. In a tablet-wrapping machine, a bed, wrapping devices thereon, a laterally recip-50 rocating carriage slidable on said bed over said devices, means on said carriage for holding a plurality of tablets, and means for successively removing the tablets from said holding means and depositing the same in coop-55 erative relation with said wrapping devices.

4. In a tablet-wrapping machine, wrapping devices, wrapper-feeding devices, a carriage movable between said wrapping and holding a pile of tablets, and means for successively transferring the tablets from said holding means to said wrapping devices.

5. The combination, with the wrapping de-55 vices and wrapper-feeding devices, of a car-

riage movable between said devices, means on said carriage for holding a pile of tablets, means also on the carriage for holding a single tablet, and means for successively transferring the tablets from the former to the lat- 70 ter means.

6. The combination, with the wrapping devices and wrapper-feeding devices, of a carriage movable between said devices, means on said carriage to hold a plurality of tablets, 75 means also on the carriage to hold a single tablet, and means mounted independently of said carriage for successively transferring the tablets from the former to the latter means.

7. The combination, with the wrapping de- 80 vices and the wrapper-feeding devices, of a horizontally-reciprocating wrapper-delivering carriage movable between said devices, means on said carriage to hold a pile of tablets, means also on the carriage for holding a 85 single tablet; a vertically-reciprocating device for successively extracting the tablets from said first-named means and transferring the same to said last-named means, and means for dumping said means to hold a sin- 90 gle tablet.

8. In a tablet-wrapping machine, wrapping devices, a carriage for supporting a pile of tablets and for delivering the wrappers to said wrapping devices, a tablet-carrier on 95 said carriage, means for extracting one tablet at a time from the pile on said carriage and for delivering the same to said carrier, and means for emptying the carrier when adjacent said wrapping devices.

9. In a tablet-wrapping machine, a bed, wramping devices arranged thereon, a reciprocating carriage guided on said bed above said devices and provided with means for holding a pile of tablets, a carrier on said car- 105 riage, means for delivering one tablet at a time from said holding means to said carrier, and means for dumping said carrier when directly above said wrapping devices.

10. The combination, with the wrapping 110 devices, of a reciprocating carriage for delivering the wrappers to said devices, means on said carriage for holding a pile of tablets, a carrier on said carriage, a reciprocating plate for extracting said tablets one by one from 115 the pile in which they are stored on said carriage and for pushing each into said carrier, and means for dumping the latter.

11. In a tablet-wrapping machine, wrapping devices, a horizontally-reciprocating 120 wrapper-delivering carriage movable over said devices, means on said carriage for holding a pile of tablets, a carrier mounted upon the under portion of said carriage, means for 60 said carriage, means on said carriage for successively extracting the tablets from said 125 holding means and pushing the same upwardly into said carrier, and means for dumping the latter when above said wrapping devices.

12. In a tablet-wrapping machine, the 130

combination, with the wrapping devices, of a | combination of a bed, a wrapper-feeding de- 65 carriage movable toward and away from the | vice at one end thereof, wrapping devices on same, guides on said carriage for holding a | said bed, a reciprocating carriage on said bed pile of tablets, a carrier on said carriage for and movable over said wrapping devices in holding a single tablet, a plate for extracting | the direction of said wrapper-feeding device, a single tablet from said guides and for push- | means on said carriage for successively de- 70 ing the same into said carrier, and means for positing the wrappers adjacent the wrapping

scribed, the combination, with the carriage, | tablets from said holding device to said car- 75 of the guides thereon for holding a pile of tab- | rier, and means for dumping the latter when lets, and a reciprocating plate movable up- adjacent said wrapping devices. wardly beneath said guides and operable to 15 extract the lowermost tablet in the pile.

14. In a machine such as described, the combination of a bed, a carriage reciprocating thereon, guides on said carriage for holding a pile of tablets, and a horizontal plate 20 guided vertically in said bed and operable to extract the lowermost tablet in the pile.

15. In a machine such as described, the combination of a bed, wrapping devices thereon, a horizontally-reciprocating car-25 riage on said bed, guides on said carriage for holding a pile of tablets, a tablet-carrier on said bed for carrying a single tablet to said wrapping devices, a vertically-reciprocating plate, and means for actuating said plate so 30 as to extract a tablet from the pile in said guides and deliver the same to said carrier.

16. In a wrapping-machine of the type set forth, a bed, a carriage slidable thereon, a tablet-carrier mounted on said carriage and 35 provided with a movable side member, a device for actuating said member, and a stop on said bed for actuating said device.

17. In a machine for wrapping tablets, in combination, a bed, wrapping devices there-40 on, a reciprocating carriage on said bed above said devices, guides on said carriage for holding a pile of tablets, a carrier on said carriage having an open bottom and embodying a tablet-clamping plate, a horizontal plate 45 guided vertically in said bed, means for actuating said plate so as to extract the lowermost tablet from the pile on said carriage and to push the same upwardly into said carrier, and means for actuating said tablet-clamping 50 plate when said carrier is above said wrapping devices.

18. In a tablet-wrapping machine, in combination, a bed, a wrapper-supporting device at one end thereof, a wrapper-feeding device 55 associated with said supporting device, wrapping devices on said bed, a reciprocating carriage on said bed, a gripper device on said carriage for delivering the wrappers from said feeding device to said wrapping devices, 60 means on said carriage for retaining a pile of tablets, and means for depositing said tablets, one by one, upon the wrappers delivered by the gripping device to said wrapping devices.

dumping the latter when adjacent said wrap- | devices, a device on said carriage for holding a pile of tablets, a tablet-carrier on said car-13. In a wrapping-machine such as de- riage, means for successively delivering the

> 20. In a tablet-wrapping machine, means to clamp a tablet, means to grip a wrapper, and a single means for normally maintaining 80 said two means in clamping and gripping position respectively.

> 21. In a tablet-wrapping machine, means to clamp a tablet, means to grip a wrapper, and a single means for releasing said two 85 means.

> 22. In a tablet-wrapping machine, means to clamp a tablet, means to grip a wrapper, and a connection between said two means whereby both are opened and closed simul- 90 taneously.

> 23. In a tablet-wrapping machine, a tablet-carrier having a movable side member, a wrapper-gripping device operable by said member, and means for operating said mem- 95 ber.

24. The combination, with the tablet-carrier having the rocking plate associated therewith, of the gripping device operable by said plate, and the means for rocking said 100 plate.

25. The combination, with a carriage, of a carrier thereon having a movable tabletclamping member, a wrapper-gripping device one element of which is carried by said 105 member, and means controlled by the movement of said carriage for operating said member.

26. The combination, with the wrapping devices, and the wrapper-feeding devices, of 110 a carriage movable between said devices, a tablet-carrier on said carriage, a wrappergripping device also mounted on the carriage, and a single means for opening said carrier and said gripping device.

27. The combination, with the wrapping devices, and the wrapper-feeding devices, of a carriage movable between said devices, a tablet-carrier on said carriage, a wrappergripping device also mounted on said car- 120 riage, and a spring for normally maintaining both said carrier and gripping device in closed position.

28. The combination, with the wrapperfeeding device and the wrapping devices, of a 125 carriage movable between the same, a tabletcarrier on said carriage, a wrapper-carrying 19. In a tablet-wrapping machine, the I device also mounted on said carriage, and

means for connecting said wrapper-carrying device with said tablet-carrier so that both

are simultaneously open and closed.

29. The combination, with the wrapper-5 feeding devices and the wrapping devices, of a carriage movable between the same and upon which the tablets are stored, a tabletcarrier on said carriage, a wrapper-carrying device on said carriage, means for connecting 10 said wrapper-carrying device with said tablet-carrier so that both are simultaneously opened and closed, means for opening and closing said devices at either end of the reciprocating movement of the carriage, and 15 means for pushing a tablet into said carrier while the same is open.

30. The combination, with the wrapping devices, of a carriage movable over the same, a device on said carriage for holding a pile of 20 tablets, a normally closed carrier on said carriage for hessing a single tablet, means for momentarily opening said carrier, means for extracting a tablet from the pile on said carriage and pushing the same into said carrier 25 when the same is open, and means for reopening said carrier when above said wrapping

devices.

31. A machine such as described including in its construction wrapping devices, a recip-30 rocating carriage movable over the same, wrapper-feeding devices at one side of said wrapping device and in the path of said carriage, a wrapper-gripping device on said carriage, means on said carriage for holding a 35 plurality of tablets, means for actuating said gripping device so as to transfer a wrapper from said wrapper-feeding device to said wrapping devices while the carriage is moving in one direction, and means for transfer-40 ring a single tablet from said holder to said wrapping devices during the movement of said carriage in the opposite direction.

32. In a wrapping-machine such as decribed, the combination of a bed having an 45 d ening therein, a wrapper-plate movable in said opening, means for laying a wrappersheet over said opening, means for depositing a tablet upon such wrapper, wrapping devices embodying oppositely-disposed folder-bars, 50 means for partially actuating one of said folder-bars so as to push said tablet and wrapper down upon said plate, means for then actuating the other folder-bar, and means for completing the folding movement of said first-55 named folder-bar.

33. In a tablet-wrapping machine a reciprocating slide-plate, a folder-bar, and a spring connecting said instrumentalities.

34. In a tablet-wrapping machine, a re-6c ciprocating slide-plate, a folder-bar in advance of said plate and movable in the same plane,

and a resilient connection between said bar

and plate. 35. In a sublet-wrapping machine, a bed, a wrapper-plate, means for laying the wrap- 65 per on said plate, means for depositing the tablet on the wrapper, horizontally-reciprocating slide-plates on said bed at either side of said wrapper-plate, resiliently-mounted folder-bars carried by said slide-plates, and 7° means for reciprocating the latter.

36. In a tablet-wrapping machine, a folderbar, and fold-retaining means associated

therewith. 37. The combination, with the folder-bar 75 69, of the fold-retaining bar 70 in connection therewith.

38. In a tablet-wrapping machine, a reciprocatory folder-bar, a rod movable transversely therethrough, and a fold-retaining 80

bar carried by said rod.

39. In a tablet-wrapping machine, a reciprocatory folder-bar having a longitudinally-extending seat, a rod slidable transversely through said folder-bar, and a fold- 85 retaining bar carried by said rod and adapted

to fit in said seat. 40. In a tablet-wrapping machine, the combination, with the wrapper-plate, of the folderbars at either side thereof, means for suc- 90 cessively actuating said bars, and means associated with the bar which is last actuated for holding down the part of the wrapper folded thereby after said bar has completed its wrapping movement...

41. In a tablet-wrapping machine, the combination, with the wrapper-plate, of the folder-bars at either side thereof, means for successively actuating said folder-bars, a fold-retaining bar associated with one of said 100 folder-bars, and means for retracting said fold-

retaining bar. 42. The combination, with the folder-bar 69, of the rod 70° movable transversely therethrough, the fold-retaining bar 70 carried at 105 one end of said rod, and the retracting-bar 71

carried at the opposite end thereof.

43. The combination, with the wrapping devices embodying the folder-bar 69 and the fold-retaining bar 70, of the retracting-bar 113 71, provided with pins 72a, the reciprocating gripping device, and the claws or hooks 72 on said device for engaging said pins and thereby retracting said fold-retaining bar.

In testimony whereof I have signed this 115 specification in the presence of two subscrib-

ing witnesses.

AUGUSTE BLANC.

Witnesses:

S. H. MUNIER,

J. TINER.