

W. S. IREY.
CIGARETTE MACHINE.
APPLICATION FILED AUG. 12, 1908.

1,016,410.

Patented Feb. 6, 1912.

15 SHEETS—SHEET 1.

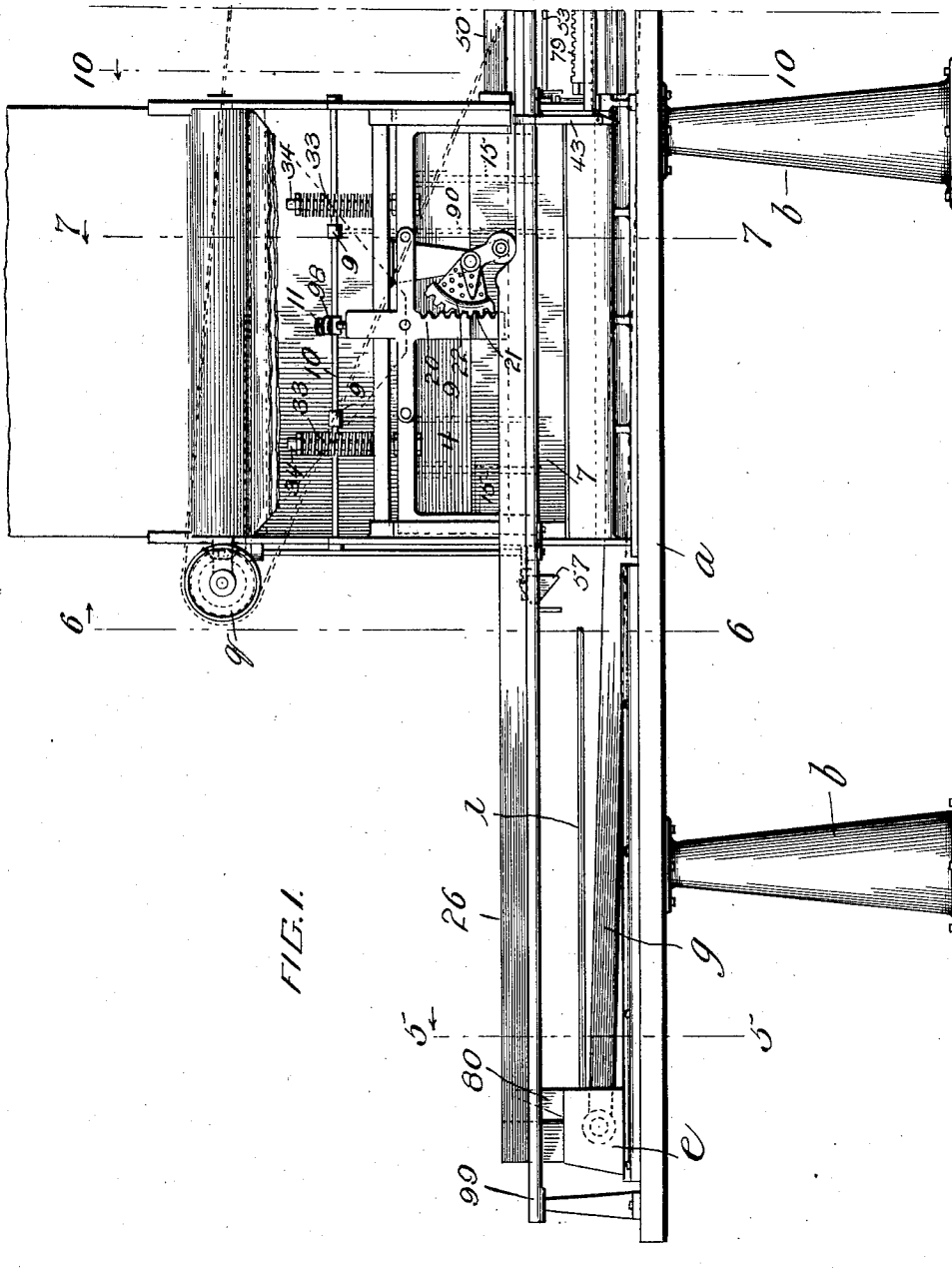


FIG. 1.

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15 SHEETS—SHEET 3.



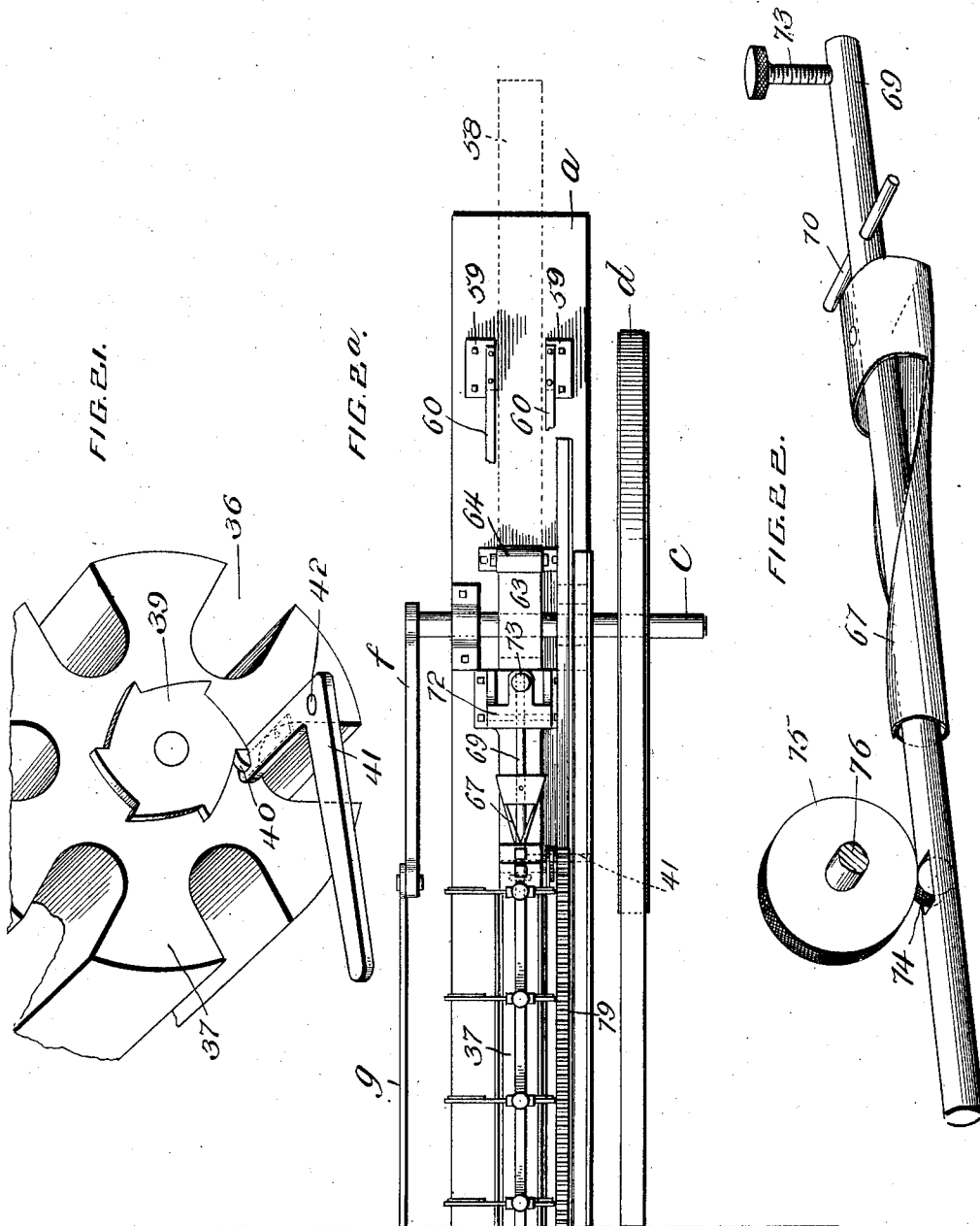
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15 SHEETS—SHEET 4.



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15 SHEETS—SHEET 5.

FIG. 5.

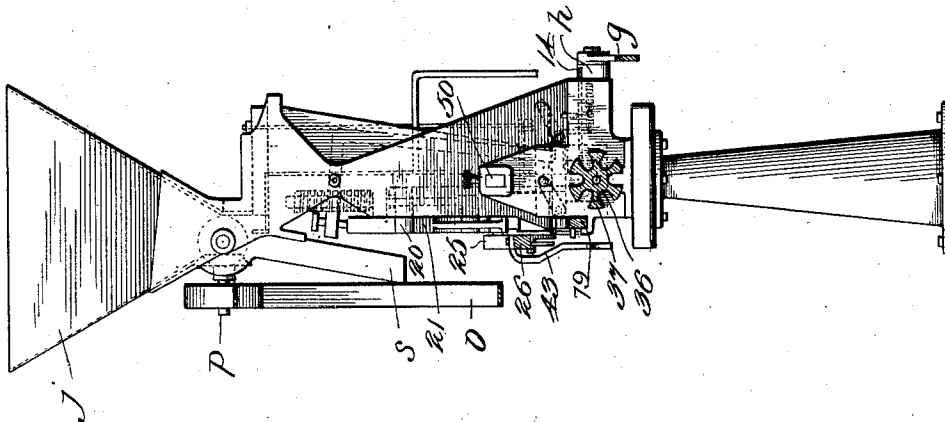
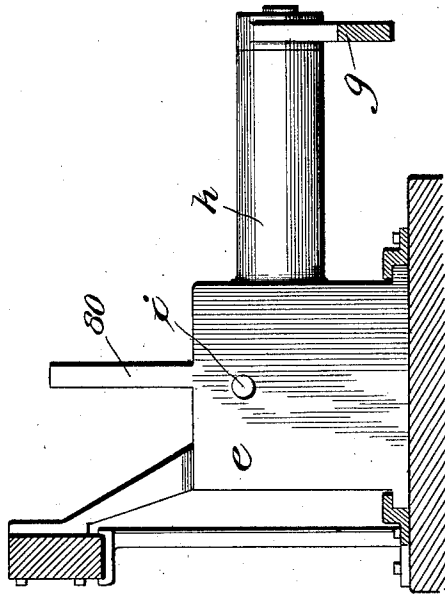


FIG. 3.

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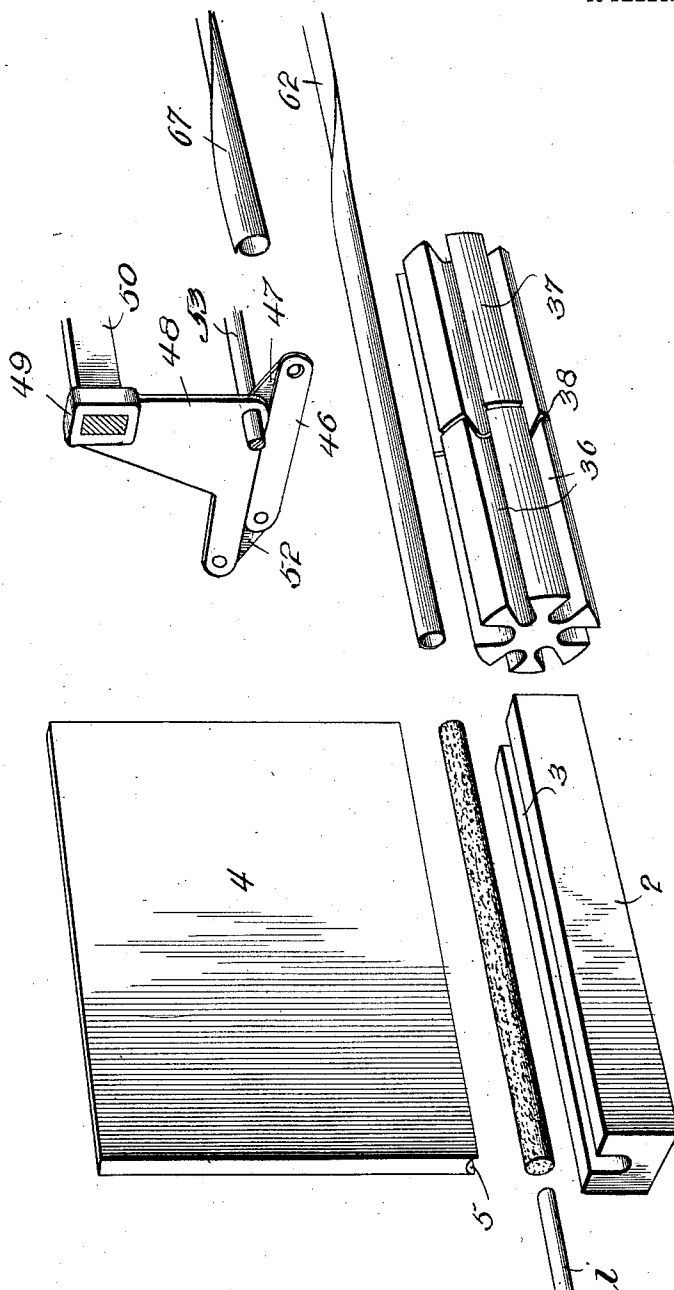
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15 SHEETS—SHEET 6.

FIG. 4.



WITNESSES:

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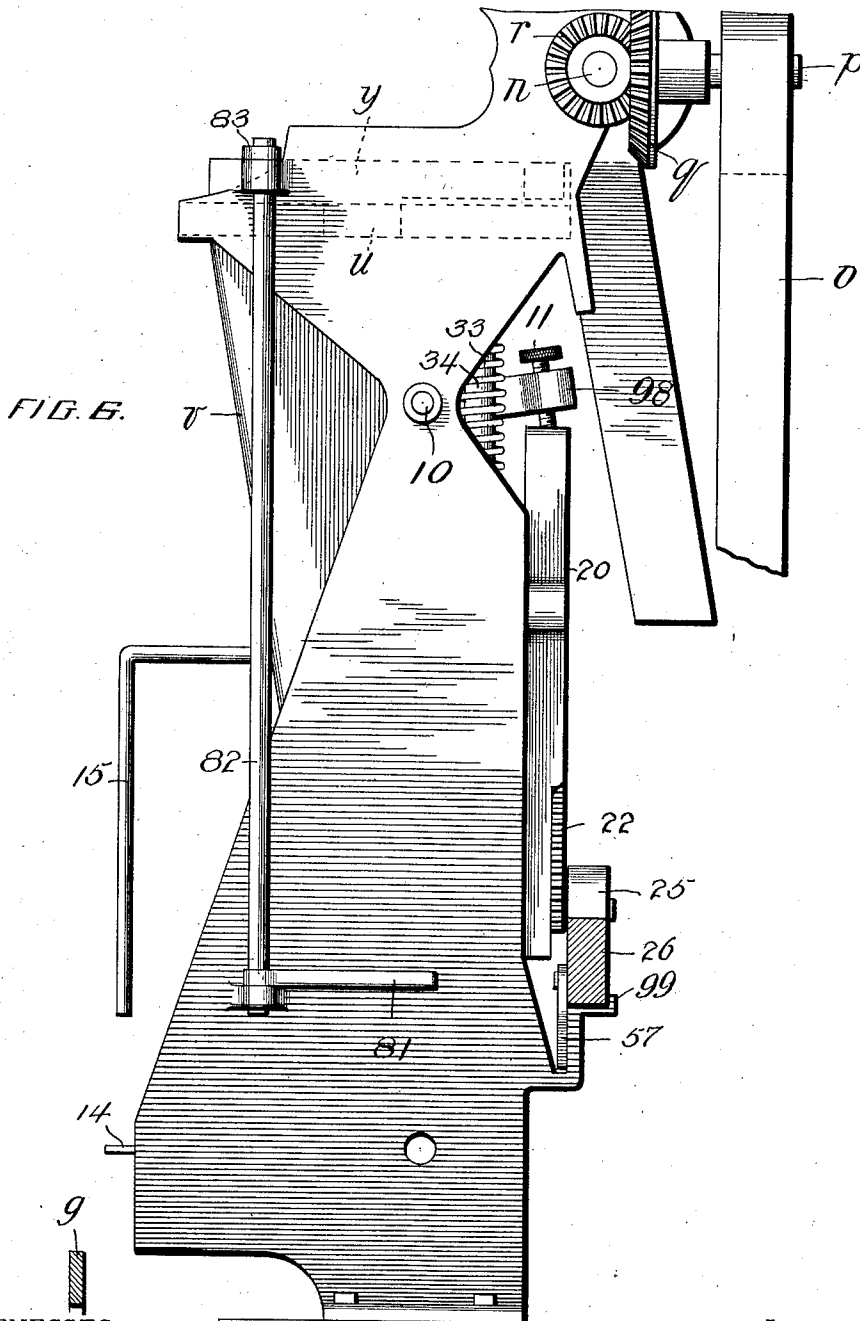
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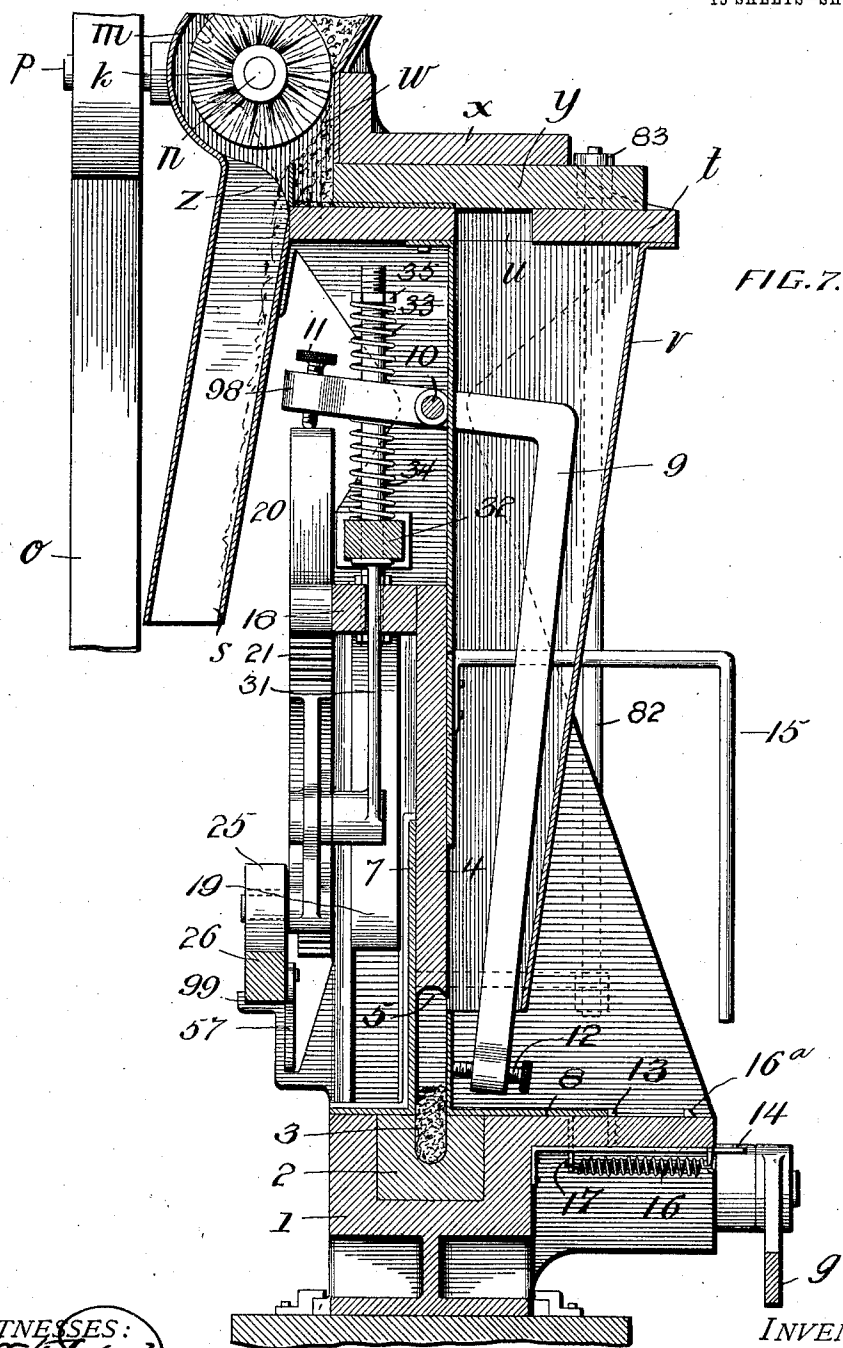
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15 SHEETS—SHEET 7.



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15 SHEETS—SHEET 9.

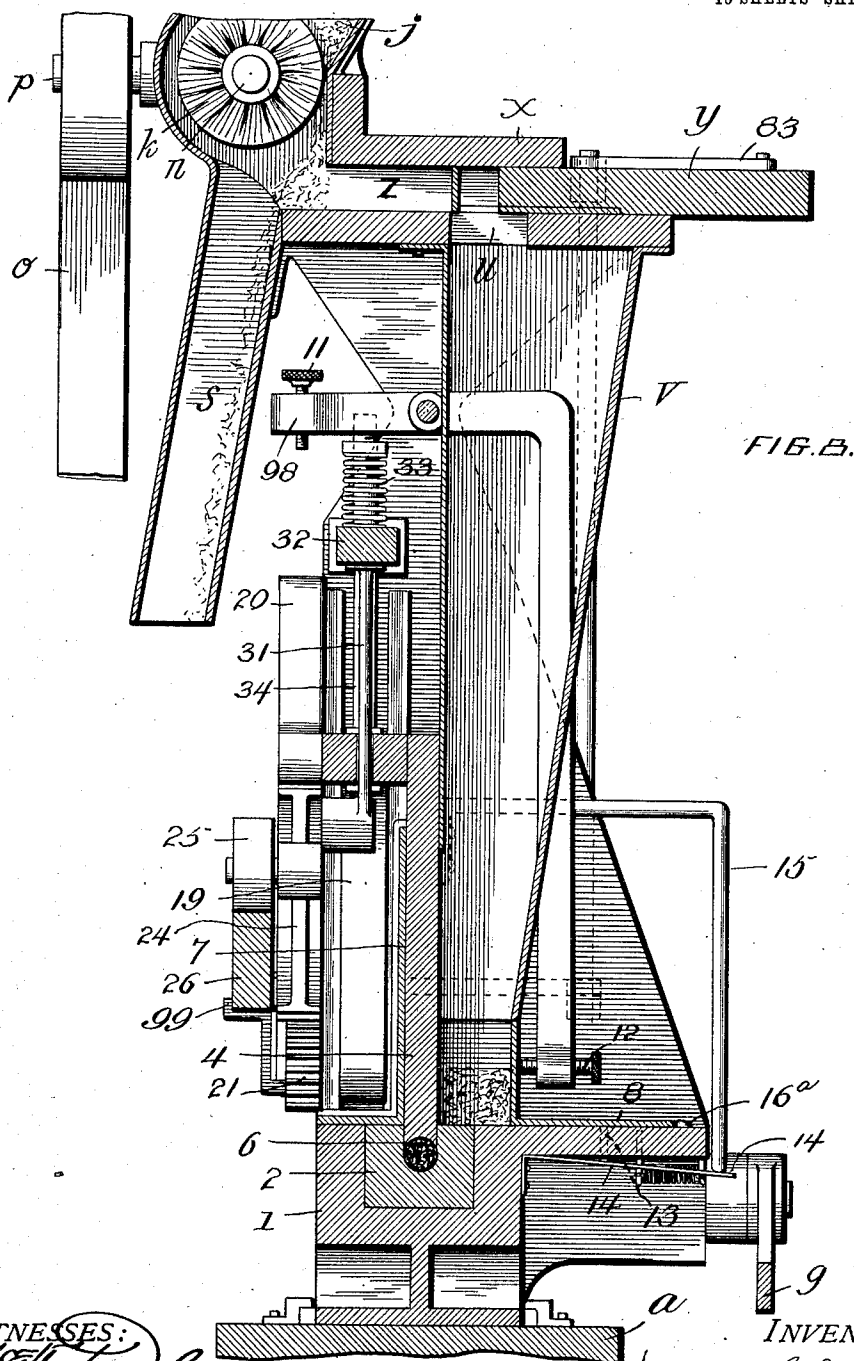


FIG. B.

WITNESSES:
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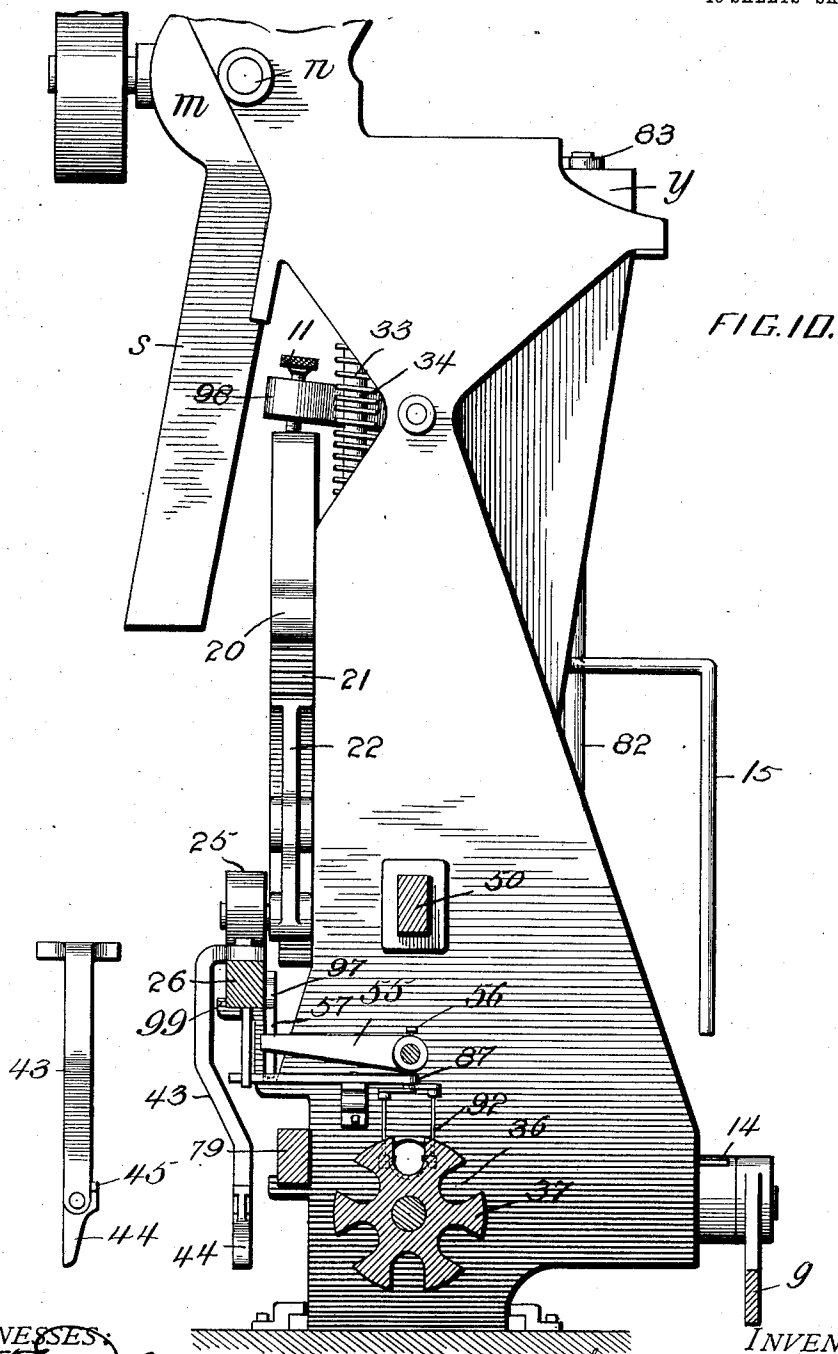
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15 SHEETS—SHEET 11.



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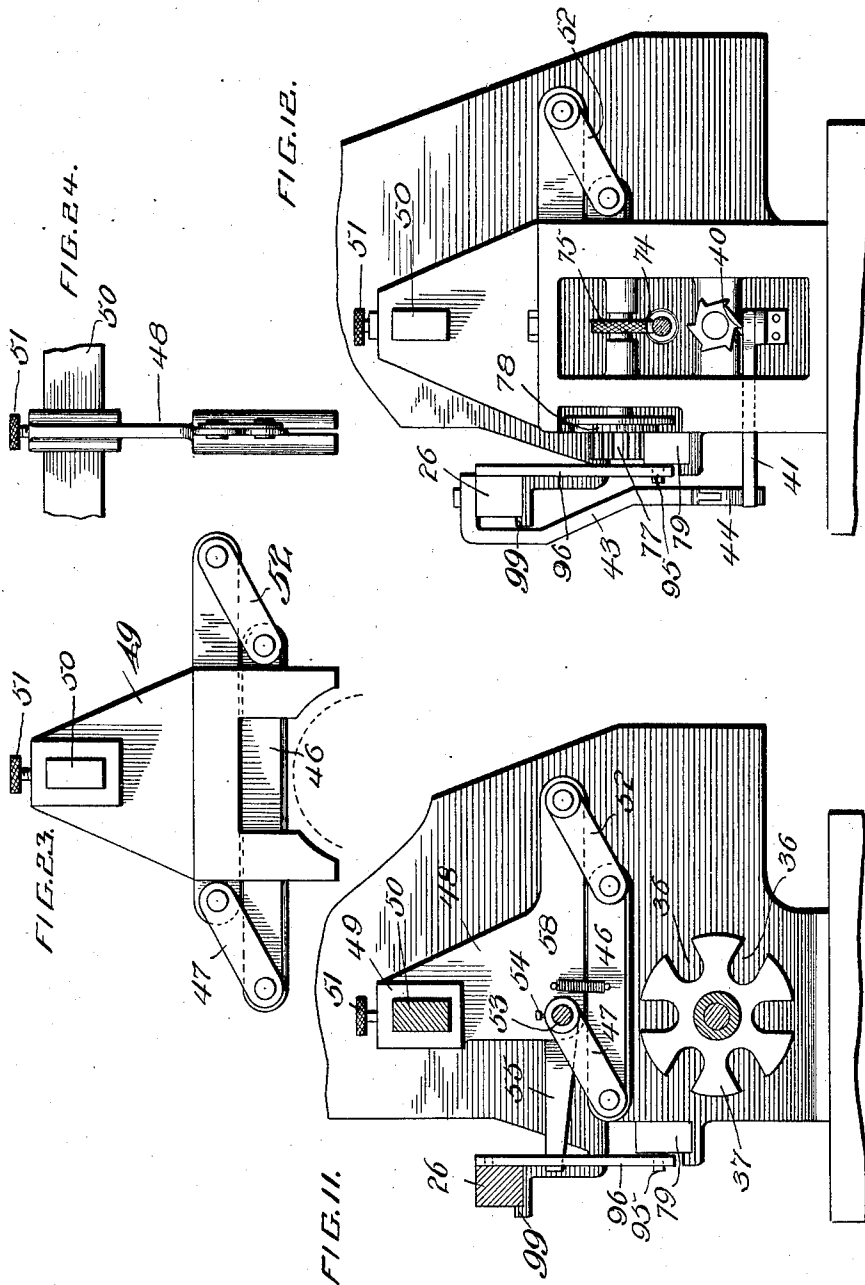
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15 SHEETS—SHEET 12.



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APPLICATION FILED AUG. 12, 1908.

Patented Feb. 6, 1912.

FILE 15.

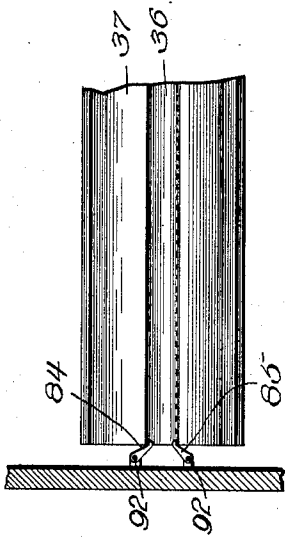
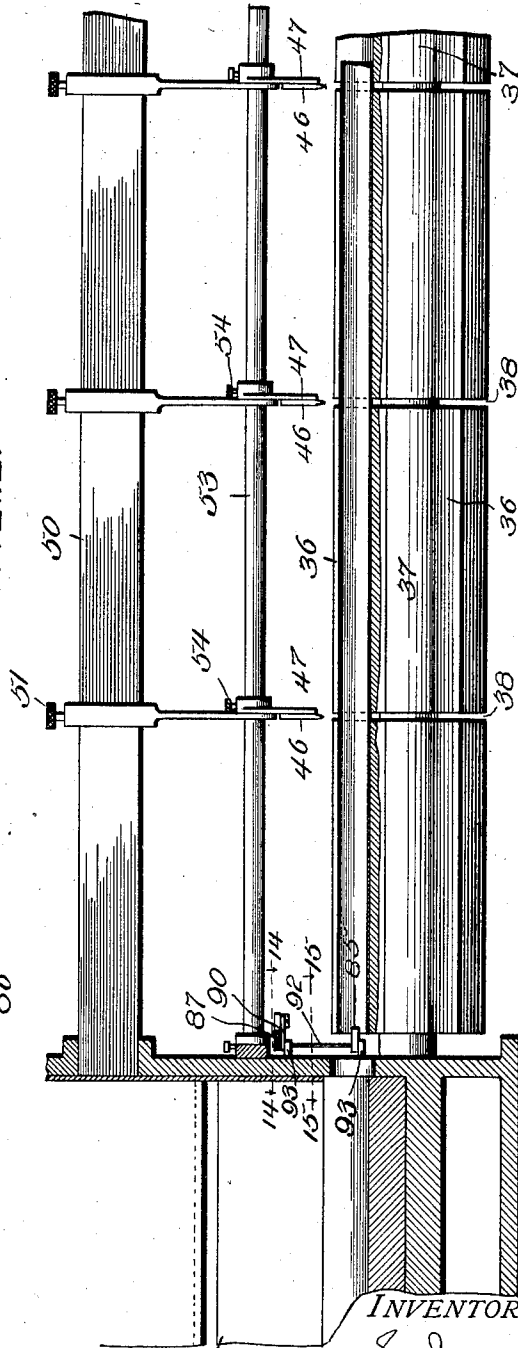
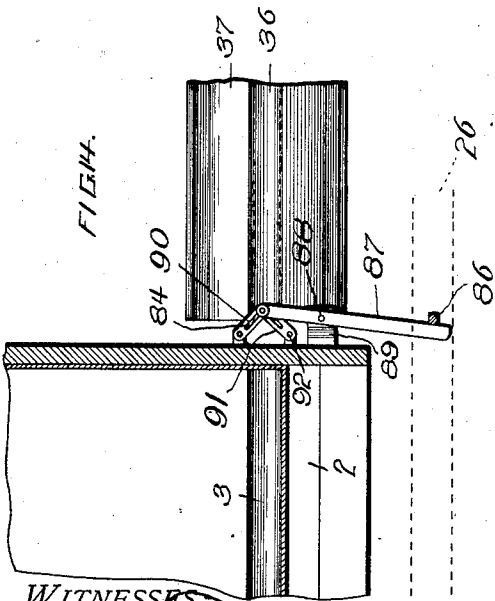


FIG. 13.



F1514.



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15 SHEETS—SHEET 14.

FIG. 1B.

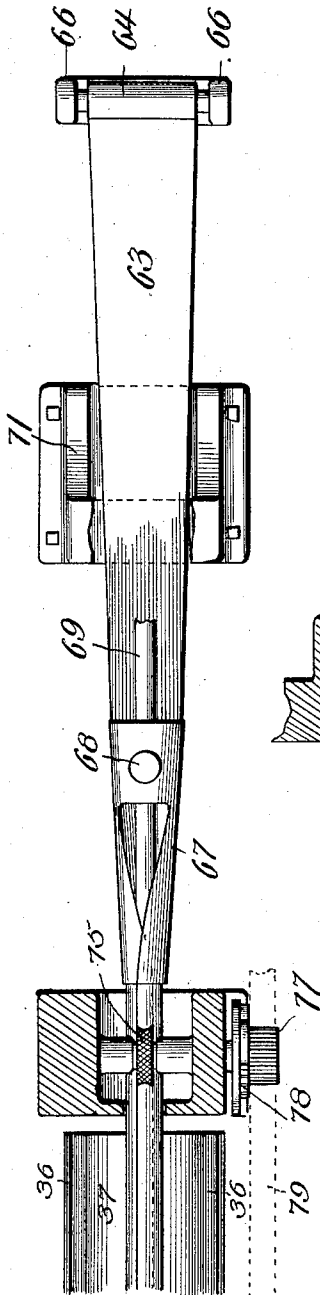


FIG. 1B.

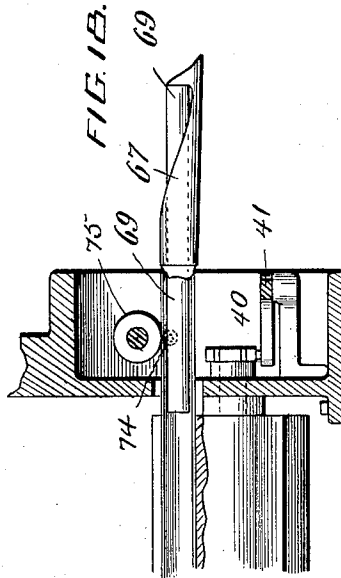
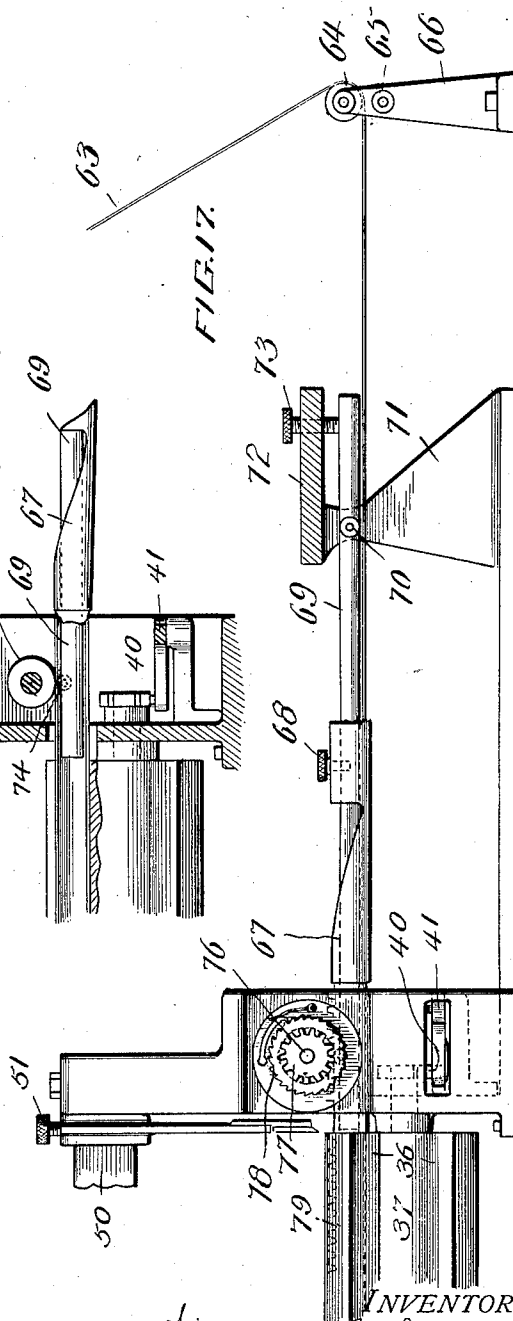


FIG. 17.



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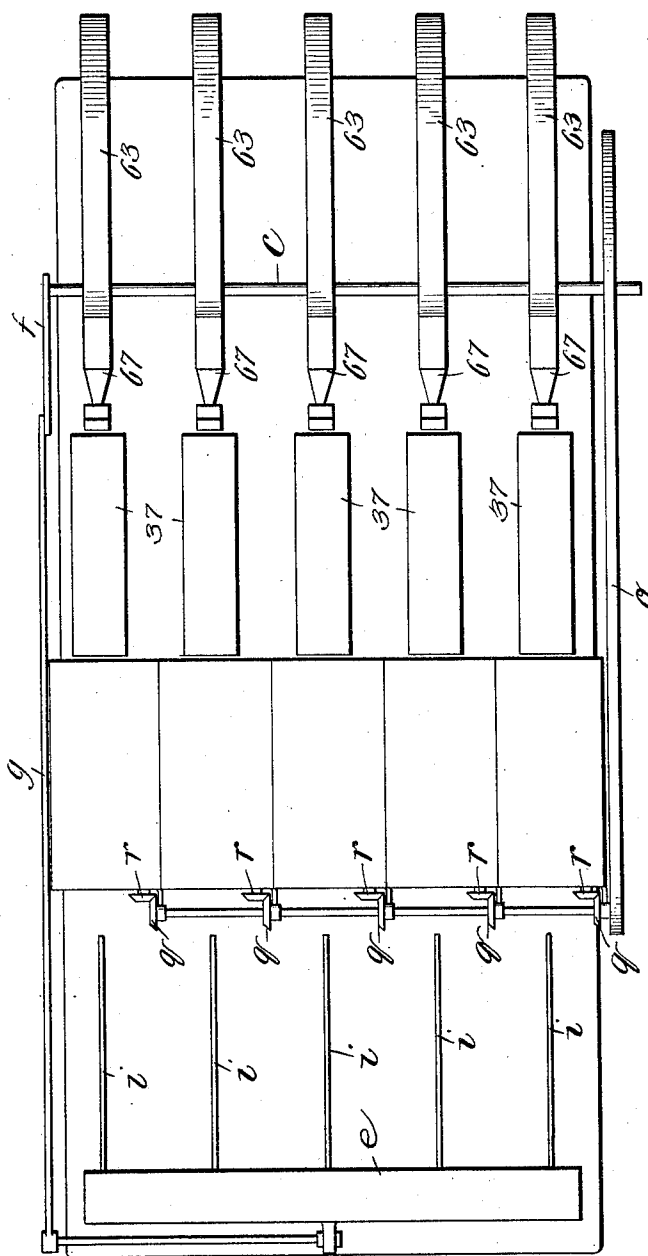
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1,016,410.

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15 SHEETS—SHEET 15.

FIG. 25.



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CIGARETTE-MACHINE.

1,016,410.

Specification of Letters Patent.

Patented Feb. 6, 1912.

Application filed August 12, 1908. Serial No. 448,227.

To all whom it may concern:

Be it known that I, WILLIAM S. IREY, of Mexico, Province of Pampanga, Philippine Islands, have invented certain new and useful Improvements in Cigarette-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in cigarette machines, and the object of my invention is to produce a simple and inexpensive machine of this kind, which may be operated by hand or power, which may be multiplexed to produce any number of cigarettes at a time, which will produce open ended or closed cigarettes, as desired, and in which all the operating parts are disposed substantially in a straight line.

Further objects will appear in the detailed description.

With these objects in view, my invention consists in the construction and combinations of parts, as herein described and claimed.

In the accompanying drawings—Figures 1 and 1^a, which are to be taken together, represent a side view of my invention. Figs. 2 and 2^a, which are to be taken together, are a top plan view of the same. Fig. 3 is a cross section of the same, taken on the line separating Figs. 1 and 1^a and looking toward the hopper. Fig. 4 is a detail view, showing various parts of the operating mechanism detached in their proper relative positions. Fig. 5 is a cross section on the line 5—5 of Fig. 1. Fig. 6 is a cross section on the line 6—6 of Fig. 1. Fig. 7 is a cross section on a larger scale on line 7—7 of Fig. 1. Fig. 8 is a cross section on the same line, but showing the parts in a different position. Fig. 9 is a side view of the tobacco rod or core forming plunger and its operating mechanism, parts being broken away and shown in section. Fig. 10 is a cross section on line 10—10 of Fig. 1. Fig. 11 is a section on line 11—11 of Fig. 1^a. Fig. 12 is a cross section on the line 12—12 of Fig. 1^a. Fig. 13 is a side view, partly in section, showing the cylinder for holding the paper tube and knives for sever-

ing the same. Figs. 14 and 15 are cross sections taken on the lines 14—14 and 15—15, respectively of Fig. 13. Fig. 16 is a top plan view, partly in section and on a large scale, of the paper folding mechanism. Fig. 17 is a side view of the same, partly in section. Fig. 18 is a cross section through a part of the paper folding means and the end of the tube-receiving cylinder. Fig. 19 is a perspective view showing part of the tobacco feed mechanism. Fig. 20 is a perspective view showing another part of the operating mechanism, a portion of the operating rod 26 being broken away. Fig. 21 is a perspective view showing part of the cylinder and its operating mechanism. Fig. 22 is a perspective view showing part of the paper folding devices. Fig. 23 represents the slotted knife carrying frame which I prefer to use when one knife only is used. Fig. 24 is an end view of the same. Fig. 25 is a top plan view of one of the cross heads when several gangs are used at the same time.

The operating parts are supported on a long table or platform *a*, mounted on pedestals *b*. On the left of the machine is a cross head *c* carrying the ejecting rod for pushing the compressed rod of tobacco into the prepared paper tube. As said before the parts of the machine are mounted substantially in line with each other, and in the second section of the machine is located the tobacco rod or core forming mechanism provided with means for feeding definite quantities of tobacco from a hopper into the compression chamber or tobacco core forming die. Next in order comes the cylinder for receiving and holding the paper tubes while the tobacco rods are pressed into said tubes, knife carrying mechanism being associated with this cylinder for severing the paper tube and its inclosed tobacco rod or core into separate cigarettes. Next in order comes the paper folding means and the paper reel. Separate means may be provided, if desired, to close the ends of the cigarettes. All the operating mechanism is mounted on or supported above the platform *a*.

c represents the operating shaft, which may be driven by hand or by power. On this shaft is mounted a large, heavy pulley

5 d , which serves to drive the mechanism and also as a fly wheel. This shaft is located near the right hand end of the machine. On the left hand end of the machine is mounted the cross head e , adapted to reciprocate in suitable guides on the platform a . The shaft c has, fixedly attached to it, a crank arm f , and a long rod or link g is pivotally attached to the crank arm f and to an extension h on the cross head e . Projecting from the cross head is the ejecting rod i , which serves to drive the compressed tobacco rod into the prepared paper tube. As shown in Fig. 1, this ejecting rod has to travel some little distance before it strikes the tobacco rod, for a purpose hereinafter explained.

The feeding and tobacco core forming mechanism will next be described.

20 j represents a hopper, located nearly above the core forming mechanism, and having a long discharge opening substantially equal in length to the length of the compressing devices. In this hopper is mounted a continuously rotating feeding means, preferably a brush k , mounted in an enlargement m of the hopper on a shaft n . The shaft n is continuously revolved from the main driving shaft c by a belt passing over the pulley d and over a similar pulley on the shaft p , that is supported in suitable bearings at right angles to the hopper j . The shaft p is provided with a bevel gear wheel, q , which meshes with a similar gear wheel r , on the shaft n . Obviously, from the connections described, the main shaft c , which is constantly driven, will constantly rotate the shaft n , causing the brush k to constantly feed tobacco from the hopper. This results in the feeding from the hopper of a greater quantity of tobacco than is required to make the cigarette rods and the excess of tobacco passes out through a discharge tube s into a suitable receptacle (not shown) from whence it is reconveyed to the hopper j . By feeding an excess of tobacco from the hopper, I obtain the desired result of dispensing with complicated gearing for feeding exactly the right quantity of tobacco. This result, the regulation of the amount of tobacco fed, being accomplished as described hereinafter. A little below the brush is mounted a platform t , provided with a discharge opening u . This platform is provided with a chute v leading to the compression chamber or die of the tobacco core forming means. The lower part of the hopper is provided with a downward extension w attached to a support x , which is supported from platform a and which supports the hopper. Between the support x and the platform t , is a movable bar y , adapted to reciprocate back and forth and provided on its end with a box z , open at

65 both the top and the bottom and of such a size as to contain exactly the required amount of tobacco necessary to form a rod. The part y is reciprocated at intervals by means hereinafter described, so that the open bottom of the box z will, at certain definite times be brought over the opening u in the platform t .

On the platform a is mounted a support 1, cut away on its top for the reception of the die 2, which has an upwardly opening compression chamber or groove 3 having parallel side walls and a curved bottom. Into and out of the compression chamber 3, a plunger 4 is adapted to reciprocate, having a curved lower face 5, the plunger and 80 die, when the former is in its lowest possible position, as shown in Fig. 8, leaving a circular opening for the tobacco rod 6.

7 represents a right angled back plate located just behind the plunger 4, and 8 represents a right angled pusher member, which at certain times forms a continuation of one side of the lower end of the chute v , as shown in Fig. 8, and at other times acts to force or push a charge of tobacco up against the back plate 7 when plunger 4 is elevated as shown in Fig. 7. The pusher member 8, is operated at intervals by the bent levers 9, mounted on a suitable shaft 10, to which is attached an operating arm 98. Each of these levers and the arm 98 are provided with adjusting screws 11 and 12 whereby the throw of the lower end of the lever and thereby the length of movement of the part 8 toward back plate 7 may be exactly regulated.

The pusher 8 is temporarily held in the position shown in Fig. 7, until the plunger 4 has entered the compression chamber 3 in the die 2, by the following means:—The support 1 is perforated and through this support passes a pin 13, carried on a spring plate 14. When the part 8 has receded, as shown in Fig. 7, the spring plate 14 forces the pin 13 up behind the horizontal part of the piston 8, temporarily locking it there, as shown in Fig. 7. At the proper time this spring plate 14 is forced downward by the bent rod or lever 15, allowing the part 8 to be returned to its original position, namely, with one end in contact with the stop 16^a, carried by the support 1. The return of the part 8 to its original position may be accomplished by any desired means, such for example, as a spiral spring 16 attached to the support 1, and at the other end to a pin 17 carried by the piston 8 and projecting downwardly through a slot in the support 1.

The plunger 4 is mounted upon a horizontal frame 18, connected to a rack frame 20, best shown in Fig. 9. The plunger 4, frame 18 and rack frame 20 are all connected together, and the part 19 serves as a

guide therefor, the plunger being in front of this guide frame. The rack frame is provided with a rack 21, which meshes with the toothed segmental gear 22.

23 represents the supporting shaft for the gear 22, and on it is mounted a bell crank lever 24 carrying a roller 25 at its lower end. The upper arm of the bell crank lever is provided with a number of perforations, and the gear 22 is also provided with a number of perforations so that by the use of suitable pins, the gear 22 may be secured in various different positions upon the upper arm of the bell crank lever 24.

The bell crank lever 24, and thereby the tobacco rod or core forming plunger, is operated by the long operating rod 26 carried by the cross head *c* and supported in suitable guides 99 and extending nearly the whole length of the machine. As shown in Fig. 9, the operating rod is provided with a level portion 27, and a higher level portion 28, these two parts being connected by the incline 29. Obviously the movement of the parts to the right from the position shown in Fig. 9 will lift the roller 25, thereby depressing the plunger. The operating rod 26 is provided with a rounded projection 30, just at the top of the incline 29, higher than the level 28. This is for the purpose of forcing the plunger 4 down against the tobacco to form a rod, and then as this roller 25 comes down upon the level 28, the rod of tobacco is released so that it can be forced into the tube by the ejecting rod *i*. The shaft 23 is mounted on a depending bracket 31, attached to the cross bar 32 of the frame, and passing through a perforation in the part 18. The rack frame and plunger are normally held in their highest position by means of strong springs 33 on rods 34, which pass down through perforations in the bar 32 of the frame, and are connected to the part 18 which connects plunger 4 and rack frame 20. The compressing of these springs may be regulated by means of the nuts 35. The action of these springs is to normally hold the parts in the position shown in Fig. 7, from whence they are moved to the position shown in Fig. 8 by the action of the operating rod 26. As the spring 33 moves the parts from the position shown in Fig. 8 to that shown in Fig. 7, they operate the curved levers 9, since the top of the rack frame 20 strikes the adjusting screw 11 on the arm 98. As the plunger 4 descends the right angled arm 15 carried thereby strikes the spring plate 14, as shown in Fig. 8, releasing the part 8, whereupon the spring 16 draws said part 8 from the position shown in Fig. 7 to that shown in Fig. 8. After the tobacco rod has been formed, between the plunger 4 and the die 2, it is forced forward, at the proper time, by the

ejector rod *i* into a paper tube previously prepared and lying in one of the longitudinal grooves 36 of the cylinder 37. This cylinder is provided with a number of transverse grooves 38, into which the severing knives are adapted to descend to cut the cigarette rod into as many parts, each being a complete cigarette, as desired. This cylinder may be of any desired length. This cylinder is adapted to be revolved at intervals step by step. On the shaft of the cylinder is mounted a ratchet wheel 39, having as many teeth thereon as there are longitudinal grooves in the cylinder, usually six. As shown in Fig. 21, this cylinder is revolved at intervals by means of a catch on one end of one arm of the bell crank lever 41, mounted on the pivot 42. The bell crank lever 41 is operated by means of a bent arm 43, Fig. 12, carried by the operating rod 26 and projecting downward below the lever 41. The arm 43 is jointed at its lower end, leaving a movable end 44, which is provided with a stop 45, the result being that the loose end 44 of the arm 43 will slip over the lever 41 without operating it when moving in one direction, but when moving in the other direction will operate said lever 41, since the stop 45 prevents the end 44 of the arm 43 from passing over the lever 41. The tobacco rod is forced into the paper in the upper one of the longitudinal grooves 36 of the cylinder 37.

Located above each of the grooves 38 is a knife 46, pivotally supported, by means of links 47 and 52, in a bracket 48 having an enlarged head 49 fixedly mounted on the bar 50 by means of the adjusting screws 51. These knives are caused to move downwardly toward the cylinder 37 and across the same in alinement with the grooves 38 (see Figs. 11 and 13) and with a shearing cut simultaneously severing the paper tube from its blank and also its inclosed tobacco core, whereby the tube and its core are cut into the required lengths, and as the cylinder 37 is revoluble, the cigarettes fall by gravity into a receptacle, not shown, underneath said cylinders. The links 47 have their upper ends adjustably fastened to an operating shaft 53 by means of the set screws 54. This shaft 53 is rotated at intervals in the following manner:—Adjustably fixed to said shaft, by means of set screws 56, is an arm 55. The arm 55 is depressed at the proper intervals by means of a cam 57 carried on the operating rod 26. Any desired means, such as a spring 58, attached at one end to the bracket 48 and at the other to the knife 46, may be employed to bring the parts back into the position shown in Fig. 11 after the lever 55 has become disengaged from the cam 57. This cam 57 is mounted so as to swing freely on the op-

erating rod 26, but this rod is provided with a stop 97, Fig. 20, allowing the cam to pass by the arm 55 in one direction without operating it, while on the return movement, said cam will operate said arm.

Means for making the paper tube will next be described.

58 represents a roll of paper supported in standards 59, which in turn are supported on the platform *a*. The standards 59 are provided with arms 60, which on their ends carry brackets supporting the guide roller 61. The strip of paper 62 passes over this guide roller and down between guide rollers 64 and 65 supported on brackets 66 on the platform *a*. The strip of paper then passes through the curved former 67, of any usual or preferred shape, which is attached by means of a set screw 68 to a round bar 69, leaving a space between the former and bar for the strip of paper to pass, said bar being pivoted at 70 on a bracket 71, supported on the platform *a*. This bracket has an extended top 72 through which passes a set screw 73, the lower end of which bears against one end of the bar 69, for the purpose of adjustment. The bar 69 is provided with a small crimping roller 74 mounted in a cut away portion thereof, and contacting with a larger crimping roller 75 mounted on the shaft 76. Pasting devices may be used if desired. On the shaft 76 is loosely mounted a cog wheel 77 and a ratchet wheel 78 is fixed to said shaft. The cog wheel 77 engages with the teeth of a rack bar 79. It results from this construction that a movement of the rack bar in one direction will not operate the shaft 76, but that the reverse movement will cause the rotation of said shaft, since the cog wheel 77 is loosely mounted on said shaft, while the ratchet wheel 78 is fixed to said shaft. The rack bar 79 is reciprocated by movement of the operating rod 26 by means of an arm 96, depending from said rod 26 and contacting with pins 95 adjustably mounted in slots 94 of the rack bar.

The means for reciprocating the parts *y* and *z* from the position shown in Fig. 7 to that shown in Fig. 8 will next be described.

80 represents a tappet or projection on the cross head *e*. This is arranged to strike an arm 81 fixed to the shaft 82, which has fixed on its upper end another arm 83, the outer end of which is pivotally attached to the part *y*, a suitable allowance being made for lost motion. The cross head *e* on its return movement restores the parts to the position shown in Fig. 7.

After the paper tube has been fed into the cylinder 37 it is necessary, or at least desirable, that one end of the paper tube be held firmly while the rod of tobacco is being forced into it to insure that the rod of

tobacco shall be forced into the tube and shall not crumple up the paper. Means for effecting this result are shown in Figs. 10, 13, 14 and 15 of the drawings. 84 and 85 represent pivoted guide fingers curved at the end to firmly hold the end of the paper tube next to the tobacco rod or core forming die. These are in the position shown in Fig. 15 when the tobacco rod is being forced into the paper tube and are at times swung aside to permit the cylinder 37 to freely revolve. These fingers are operated in the following way:—On the operating rod 26 are two projections, one being shown at 86 in Fig. 14, adapted to strike one end of a lever 87 pivoted at 88 in a bracket 89. The other end of this lever carries a pin which engages with the slotted links 90 and 91. Each of these links is firmly fixed to a rod such as 92, each of which rods carries one of the fingers, such as 85. The rod 92 is supported in brackets 93.

The operation is as follows:—The hopper *j* being filled with tobacco and a roll of paper being placed on the supports 59, and the end thereof being brought in through the folder 67 and between the crimping rollers 74 and 75, the shaft *c* is set in motion. This sets in operation the brush *k* which fills the box *z* with tobacco. The cross head moves forward until the tappet 80 strikes the arm 81, which swings the box *z* over the opening *u* discharging one measured charge of tobacco into the chute *v*, as shown in Fig. 8. The plunger 4 is then raised and simultaneously the part 8 is pushed toward the back plate 7, as shown in Fig. 7. The plunger 4 then descends, forming a tobacco rod, as shown in Fig. 8. Meantime the cross head *e* has returned to the position shown in Fig. 1, and a paper tube has been fed into the uppermost longitudinal groove in the cylinder 37, the ends of said tube being held by the fingers 84 and 85. On the next movement to the right of the cross head, the ejector rod *i* presses the rod of tobacco past the fingers 84 and 85 into the paper tube. It should be noted that the lower end of the plunger 4 is always within the die 2, except momentarily when a fresh charge of tobacco is fed into the said die. After the rod *t* has been forced into the paper tube, the knives 46 descend with a swinging movement, cutting the cigarette rod and its inclosing paper tube into cigarettes, as before stated, the fingers 84 and 85 are then drawn back and the cylinder 37 revolved one-sixth of a revolution after which the cycle of operations is repeated.

It should be noted that the cylinder that contains the paper tube may be of any desired length, so that one or more cigarettes may be produced at each operation of the cross head. It should be further noted that

a number of machines may be mounted on the same platform, as can easily be done since the parts are in substantially a straight line in which case all the parts could be operated by a common crank shaft and a common cross head, as shown in Fig. 25.

While I have thus described my invention, I wish it to be distinctly understood that I do not limit myself to the exact details shown and described, as these might be varied widely without departing from the spirit of my invention.

I claim:—

1. In a cigarette machine, the combination of a hopper, means substantially closing the bottom of said hopper and operating to continuously feed tobacco from the bottom thereof in excess of the quantity required for each tobacco core, measuring means for receiving the proper quantity of tobacco for each core, means for conducting off the excess tobacco, and means for forming a tobacco core, said measuring means operating adjacent said hopper and movable to convey and deliver a measured quantity of tobacco to said core forming means, substantially as described.

2. In a cigarette machine, the combination of a hopper having its bottom substantially closed by a rotating feeder for continuously discharging tobacco therefrom, means for conducting off the excess of tobacco, means for forming a tobacco core and a chute leading thereto, a carrier for receiving a measured quantity of tobacco, and means for operating said carrier between said hopper and chute for delivering a measured charge of tobacco to said core forming means, substantially as described.

3. In a cigarette machine, the combination of a hopper having its bottom substantially closed by a revolving brush for continuously discharging tobacco therefrom, means for conducting off the excess of tobacco, tobacco core forming means, a support provided with a discharge opening leading to said core forming means, a carrier open at the top and bottom for receiving a measured quantity of tobacco and slidably mounted on said support, said support forming a closed bottom for said carrier during a portion of its travel, and means for reciprocating said carrier on said support between said hopper and discharge opening, substantially as described.

4. In a cigarette machine, the combination of tobacco core forming means, a chute leading thereto, a hopper, a revolving brush substantially closing the bottom of said hopper and discharging the tobacco continuously therefrom, a flat support having an opening delivering into said chute, a carrier open at the top and bottom and mounted on said flat support, and means for reciprocating

said carrier between said hopper and chute, substantially as described.

5. In a cigarette machine, the combination of a plunger and die, operating means for reciprocating said plunger, and automatic means for feeding a measured quantity of tobacco between said plunger and said die, said operating means being arranged to withdraw said plunger from said die momentarily during the feeding therebetween of a measured quantity of tobacco, to then operate said plunger to compress the tobacco between the plunger and die, and to then slightly withdraw said plunger leaving it still in engagement with said die, substantially as described.

6. In a cigarette machine, the combination of a plunger and die, means for feeding a measured quantity of tobacco between said plunger and die, means for holding a part of said feeding means as a wall to hold the tobacco between said plunger and said die, means for releasing said feeding means and returning it to its original position at the proper time, means for locking said feeding means and means for operating said plunger, substantially as described.

7. In a cigarette machine, the combination of a cylinder provided with longitudinal and transverse grooves, means for feeding a paper tube into one of said grooves, means for forcing a rod of tobacco into said tube, and means for severing said tube, substantially as described.

8. In a cigarette machine, the combination of a revoluble cylinder provided with longitudinal and transverse grooves, means for forming a paper tube and feeding it into said cylinder, means for forcing a rod of tobacco into said tube, and means for simultaneously cutting said tube and said rod at various places, substantially as described.

9. In a cigarette machine, the combination of means for forming a core of tobacco, means for forming a paper tube of any desired length, a revoluble cylindrical member having transverse grooves and having longitudinal grooves extending along its periphery for receiving and supporting said paper tubes, means for forcing the core of tobacco into said tube, a set of knives in the line of said work, each of said knives being disposed above one of said transverse grooves and supported at its ends by swinging arms, one set of said arms being rigidly secured on a rock shaft, means for intermittently rocking said shaft for swinging said knives simultaneously in a downward and transverse direction for simultaneously severing said core and tube into a plurality of sections with shearing cuts, and means for retracting said knives at the end of their cutting strokes, substantially as described.

10. In a cigarette machine, the combination of a cross head provided with an operating rod and an ejecting rod, a tobacco core forming means including a compression chamber and means for momentarily opening said chamber so that tobacco may be fed therein, a cylinder provided with longitudinal and transverse grooves, means for forming and feeding a paper tube into one of the longitudinal grooves in said cylinder, and means for simultaneously severing the cigarette rod at various places, substantially as described.

11. In a cigarette machine, the combination of an ejecting rod, tobacco core forming means, a revolving cylinder provided with longitudinal and transverse grooves, tube forming mechanism and a paper reel, all disposed in one straight line and knives cooperating with said transverse grooves, substantially as described.

12. In a cigarette machine, the combination of a revolving cylinder provided with longitudinal and transverse grooves, means for revolving said cylinder step by step, means for forming a tube and delivering it into one of the grooves of said cylinder, devices for forming a tobacco rod and forcing it into said tube, and knives cooperating with said transverse grooves substantially as described.

13. In a cigarette machine, the combination of tobacco core forming means, a cylinder having longitudinal grooves, means for forming a paper tube and delivering it into one of the grooves of said cylinder, and operating means for all of said parts, consisting of a single reciprocating rod, means for operating said rod, and connection between said rod and the various parts mentioned, substantially as described.

14. In a cigarette machine, the combination of a support provided with a grooved die, a plunger having a grooved end, a reciprocating pusher member operating at right angles to said plunger for forcing tobacco in between said plunger and said die, means for operating said plunger, including a reciprocating rod provided with inclined faces, a segmental gear operated by said rod and a rack bar connected to said plunger and devices operated by said rack bar to force said pusher toward said plunger, substantially as described.

15. In a cigarette machine, the combination of a grooved die and a grooved plunger, means for reciprocating said plunger, a pusher, devices operated by said means for forcing said pusher toward said plunger, means for preventing the backward movement of said pusher, and devices for disengaging said last named means from said pusher, substantially as described.

16. In a cigarette machine, the combination of a supporting frame, a series of tobacco core forming means, a series of longitudinally grooved cylinders, means for revolving each cylinder by a step by step motion, a series of paper tube making devices, means for simultaneously ejecting rods of tobacco formed by said series of tobacco core forming means into one of the grooves, respectively, of each said cylinders, and severing means substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 5th day of June, 1908, A. D.

WILLIAM S. IREY.

Witnesses:

ROMÁN R. SERRANO, Jr.,
TOMÁS GALURA.