

M. POLLAK.
CIGARETTE MACHINE.
APPLICATION FILED FEB. 10, 1909.

970,110.

Patented Sept. 13, 1910.

3 SHEETS—SHEET 1.

Fig. 1.

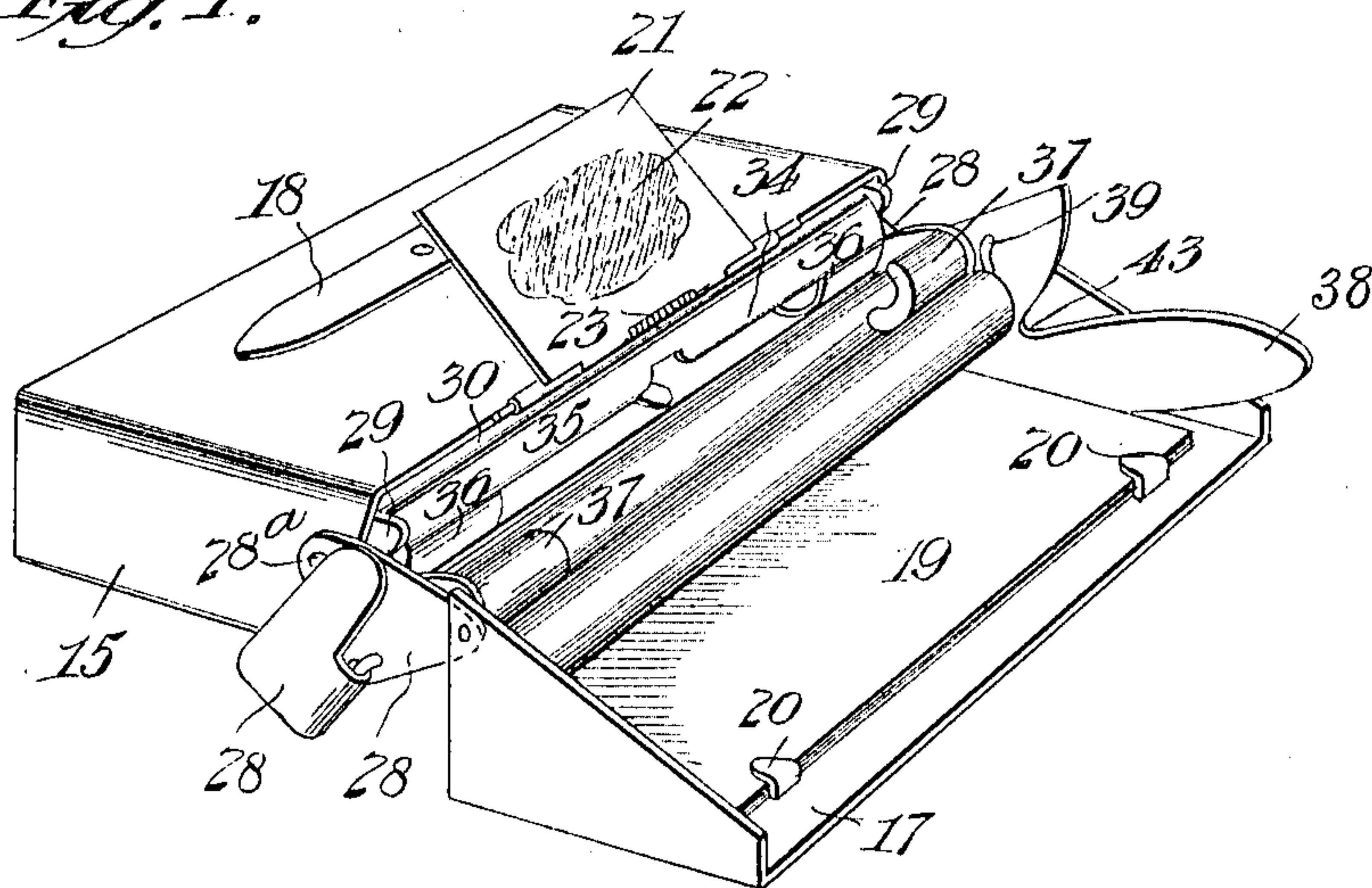


Fig. 2.

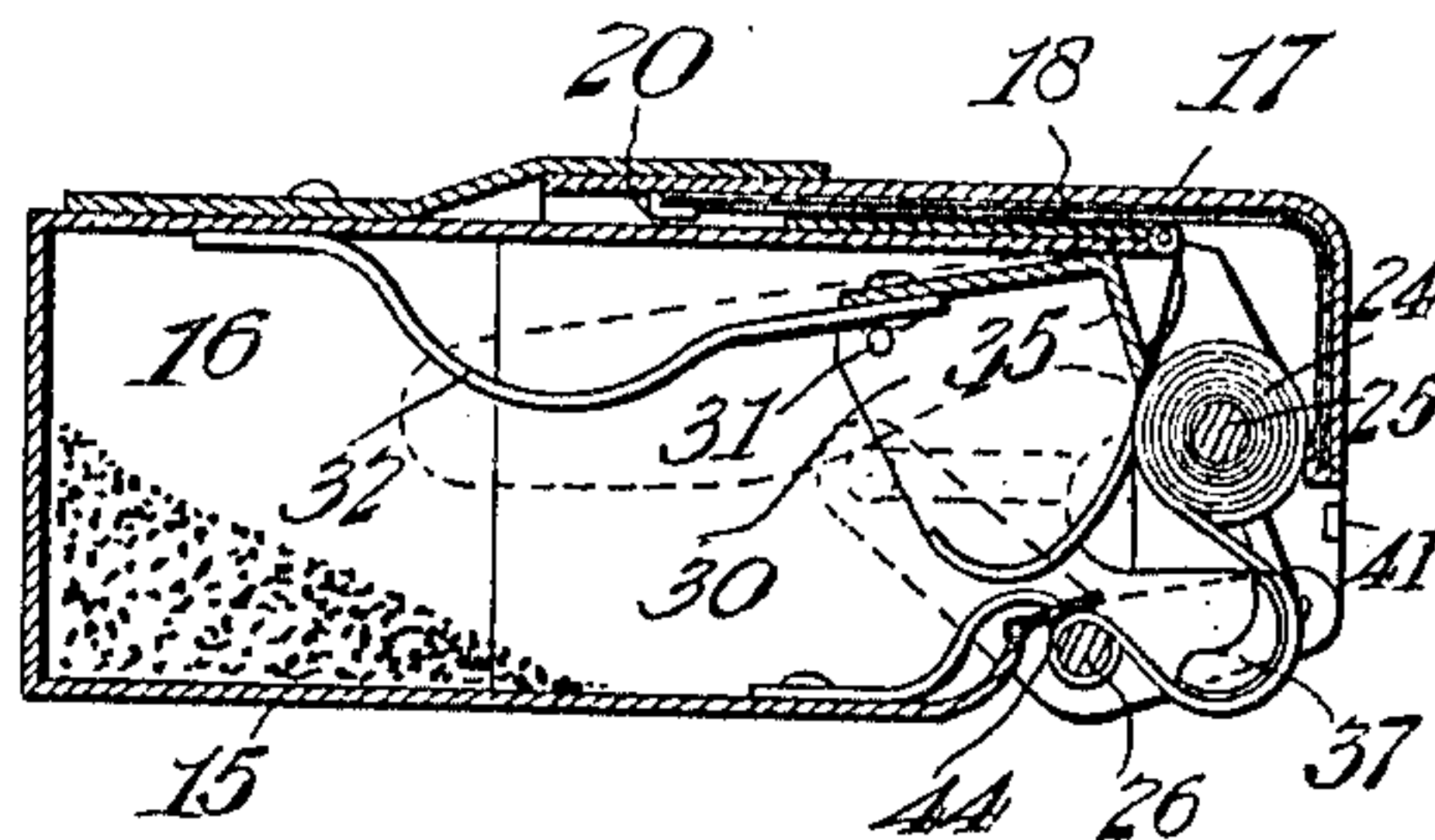


Fig. 3.

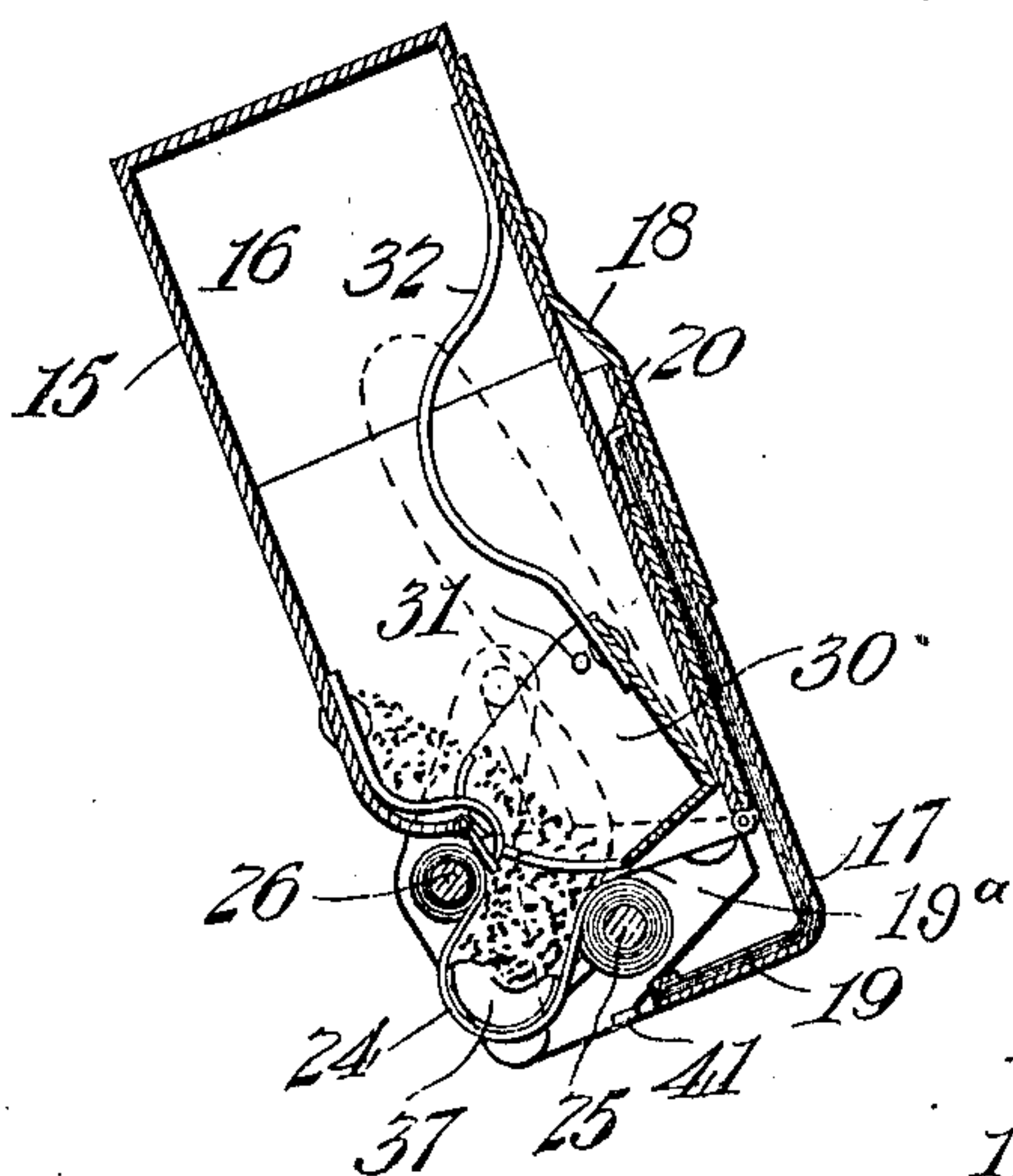


Fig. 4.

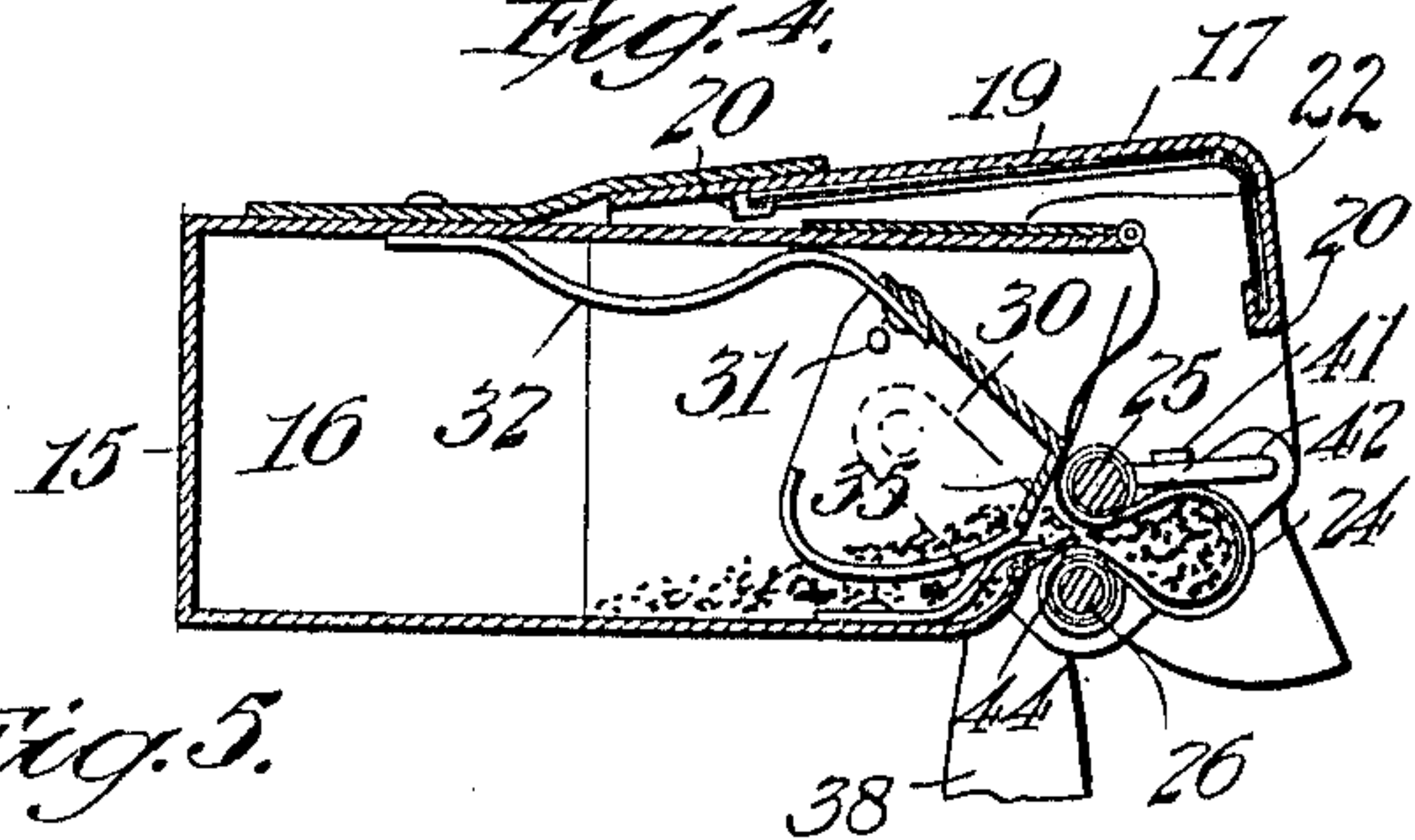
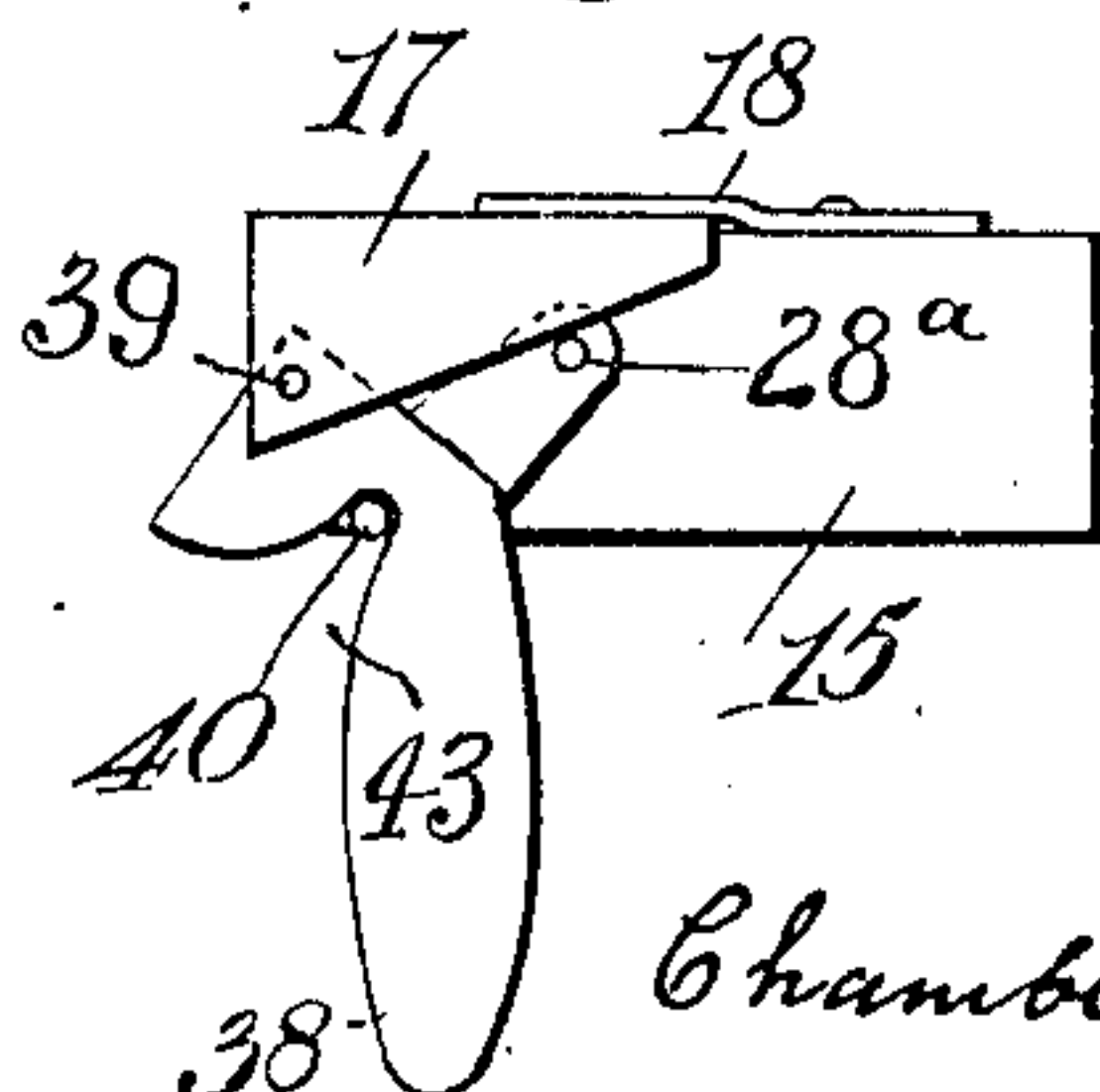


Fig. 5.



WITNESSES

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3 SHEETS—SHEET 2.

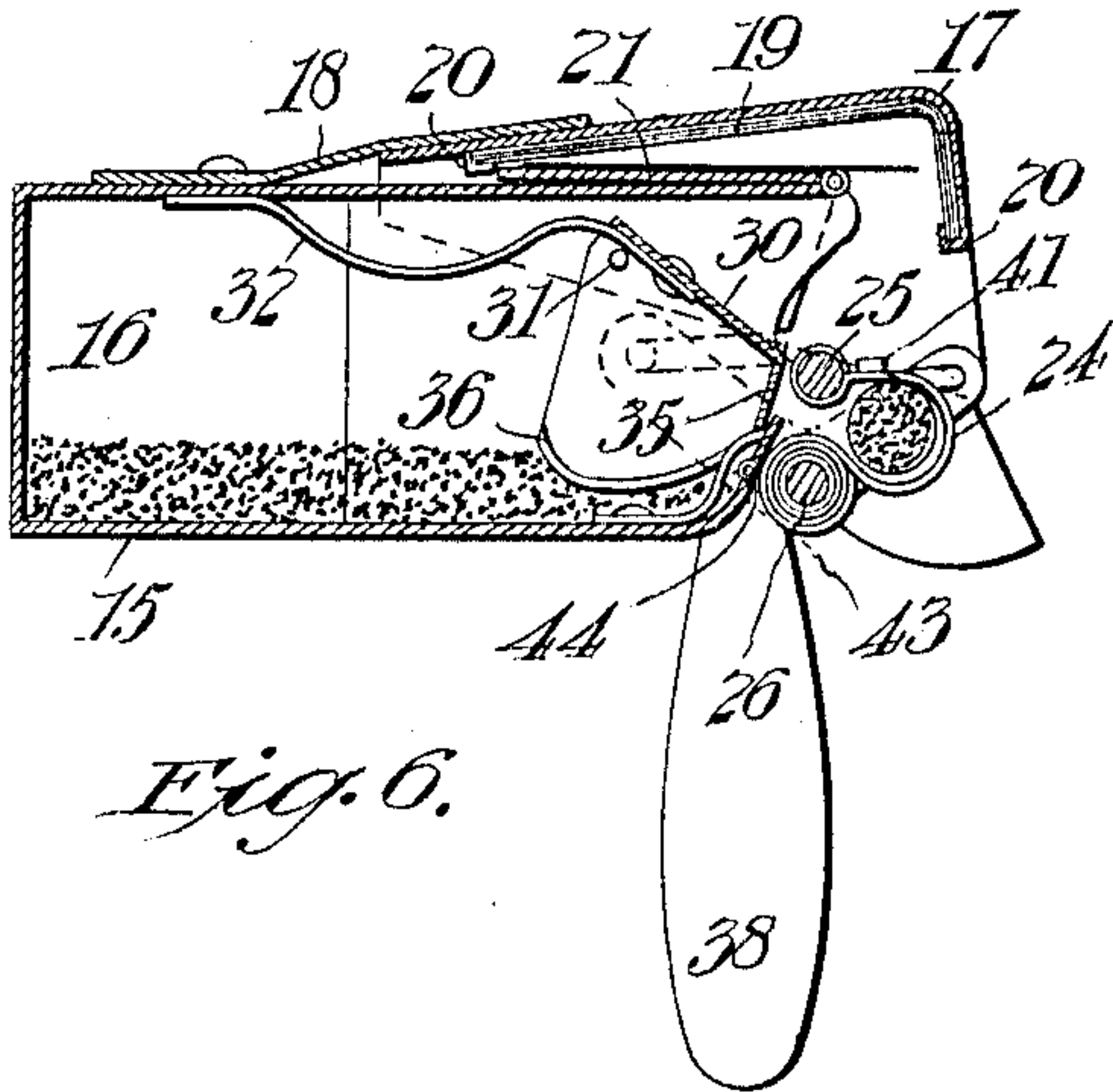


Fig. 6.

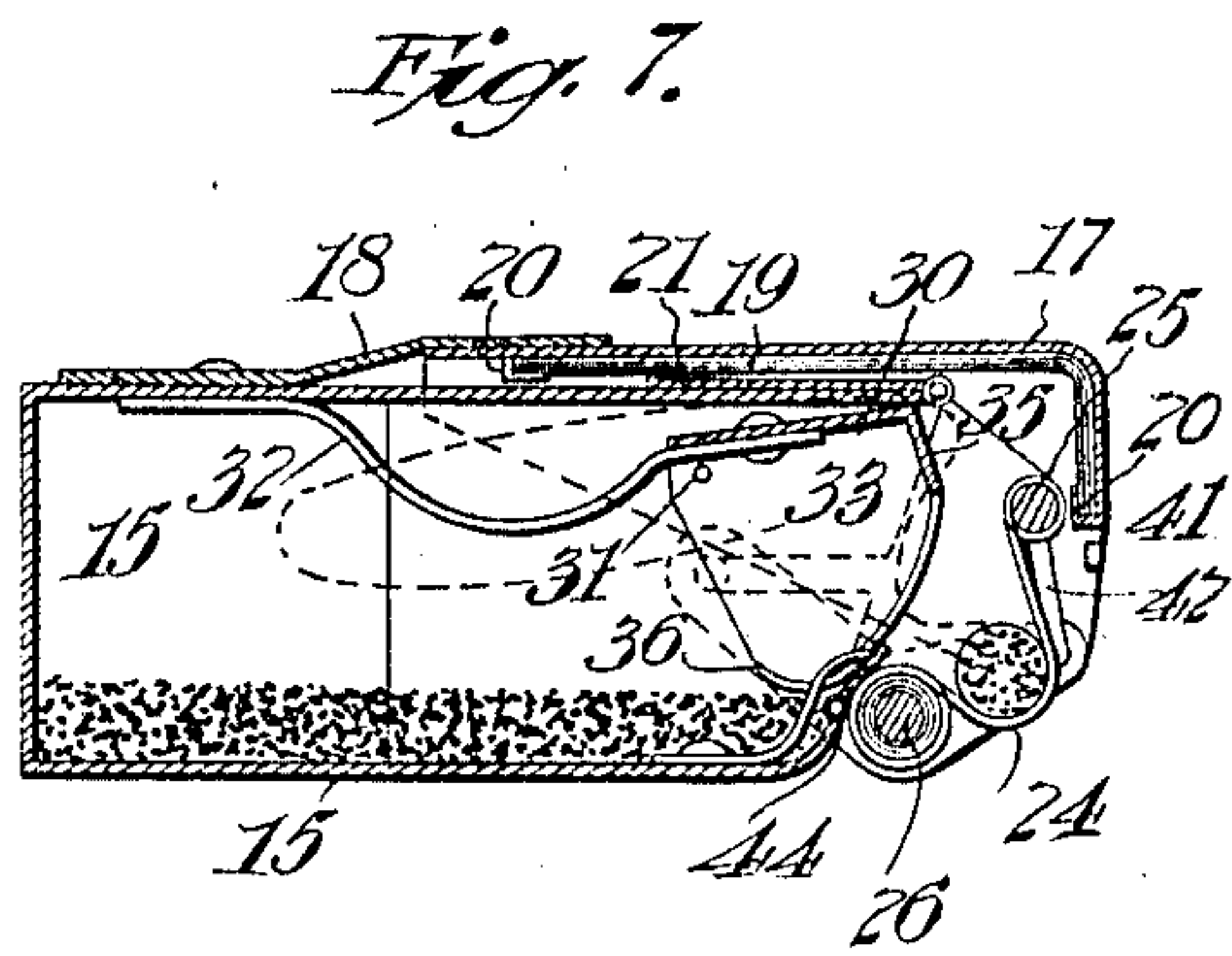


Fig. 7.

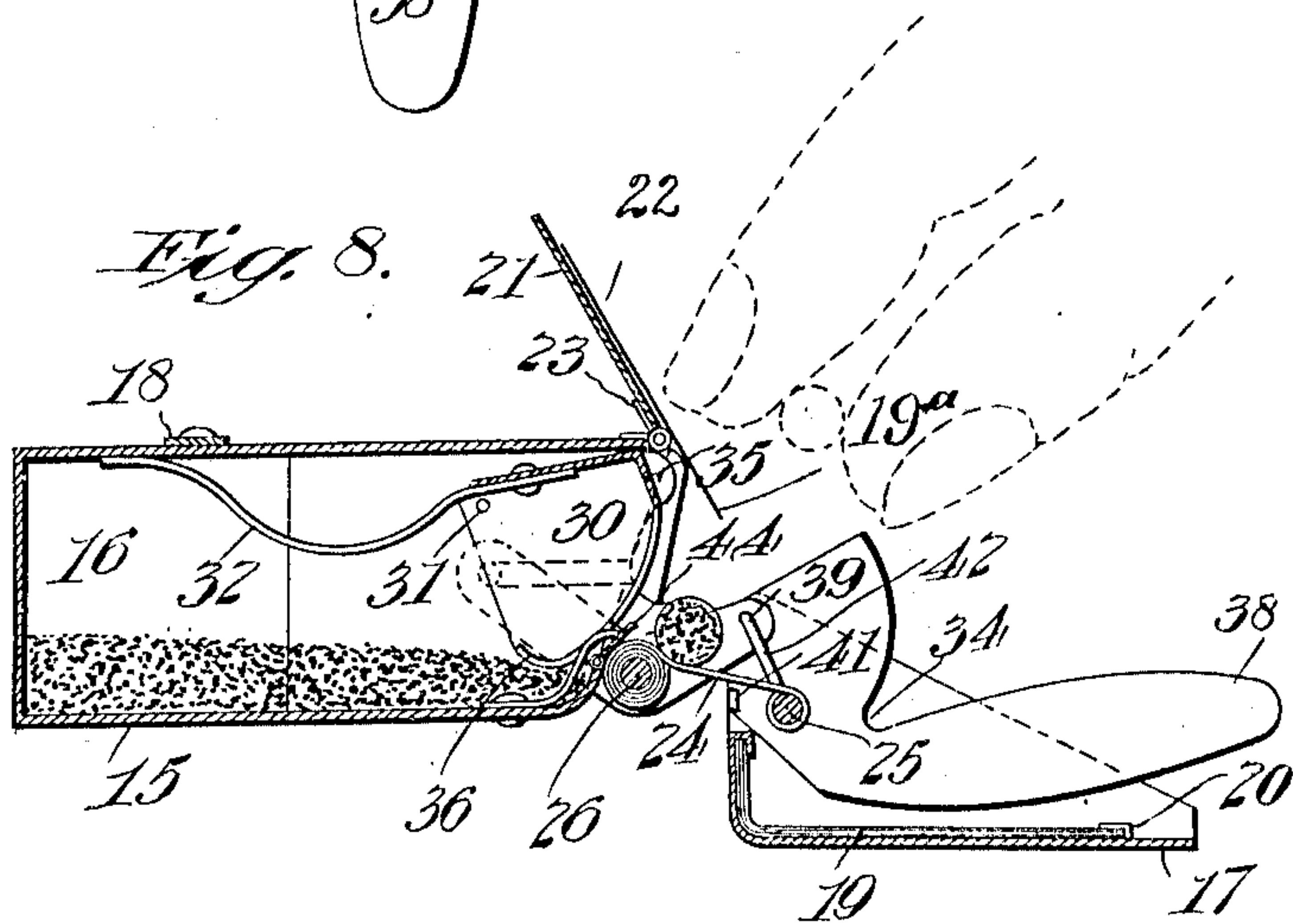


Fig. 8.

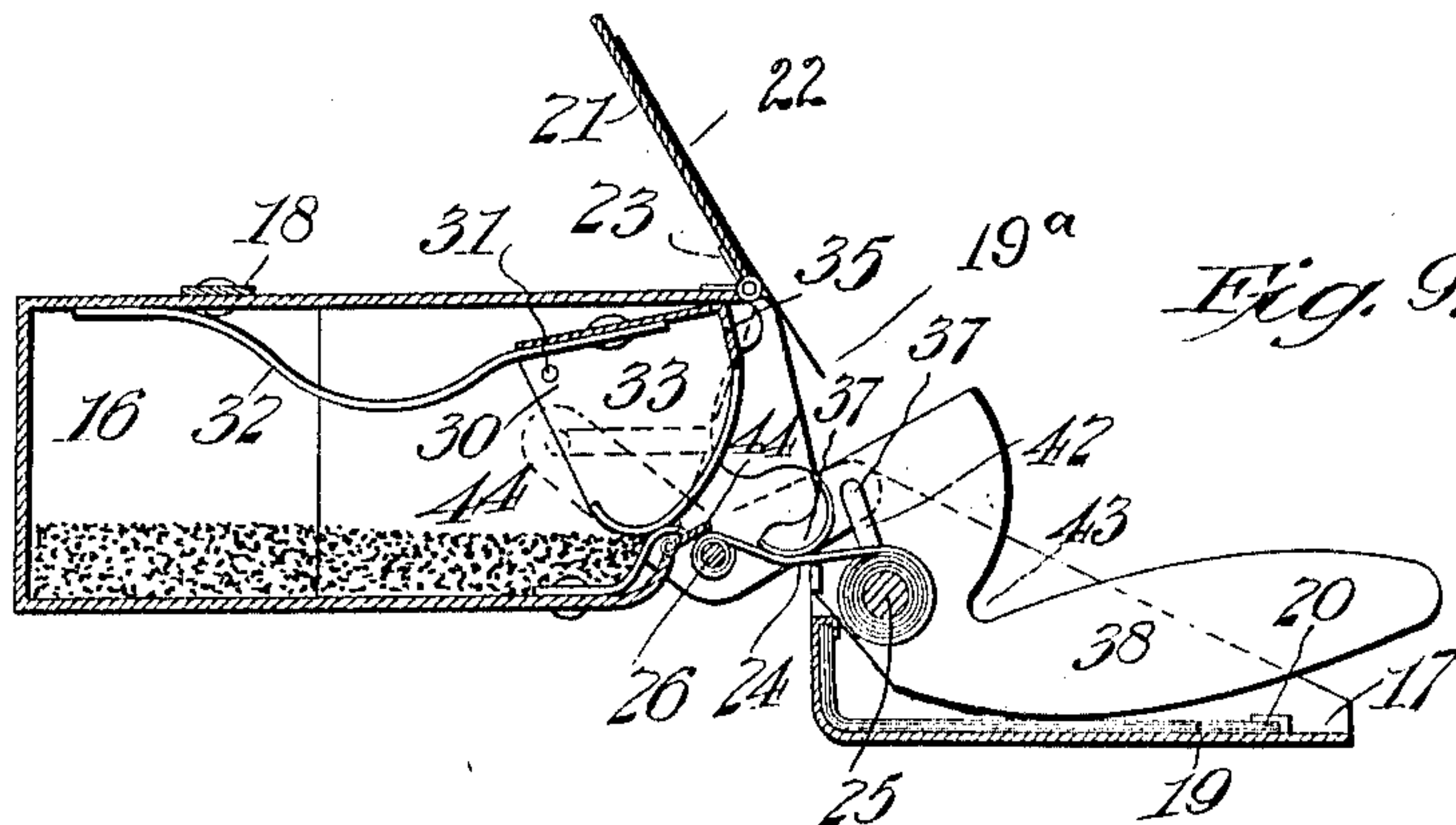


Fig. 9.

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3 SHEETS—SHEET 3.

Fig. 10.

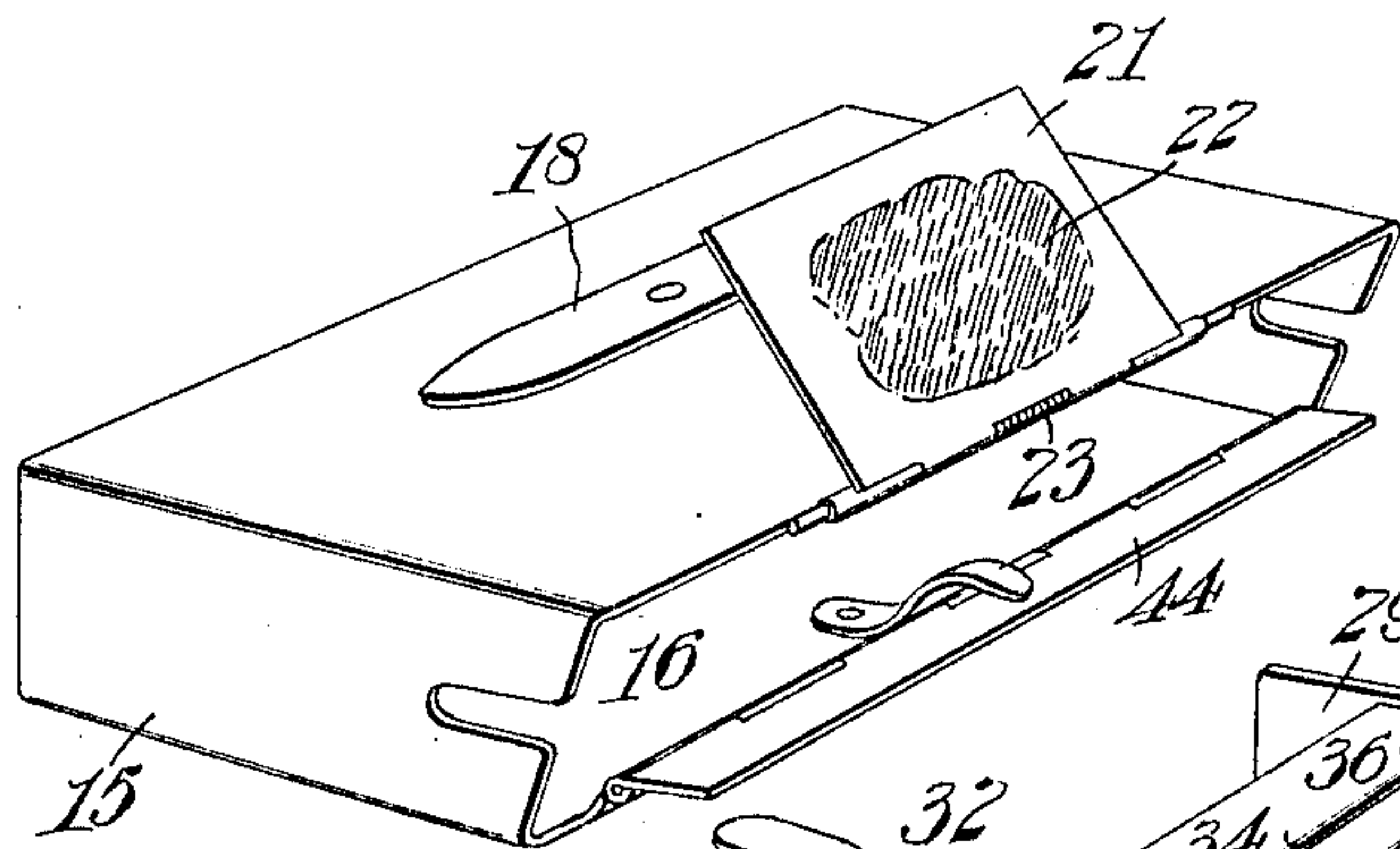


Fig. 11.

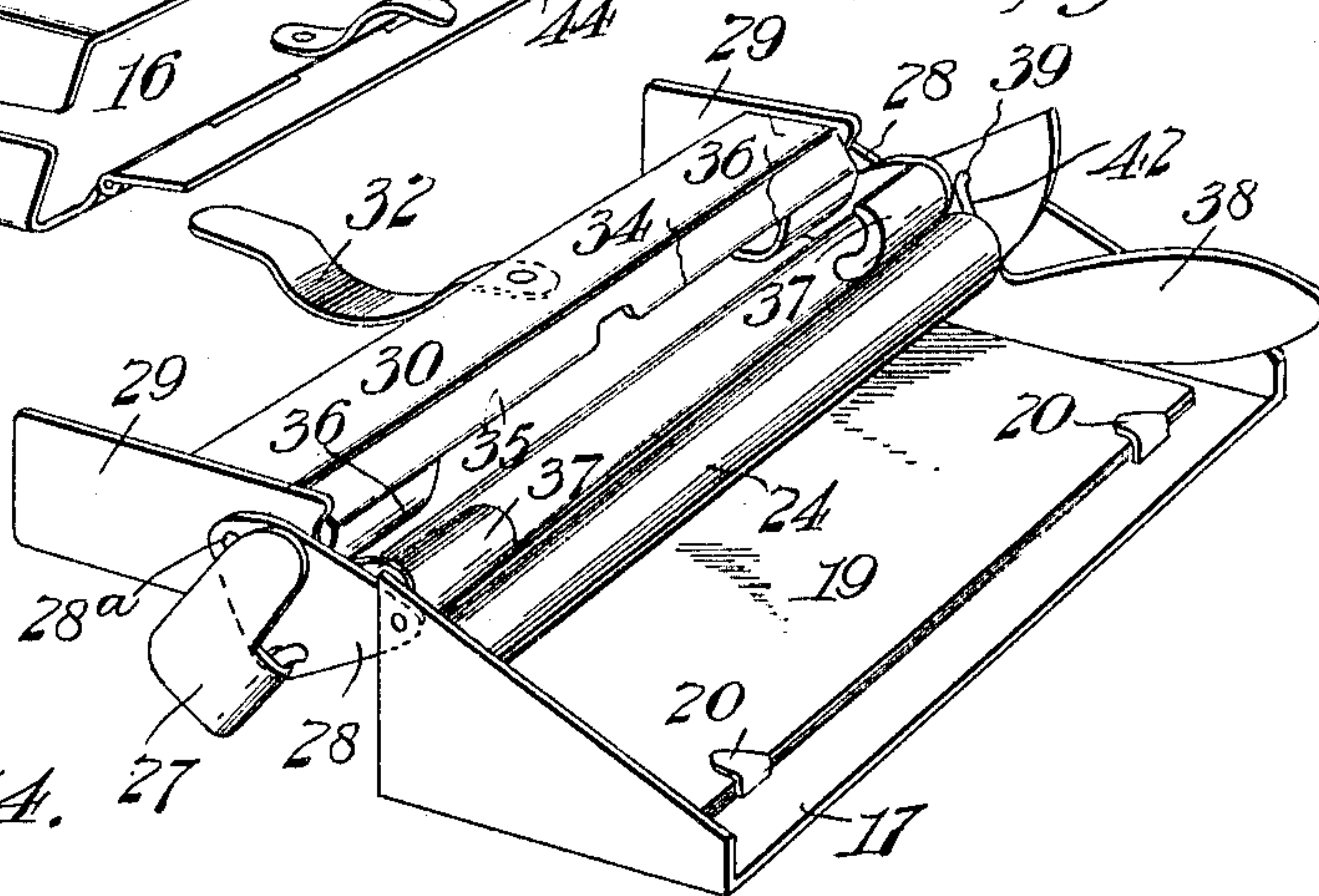


Fig. 14.



Fig. 15.

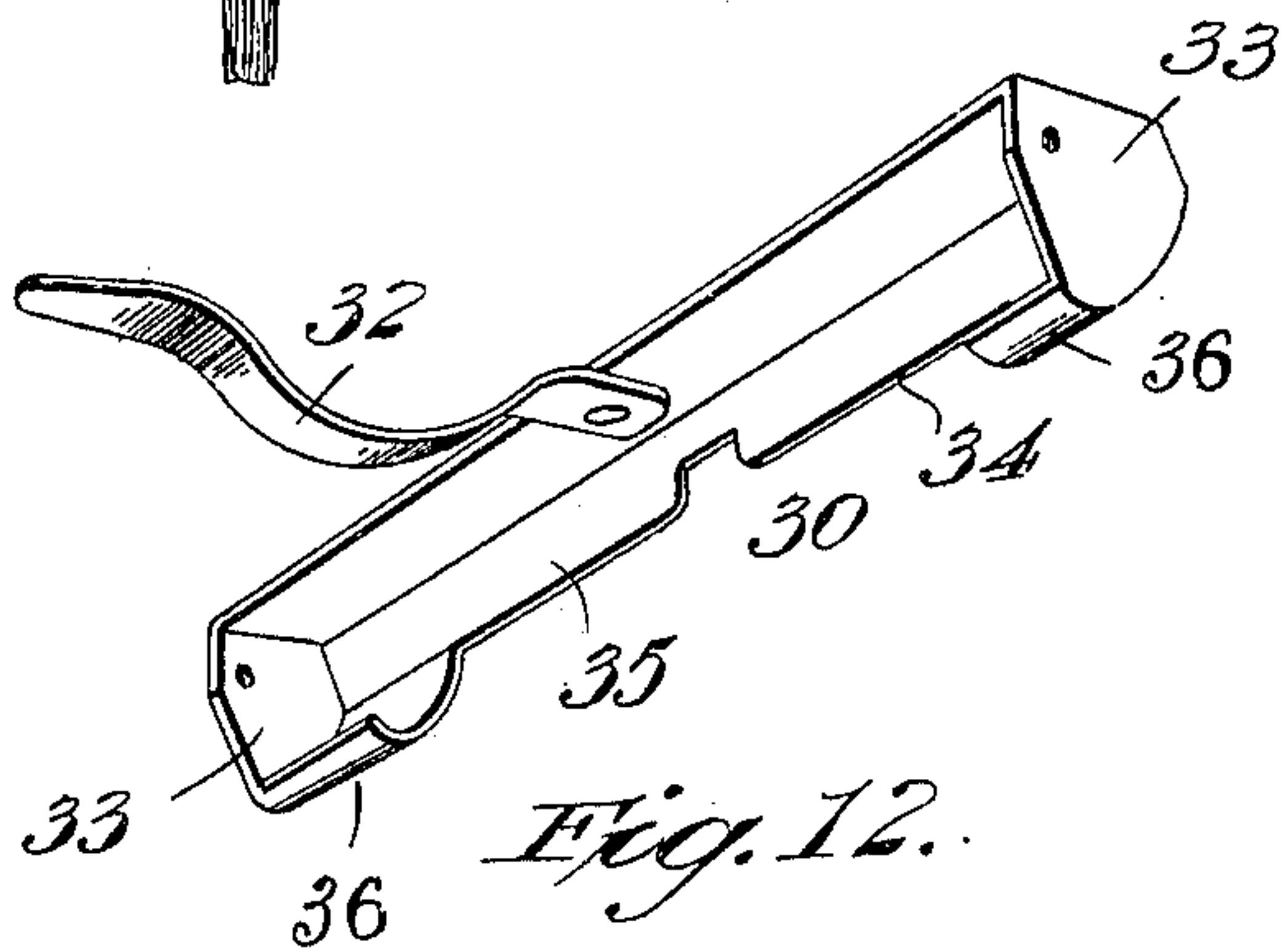
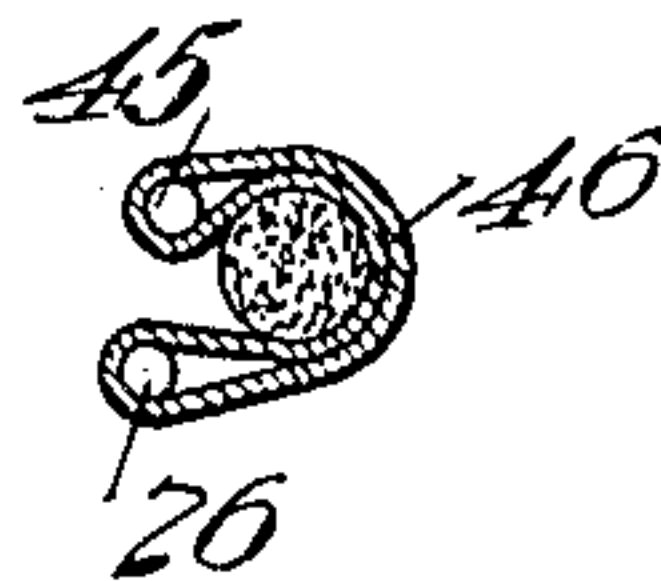
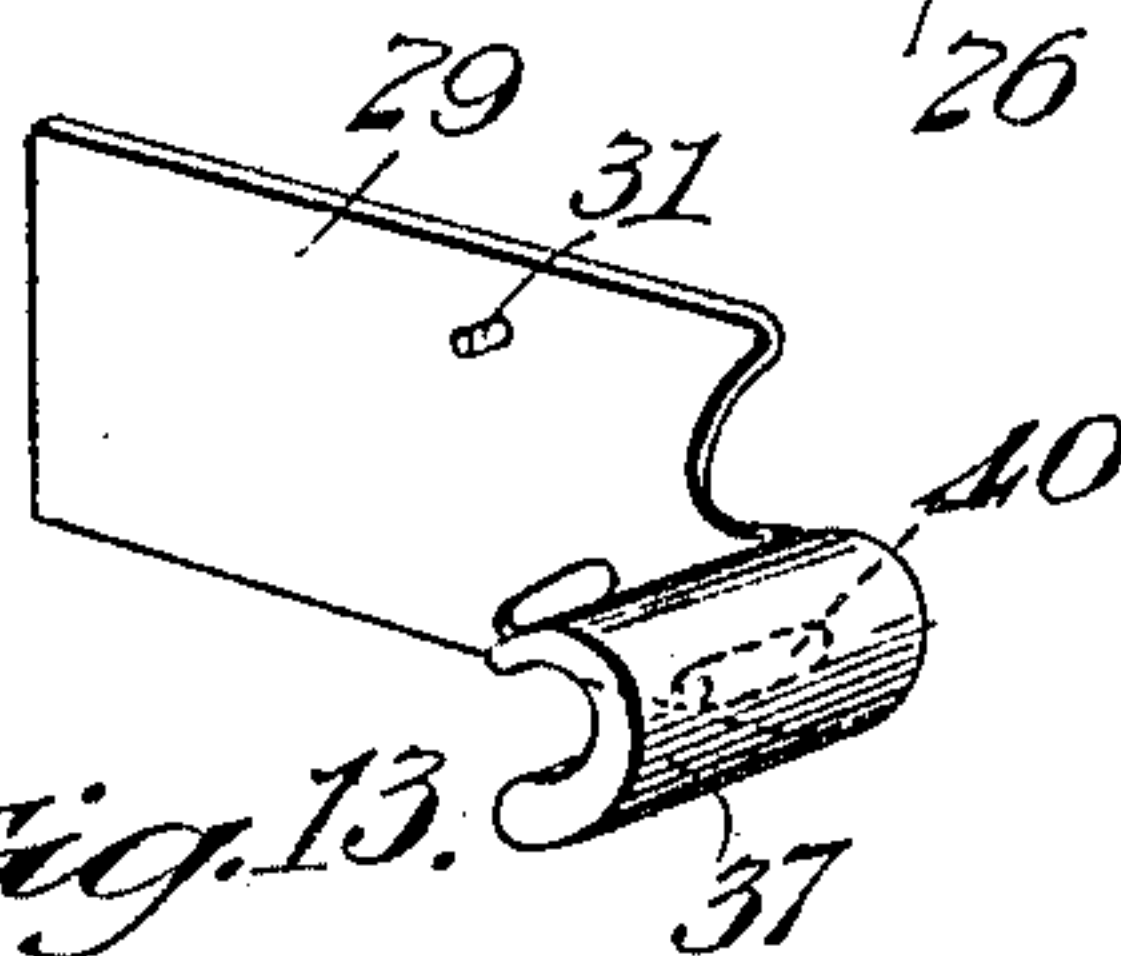


Fig. 12.

Fig. 13.



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UNITED STATES PATENT OFFICE.

MAX POLLAK, OF WATERBURY, CONNECTICUT.

CIGARETTE-MACHINE.

970,110.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed February 10, 1909. Serial No. 477,127.

To all whom it may concern:

Be it known that I, MAX POLLAK, a citizen of the United States, and resident of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Cigarette-Machines, of which the following is a specification.

This invention relates to new and useful improvements in pocket cigarette machines.

It is the purpose of the invention to provide a simple, compact and practical construction that is adapted to be carried in the pocket after the custom of a cigar case, or tobacco box or bag, and is designed to contain a supply of tobacco and cigarette papers and further comprises means whereby the tobacco is placed and rolled within the papers to form a cigarette preparatory to being removed and smoked.

The construction of the device is simple in comparison with the amount of work required and in practice is found to be efficient, durable and convenient.

Further objects of the invention will hereinafter appear; and to these ends the invention consists of a device for carrying out the above objects, embodying the features of construction, combinations of elements, and arrangement of parts having the general mode of operation, substantially as hereinafter fully described and claimed in this specification and shown in the accompanying drawings, in which—

Figure 1, shows a perspective view of my improved form of pocket cigarette machine, in an open position. Fig. 2, is a central vertical cross section through the machine when in a closed and normal position. Fig. 3, is a similar cross sectional view illustrating the machine as tipped up on one edge for the purpose of shifting the tobacco in position to be rolled and covered. Fig. 4, is a further cross section, taken on the same line, and illustrating the next step in the production of a cigarette. Fig. 5, is an end view, on a reduced scale, as seen from the opposite end to that shown in Fig. 4. Figs. 6 and 7 are similar cross sections designed to show the further operations in the formation of a cigarette, the latter figure indicating a completed cigarette ready to be removed. Fig. 8, shows the machine open and indicating the manner of removing a cigarette. Fig. 9, shows a similar cross section of the open machine with parts in position

shown in Fig. 1, with cigarette removed and rolling belt run back upon the upper roll to normal position, preparatory to a further operation. Fig. 10, shows a disconnected perspective view of the box or receptacle for holding the tobacco. Fig. 11, is a perspective view of the remaining cigarette forming mechanism, as shown when withdrawn from the case. Fig. 12, shows a detached perspective view of the cut-off mechanism 30, as shown in the preceding figures. Fig. 13, shows a detailed perspective view of one of the end plates in which the cigarette forming mechanism is mounted. Fig. 14, represents a plan view of a completed cigarette as formed upon the machine, and Fig. 15, shows a detail of a modified form of endless belt for rolling the cigarette.

Referring in detail to the reference characters marked upon the drawings 15 indicates the main casing or box of the machine which as shown is made of sheet metal. This box not only constitutes the body, so to speak, to which the operative parts of the machine are attached but also forms a receptacle 16 in which the tobacco is contained. To this casing is indirectly hinged a cover 17 which when opened (see Fig. 1) serves to expose the operative parts of the machine for the removal of the completed cigarette, and when closed this cover is held shut by a turn button 18 located upon the outside of the case.

The machine is designed to use prepared pieces of paper 19 similar to those which come in book form for manual cigarette making, and a bunch of such papers are located just under the cover 17, being supported in position by clips 20. To the forward edge of the case is hinged a plate 21 the face of which is coated with a suitable adhesive substance 22 such for instance as gum, whereby the outside paper is engaged by the gum and drawn loose from the pad or series when the cover is opened and pulled away. This plate is provided with a spring 23 that tends to throw its outer end up as shown in Figs. 6, 8 and 9 when the cover is opened. By this tilting of the plate 21 the forward edge portion of such withdrawn sheet of paper is deflected down and with the closing of the cover as shown in Fig. 2, is disposed against the face of a belt 24 that is mounted upon a spring actuated roll shaft 25. This belt is designed to be

wound from such roll by a manually operated shaft 26 having a key 27 hinged to its outer end for its manipulation. Both the roll 25 and the shaft 26 are mounted in brackets 28—28 pivoted at 28^a to end plates 29 that in turn are fitted to slide into the inner end portions of the casing.

A cut-off 30 is pivoted as at 31 to the end plates 28 attached to the casing, and serves to cut-off the supply of tobacco during the final rolling and completion of the cigarette. This cut-off is provided with a spring 32 which is secured thereto and bears against the underside of the case for normally holding the cut-off up as shown in Figs. 2, 3, 4, and 8, thus leaving the machine in a position to shift the tobacco from the receptacle 16 against the paper 19 and belt 24 for rolling. This cut-off is formed of sheet metal and in detail comprises end portions 33, which pivotally fit against the end plates 29, and a top side, against which the before mentioned spring 32 rests. The central part 34 of the front portion 35 of this cut-off is open to allow the tobacco to pass to the belt while the end portions include flanges 36 that extend down upon the inside of the ends to retard the passage of the tobacco at this point and thus leave the end portions of the papers free to be closely wound together.

The cigarette is formed by rolling the paper around the tobacco by the assistance of the belt which is normally retained upon the before mentioned spring actuated roller and is drawn therefrom by a manual operation of the other shaft 26.

The parts as shown in Fig. 2, represent the machine in readiness to receive the tobacco contained in the box 15, and around which the papers 19 are to be wound. As here shown the belt 24 is attached to and its greater portion wound upon the upper roll 25 while the other end of the belt is disposed down and around the end guides 37 secured to the outer portion of the plates 29 and then returned and attached to the operating shaft 26. The belt thus forms a loop or pocket into which tobacco is shifted by tilting up the box as shown in Fig. 3, preparatory to rolling the sheet of paper around the tobacco. The lower edge 19^a of the sheet of paper is disposed against the belt so that when the belt is manually wound upon the shaft 26 the paper will be drawn in and wound upon the roll of tobacco, while the end portions are fed into the end guides 37 which tend to more closely wind and twist the ends of the paper and bring the same together, to close the ends of the cigarette as shown in Fig. 14. The cigarette is thus wound and held by the twisted and closed ends, together with a small amount of gum which was transferred to the paper from the plate 22 when drawn therefrom. After the

tobacco has been shifted into the pocket of the belt as indicated in Fig. 3, the lever 38, which is pivoted to the pivotal end 39 of the shaft of spring roll 25 (see Figs. 1 and 5) is operated by being drawn down from the position shown in Figs. 2, 3 and 7, to that shown in Figs. 4 and 5, which in turn carries the upper or spring roll around the body of the tobacco, so to speak, and down upon the inlet side, thus inclosing it by the belt, and forming the same into a cylindrical body. When the parts are in this position (see Fig. 3) and the shaft 26 operated, the paper will be wound in with the belt and drawn off from the gum 22, which winding operation likewise rolls the tobacco and winds the paper therearound and upon itself. When the free end of the lever 38 is drawn down its lower edge first binds upon the lug 40 secured to the end of the plates 29 thus causing the butt end of the lever, its bracket 28, pivot 39 and roll 25 together with the cover 17 to raise, better to release the paper until the lug 41 upon the inside of lever brings up against the bent end portion 42 of the roll shaft 25. This engagement of the shaft obviously throws the roll over the bulk of tobacco, compressing the same as shown in Fig. 6. When the lug 41 makes the above engagement with the end 42 of the shaft before mentioned, the corner of the lever will have slipped past the lug 40 until it registers with and drops into the recess 43 of the lever which serves to hold the lever in position and the upper roll down during the winding and rolling operation. The movement of the lever 38 also causes the cut-off 30 to be operated against the action of its spring 32 so that its front part 35 will be thrown down against the lower edge 44 of the case to shut off the supply of tobacco, while the cigarette is being wound. This movement of the cut-off by the manipulation of the lever is caused by the engagement of the before mentioned upper roll 25 with the face of the cut-off (see Figs. 3 and 4) and by the swinging and slight preliminary rotary movement of said roll, which obviously tends to throw the cut-off down against the slight resistance of its spring in the manner indicated.

From the foregoing it will be understood that the belt is normally contained upon the upper roll 25 which would be provided with a spring somewhat after the style of a curtain roller, and that the belt is drawn therefrom by the manual operation of the connected shaft 26, and further that when the cover is opened the cigarette removed and the lower shaft released, (see Figs. 8 and 9) the upper spring roll will promptly rewind the belt back upon itself preparatory for another operation.

In the modification shown in Fig. 15, I have illustrated a detail belt construction

which avoids the use of a spring roll and includes only a plain pair of shafts 26 and 45 the former being an operating shaft as in the other form and the latter an idler.

5 These shafts are provided with an endless belt 46 which obviously can be run back and forth to roll and form the cigarette by the manipulation of the operating shaft 26.

10 Having thus described my invention what I claim and desire to secure by Letters Patent is:—

1. In a pocket cigarette machine, the combination of a casing adapted to hold tobacco, a belt for forming a cigarette, end 15 guides around which the belt is passed to deflect the same into a cylindrical pocket form, rolls upon which the belt is mounted, a cover for the casing with means for supporting a series of sheets of paper therein, 20 a handle for drawing the belt and a sheet of paper around the guides and tobacco to form a complete cigarette.

2. In a pocket cigarette machine, the combination of a casing adapted to hold tobacco, a belt for forming a cigarette, a pair 25 of rolls upon which the belt is mounted, fixed guides around which the belt is passed to deflect the same into a pocket form, means for supporting a series of sheets of paper within the case, and a handle for drawing 30 the belt and a sheet of paper around the guides to roll the tobacco when placed therein.

3. In a pocket cigarette machine, the combination of a casing adapted to contain tobacco and a cover with means for supporting a series of sheets of paper, a pair of 35 rolls one of which is manually operated, a belt mounted upon the said rolls whereby a sheet of paper is drawn in and wound around the tobacco, end guides for twisting and inclosing the ends of the paper after being 40 wound around the tobacco.

4. In a pocket cigarette machine, the combination of a casing adapted to contain tobacco and a cover to hold a series of sheets 45 of paper, means for taking the paper from the pad and placing it in position to be wound around the tobacco, of a belt one end of which is mounted upon a spring roll and the other upon a manually operated roll 50 whereby a sheet of paper is drawn in and wound around the tobacco, fixed end guides adapted to twist and inclose the end of the paper after being wound around the tobacco. 55

5. In a pocket cigarette machine, the combination with a casing adapted to contain tobacco, means for also retaining a series of 60 cigarette papers within the casing, of cigarette forming mechanism comprising a belt mounted upon a spring roll and manually operated shaft, a cut-off to regulate the supplies of tobacco to the belt, means for deflecting one of the sheets of paper in against the 65

belt drawing it around the tobacco as it is rolled by the movement of the belt.

6. In a pocket cigarette machine, the combination of a casing adapted to hold tobacco, a belt for forming a cigarette, end 70 guides around which the edges of the belt pass to deflect the same into a pocket form, means for drawing the belt and a sheet of paper around the guides to roll tobacco when placed therein, a cover for inclosing the 75 above operative parts and having means for carrying the sheets of paper to be rolled around the tobacco.

7. In a pocket cigarette machine, the combination of a casing adapted to contain tobacco, means for also retaining a series of 80 cigarette papers within the cover of the casing, cigarette forming mechanism, comprising a belt, rolls upon which the belt is mounted, brackets in which the ends of the 85 rolls are pivoted, a lever for shifting the brackets and rolls preparatory to the rolling of a cigarette, a plate beneath the cover for deflecting one of the sheets of paper in 90 against the belt, and means for moving the belt and drawing the paper around the tobacco.

8. In a pocket cigarette machine, the combination of a casing adapted to contain tobacco, a cover therefor adapted to carry 95 sheets of paper, a transfer plate beneath the cover to take the papers from the cover and place them in the machine, a belt and means whereby the said sheets of paper are drawn in and wound around the tobacco, guides 100 for twisting the end of the paper after being wound around the tobacco.

9. In a pocket cigarette machine, the combination of a casing adapted to contain tobacco, end plates detachably mounted within 105 the casing, brackets pivoted to the plates, an operating lever connected with the brackets, rolls carried by the brackets and a belt mounted upon the rolls and means for operating the belt to roll the tobacco and 110 cover the same with a sheet of paper.

10. In a pocket cigarette machine, the combination of a casing adapted to hold tobacco, a belt for forming a cigarette, rolls 115 upon which the belt is mounted, means for operating the rolls and belt, means for drawing the belt around the tobacco, and a cut-off adapted to be engaged and operated by the rolls to shut off the supply of tobacco 120 from the case.

11. In a pocket cigarette machine, the combination of a casing adapted to contain tobacco, end plates detachably mounted 125 within the casing, brackets pivoted to the plates, an operating lever connected with the brackets, rolls carried by the brackets and a belt mounted upon the rolls, a handle for operating the belt to roll the tobacco and cover the same with a sheet of paper, and 130 a hinged cover for the casing pivoted to the

said brackets whereby the cigarettes may be released.

12. In a pocket cigarette machine, the combination of a casing adapted to hold tobacco, a belt for forming a cigarette, and guides for the belt, means for looping the belt around the guides to form a pocket, means for drawing the belt and sheets of paper around the guides to roll tobacco when placed therein, cut-off to automatically shut

off the supply of tobacco while a cigarette is being made.

Signed at Waterbury, in the county of New Haven, and State of Connecticut, this 6th day of February, A. D., 1909.

MAX POLLAK.

Witnesses:

ROBERT DENNISON,
A. M. CARY.