

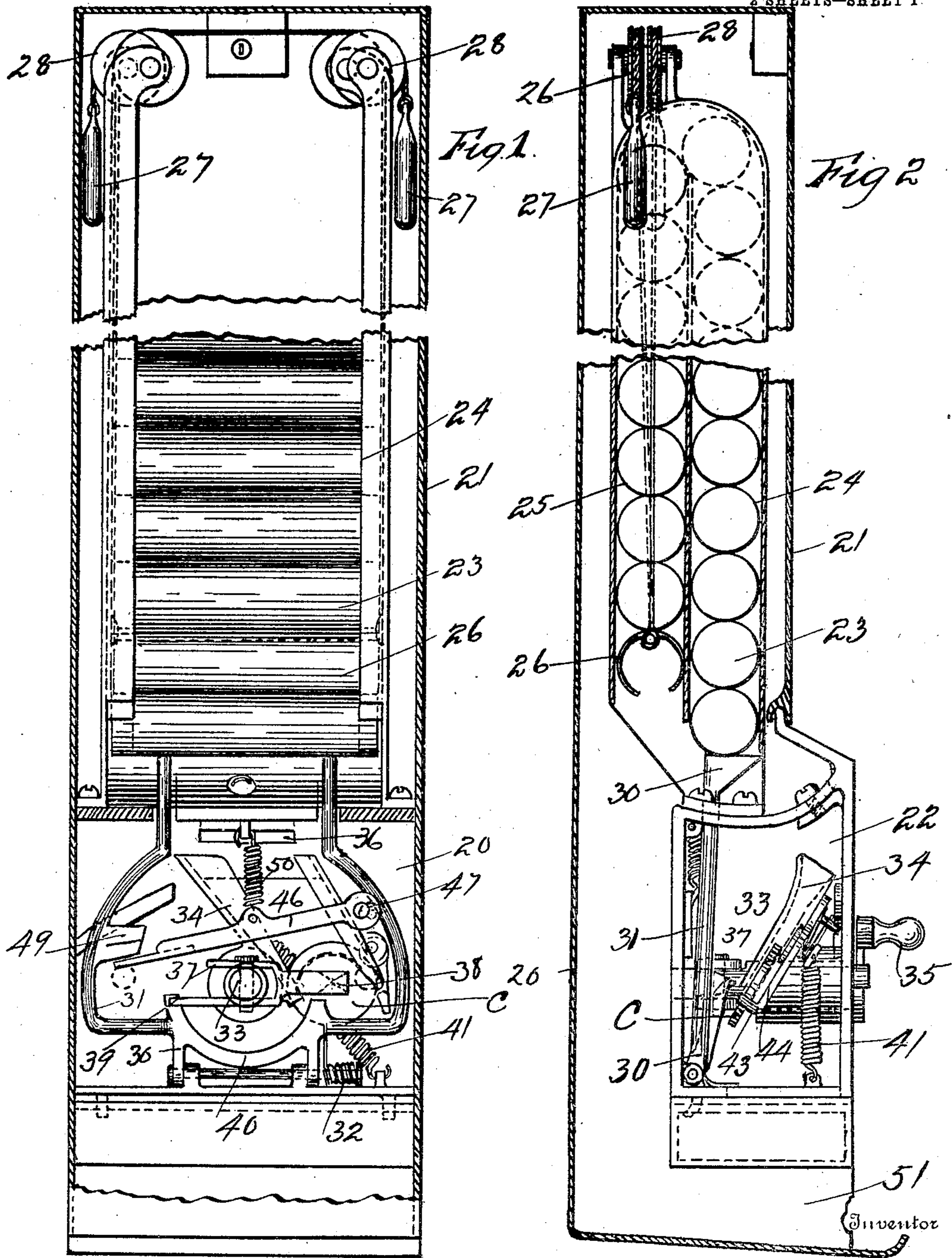
No. 836,721.

PATENTED NOV. 27, 1906.

N. C. WALLENTIN.
VENDING MACHINE.

APPLICATION FILED JULY 10, 1905.

2 SHEETS—SHEET 1.



Witnesses:

Frank A. Foster
E. J. Ugeden

Nils C. Wallentin

By

Howard E. Barlow
Attorney

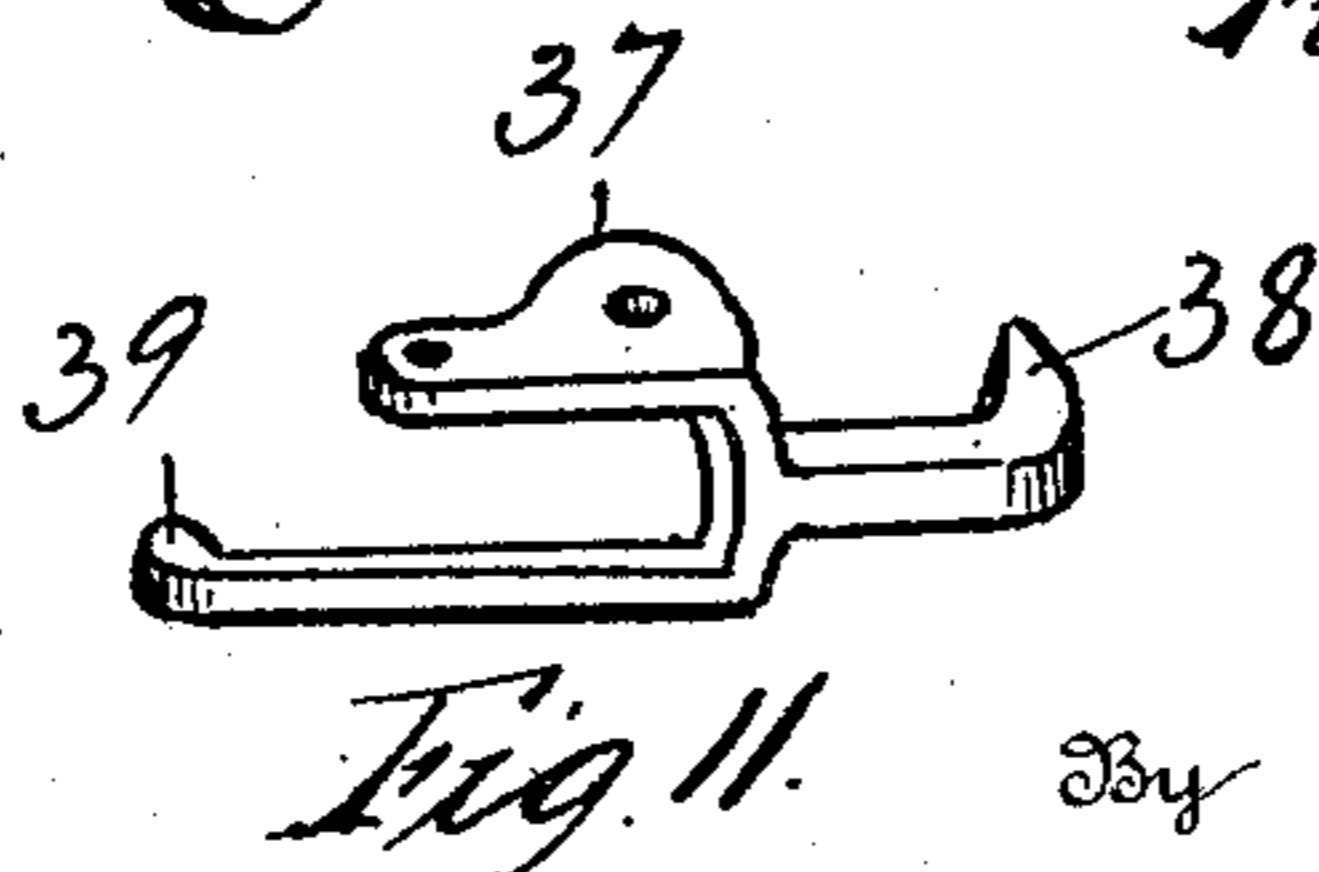
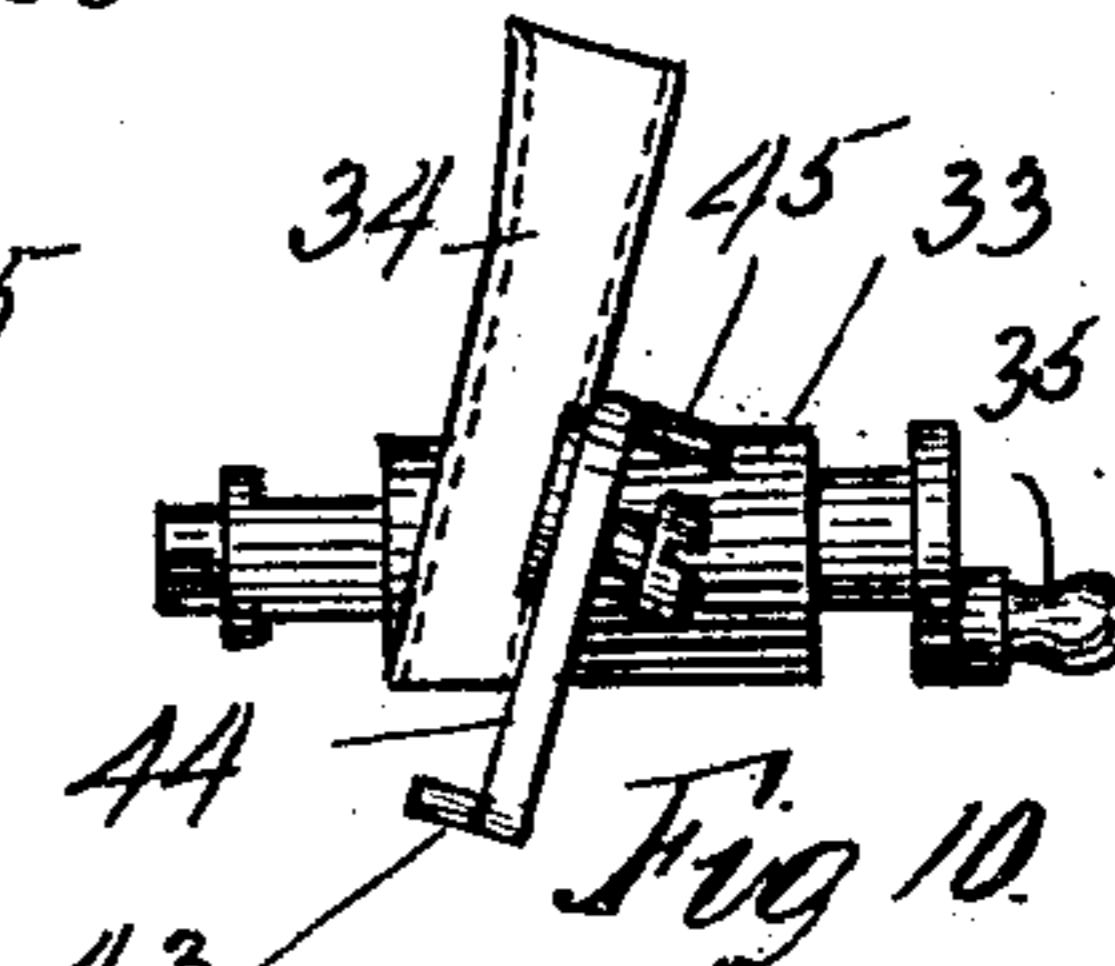
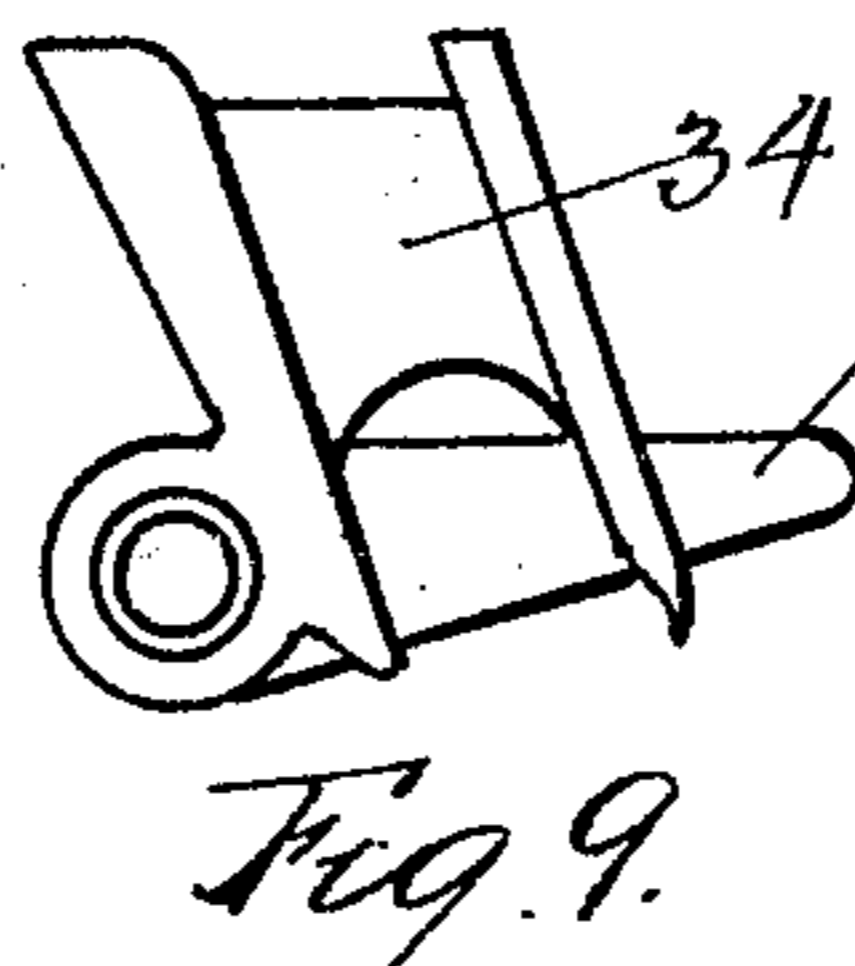
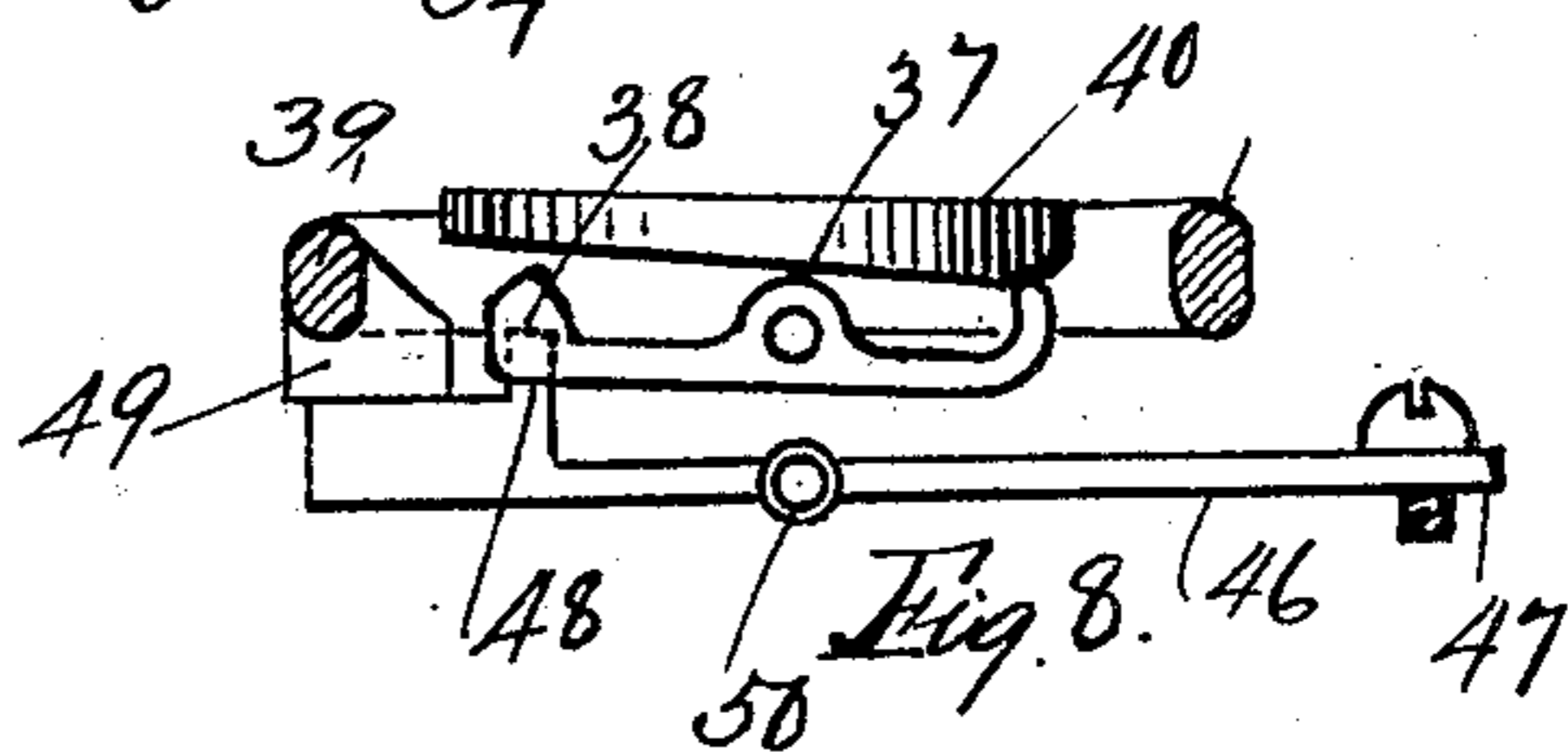
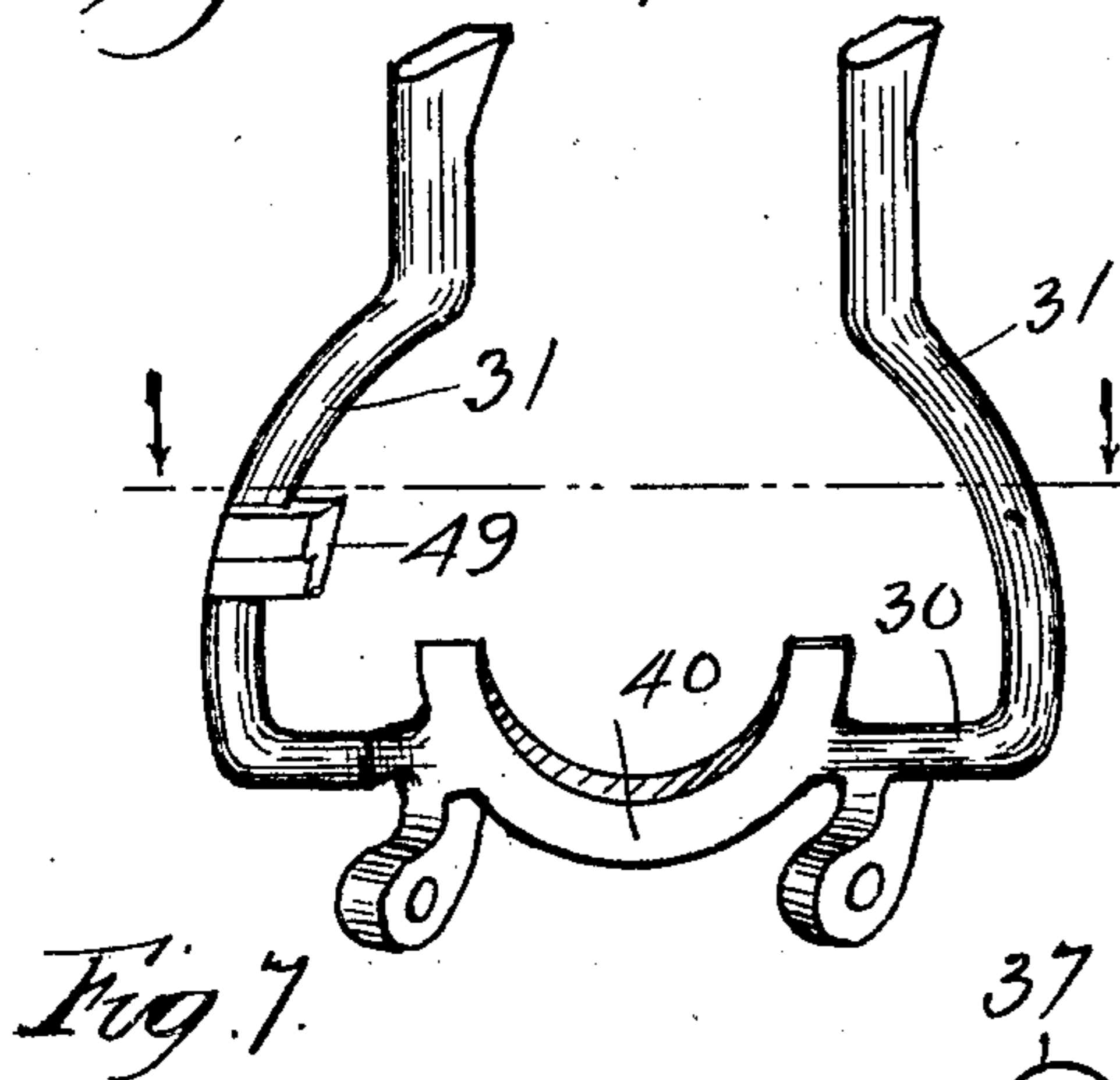
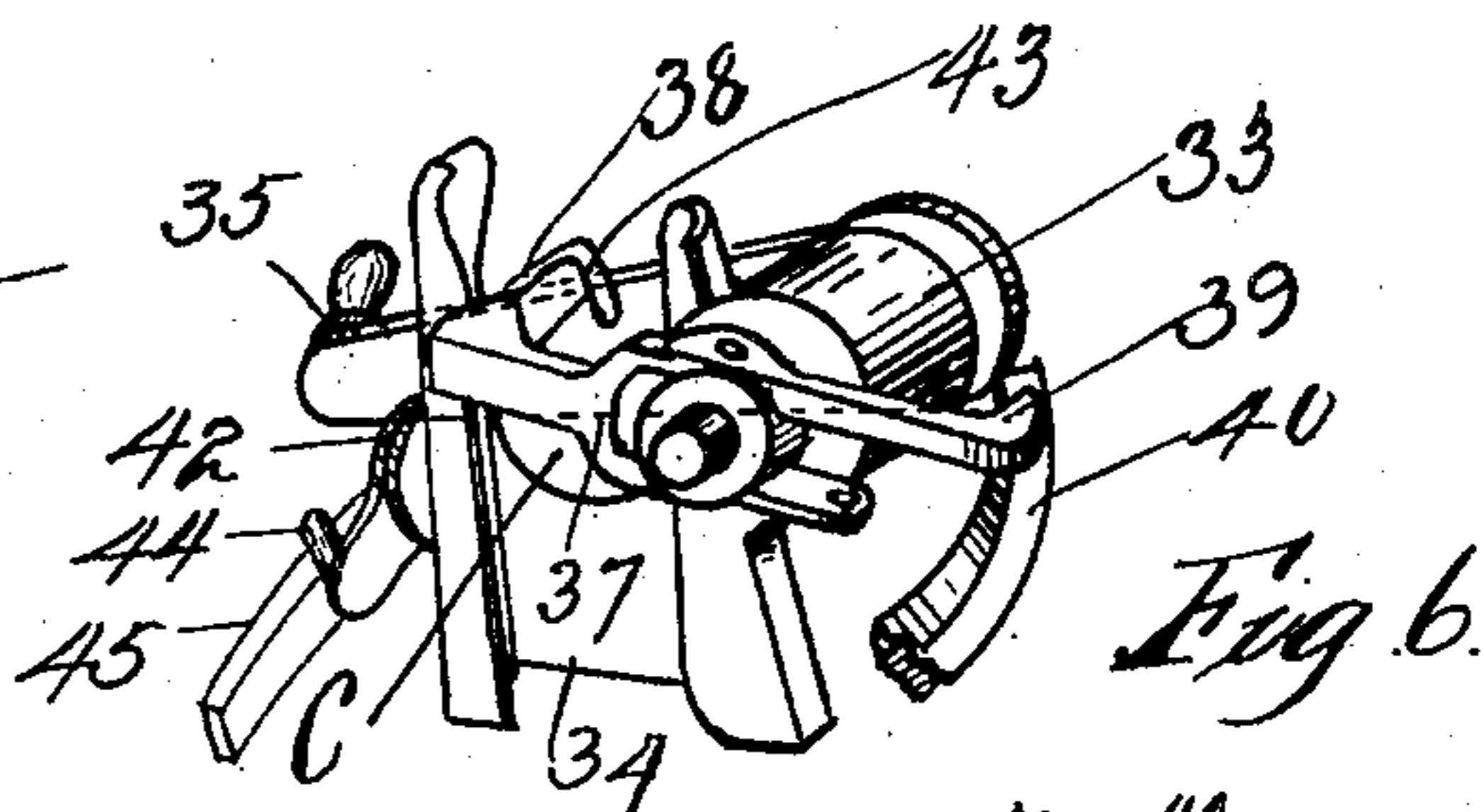
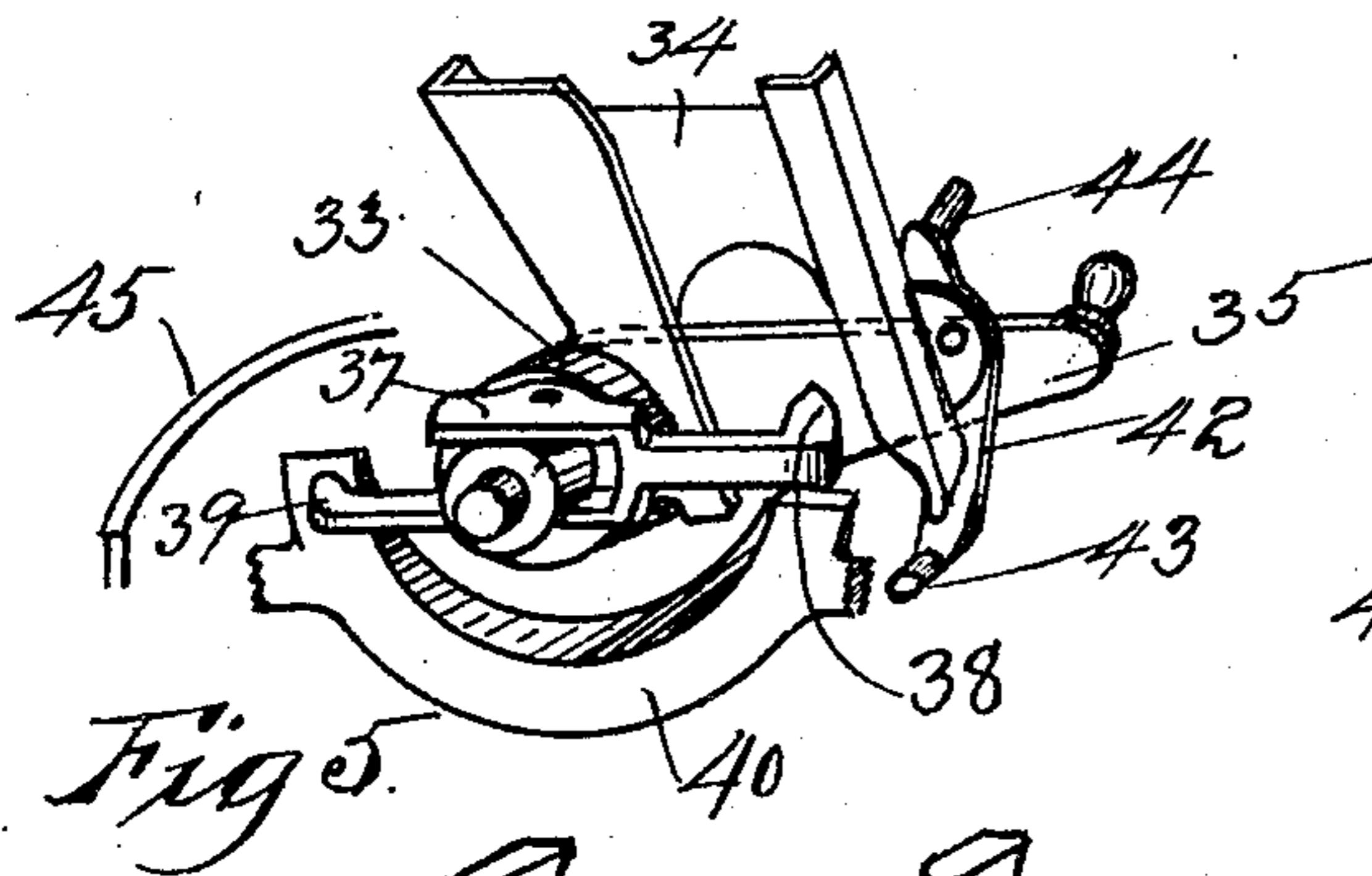
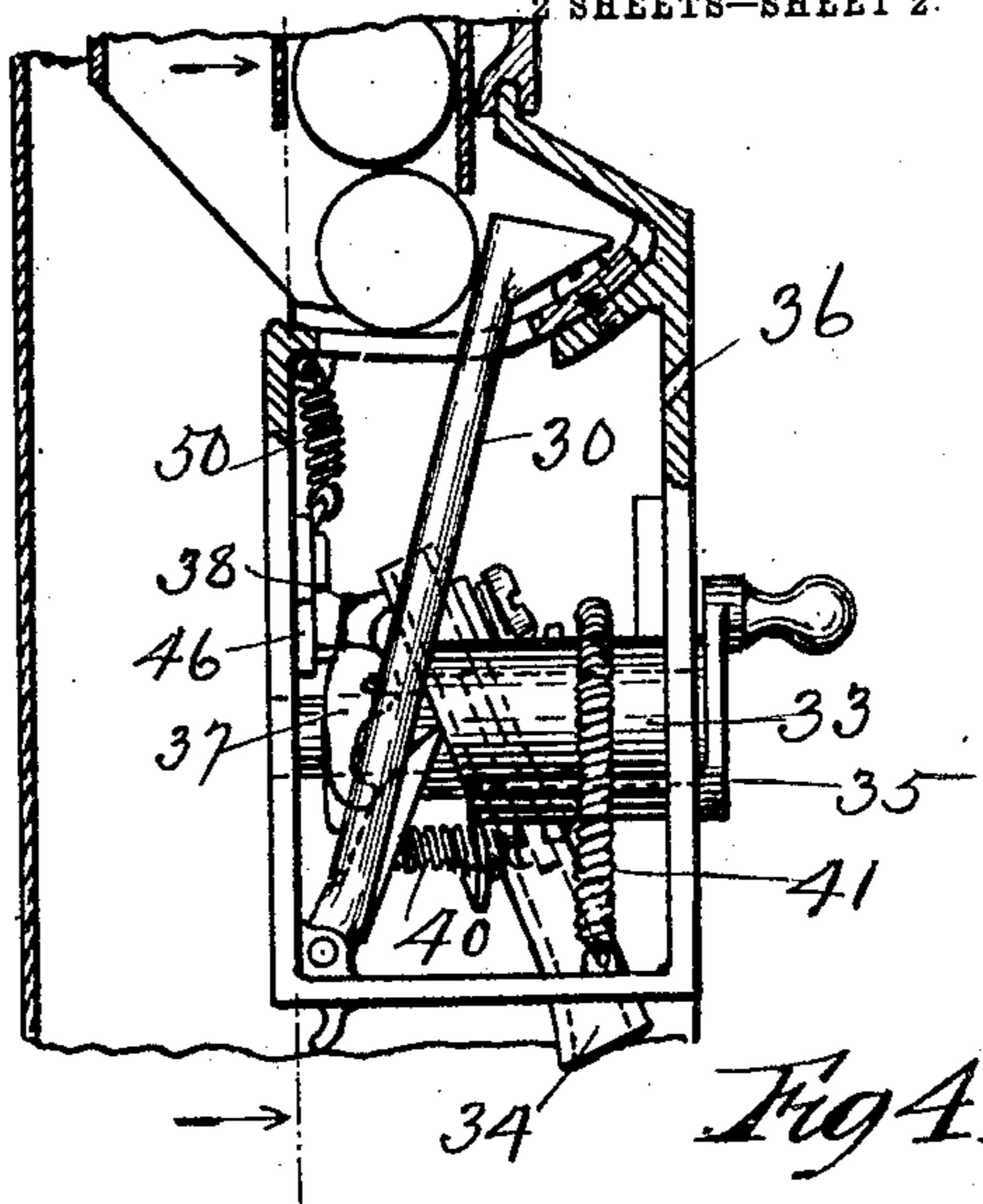
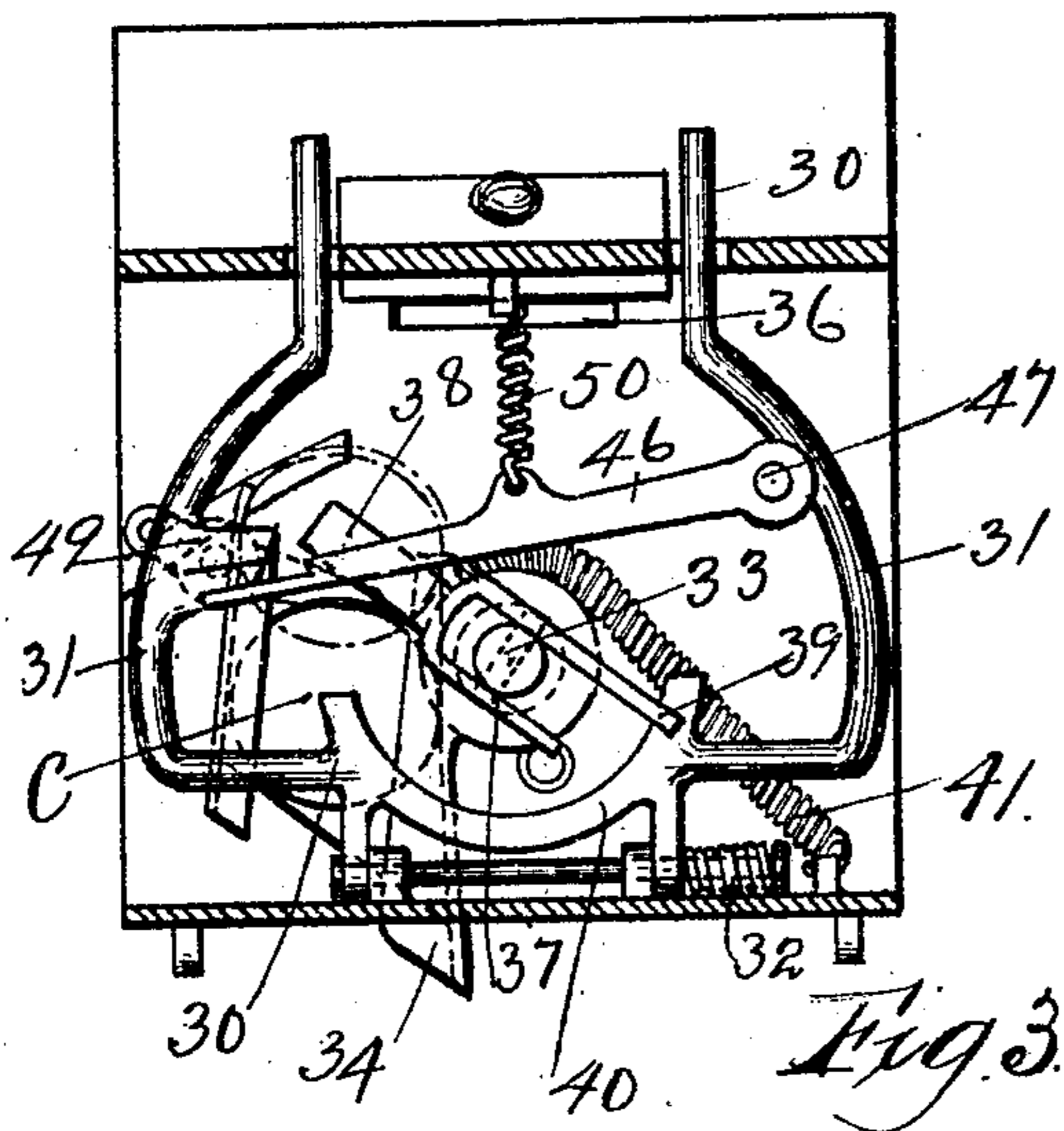
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APPLICATION FILED JULY 10, 1905.

2 SHEETS—SHEET 2.



Witnesses
Frank A. Foster
E. S. Ogden

Nils C. Wallenthin

By *Amend & Barlow*
Attorney

UNITED STATES PATENT OFFICE.

NILS C. WALLENTIN, OF CENTRAL FALLS, RHODE ISLAND.

VENDING-MACHINE.

No. 836,721.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed July 10, 1905. Serial No. 268,919.

To all whom it may concern:

Be it known that I, NILS C. WALLENTIN, a citizen of the United States, residing at Central Falls, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Vending-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in coin-controlled vending-machines, and pertains more particularly to that class of inventions in which the coin serves as a connector to insure the
15 operation of the delivery mechanism.

The invention has for its object the production of simple and inexpensive means for insuring the prompt delivery of an article upon deposit of the proper coin.

20 A further object is to provide means for preventing the surreptitious operating of the machine without the deposit of the proper coin.

25 A further object is to provide means to prevent more than one operation of the machine upon the deposit of each coin.

With these objects in view the invention will be hereinafter fully described, and particularly set forth in the claims.

30 In the accompanying drawings, Figure 1 is a rear view of a vending-machine embodying my invention, parts being shown in section. Fig. 2 is a side view thereof, parts being in section. Fig. 3 is a detail view of the coin-controlled mechanism after the same has
35 been partially operated. Fig. 4 is a similar view at right angles to Fig. 3. Figs. 5 and 6 are detail perspective views illustrating the coin-chute and its adjuncts. Fig. 7 is a
40 front elevation of the yoke member in detail. Fig. 8 is a top view showing the arms of the yoke member in section, also the cam in said yoke member and the pivoted lever engaging said cam. Fig. 9 is a detail view of the coin-chute. Fig. 10 is a side elevation of the coin-chute mounted on the shaft. Fig. 11 is a
45 detail perspective view of the lever that is pivoted on the shaft.

Referring to the drawings, 20 designates a
50 casing provided with an extension 21, in which the articles to be vended are located, and a chamber 22, containing the coin-controlled mechanism. The articles to be vended are preferably placed in cylindrical car-

tons 23, which are placed in a chute provided 55 with a plurality of compartments 24 25, which communicate with each other at their upper ends. The lowermost carton in compartment 24 rests upon the upper end of a yoke member 30, to be hereinafter de- 60 scribed, the lowermost carton in compartment 25 resting upon a cylindrical member 26, supported by counterbalancing-weights 27, connected thereto by cords passed over pulleys 28 in the top of extension 21. By 65 this arrangement the weights 27 serve to elevate the topmost carton in compartment 25, so as to automatically deliver the same into compartment 24 when the lowermost carton of said compartment 24 has been removed by 70 the delivery mechanism.

The delivery mechanism comprises a yoke member 30, pivoted at its lower end in chamber 22, the arms 31 thereof serving to support the lowermost carton in chute 24. Said 75 yoke member is held normally beneath chute 24 by means of a spring 32. Interposed between arms 31 and arranged transversely to the pivot of the yoke 30 is an oscillating shaft 33, carrying a coin-chute 34 and provided with an operating-handle 35, said 80 chute registering with an opening 36 in chamber 22. Said chute is tapered, whereby the coin is prevented from passing entirely through, as shown. 85

On a reduced portion of shaft 33 is pivotally mounted a transversely-arranged lever 37, one end of which is provided with a protuberance 38, adapted to contact with a coin C, held in chute 34, the other end of said lever 90 being provided with an extension 39 normally engaging a cam 40, formed on yoke member 30.

A spring 41 serves to return the shaft 33 and its adjuncts to their normal positions 95 after operation.

On the coin-chute 34 is pivotally mounted a member 42, provided with a finger 43, projecting over the narrow end of said chute and adapted to enter the open side of the 100 latter, the opposite end of said member being provided with a finger 44, adapted to engage a stationary cam 45, whereby the coin is forced out of said chute when the shaft 33 has been turned to the proper position. 105

A locking-arm 46 is pivotally mounted at 47 and provided at its free end with an enlargement from which projects a lug 48.

Said enlargement is adapted to engage a lug 49 on yoke member 30, the arm 46 being under the tension of a spring 50.

The operation is as follows: A coin upon
5 being deposited in chute 34 will be arrested in its movement opposite the protuberance 38 of lever 37. The shaft 33 is then turned by means of its handle 35, the projection 39 of lever 37 riding over cam 40. The coin
10 serves to prevent the rocking of lever 37, as will be clearly apparent, and as a consequence the action of said lever on cam 40 forces the yoke member 30 to rock forward on its pivot. The effect of this is to permit
15 the lowermost carton 23 in compartment 24 to drop on the top of chamber 22, and at the same time the spring 50 will draw the free end of the locking member 46 into engagement with lug 49, thereby locking the member 30
20 in its forward or abnormal position to prevent a second operation of said member before the deposit of another coin. As said shaft 33 continues to turn the finger 44 of member 42 engages cam 45 and the coin is
25 thereby forced out of the chute. Just previous to this latter operation, however, the protuberance 38 of lever 37 engages finger 48 on the locking-lever 46 and depresses the same below lug 49, whereupon spring 52 will
30 return the yoke member 30 to its normal position. The result of this operation is to cause the arms 31 to kick the carton off the top of chamber 22, whereupon said carton will fall to the delivery-opening 51. The
35 shaft is at the same time returned to its normal position by spring 41. It will be noted that if the shaft is turned when there is no coin in chute 34 the cam 40 will force the protuberance 38 into the open side of the
40 chute and the position of the yoke member 30 remains unchanged. As the carton from compartment 24 is dropped on the top of chamber 22 the counterbalanced member 26 will simultaneously deliver the topmost carton in compartment 25 to the compartment
45 24, thus automatically replenishing the latter compartment.

The advantages of my improved vending-machine will be at once apparent to those
50 skilled in the art to which it appertains. It will be particularly noted that the parts are positive in their operation, and thus insure prompt delivery of the vended article. It will also be noted that the surreptitious operation of the machine is effectually prevented.

It will be further understood that while I have shown and described my improved machine as adapted for the delivery of cylindrical cartons I do not limit myself thereto, as the same is equally applicable for the delivery of goods of other character.

I claim as my invention—

1. An apparatus of the character described
65 comprising an ejector member pivotally sup-

ported at its lower end and normally supporting the articles to be vended, a coin-chute, a support therefor, and an operating member for said ejector, said member being independent of said ejector and pivotally
70 mounted upon said support, one end of said member being in contact with said ejector and the other end thereof projecting into said coin-chute.

2. An apparatus of the character described
75 comprising an ejector member pivotally supported at its lower end and normally supporting the articles to be vended, a reversible coin-chute, an oscillating support therefor, and means independent of said ejector
80 for operating the same, said means being mounted upon said oscillating support.

3. An apparatus of the character described comprising an ejector member pivotally supported at its lower end and normally supporting
85 the articles to be vended, a reversible coin-chute, an oscillating shaft upon which said chute is mounted, and means independent of said ejector for operating the same, said means being mounted upon said
90 oscillating shaft.

4. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon, a lever pivoted to said
95 shaft, a pivoted ejector member normally supporting the articles to be vended, and means carried by said ejector member lying in the path of movement of said lever, whereby said ejector member may be operated by the oscillation of said shaft.
100

5. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon, an ejector member normally supporting the articles to be vended,
105 and a lever pivoted to said shaft and having one end normally engaging said ejector member, the other end being constructed to engage a coin in said chute, whereby said ejector member may be operated by the oscillation of said shaft.
110

6. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon, a pivoted ejector member normally supporting the articles to be vended
115 and provided with a cam portion, and a lever pivoted to said shaft, one end of said lever being normally in engagement with said cam portion, the other end thereof being constructed to engage a coin held in said chute, whereby said ejector member may be operated by the oscillation of said shaft.
120

7. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon, a pivoted ejector member normally supporting the articles to be vended
125 and provided with a cam portion, a lever pivoted to said shaft and having one end normally engaging said cam portion, the other end thereof being constructed to engage a coin held in said chute, a coin-discharging
130

member pivoted to said chute, and means for automatically operating said member to discharge a coin from said chute.

8. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a lever pivoted to said shaft and extending transversely of said chute, said lever being constructed to engage a coin retained in said chute, and a delivery device controlled by said lever.

9. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a lever pivoted to said shaft and extending transversely of said coin-chute, one end of said lever being provided with a protuberance for engaging a coin held in said chute, and a delivery device operated by the other end of said lever.

10. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a pivoted yoke member, and a lever pivoted to said shaft and extending transversely of said coin-chute, one end of said lever normally engaging said yoke member and the other end thereof being constructed to engage a coin held in said chute.

11. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a delivery device, a lever pivoted to said shaft and extending transversely of said chute, one end of said lever engaging said delivery device, the other end thereof being free to enter said coin-chute, and means for automatically forcing a coin out of said chute.

12. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a delivery device, a lever pivoted to said shaft and extending transversely of said chute, one end of said lever normally engaging said delivery device, the other end thereof being free to enter said chute, a coin-discharging member pivoted to said chute and having a finger projecting into the latter, and means for rocking said member.

13. An apparatus of the character described comprising an oscillating shaft, a coin-chute provided with an opening therein, a delivery device, and a lever pivoted to said shaft and extended transversely of said

chute, one end of said lever controlling said delivery device, the other end thereof being free to enter the opening in said chute.

14. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a pivoted yoke member provided with a cam portion, and a lever pivoted to said shaft, one end of said lever normally engaging said cam, the other end thereof being free to engage a coin in said chute.

15. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a pivoted yoke member, a locking-lever therefor, and a lever pivoted to said shaft, one end of the latter lever normally engaging said yoke member, the other end thereof being free to engage a coin in said chute.

16. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a pivoted yoke member provided with a lug, a spring-pressed locking-lever for engaging said lug, and a lever pivoted to said shaft, one end of the latter lever engaging said yoke member, the other end thereof being free to engage a coin in said chute.

17. An apparatus of the character described comprising an oscillating shaft, a coin-chute mounted thereon and constructed to retain a coin, a pivoted yoke member provided with a cam, a locking-lever for said yoke member, and a lever pivoted to said shaft, one end of the latter lever engaging said cam, the other end thereof being free to enter said coin-chute.

18. An apparatus of the character described comprising a rotatable shaft, a coin-chute mounted thereon and constructed to retain a coin, a pivoted yoke member, a locking-lever therefor, a lever pivoted to said shaft, one end of said lever engaging said yoke member, the other end thereof being free to enter said coin-chute, and means for automatically forcing a coin out of said chute.

In testimony whereof I affix my signature in presence of two witnesses.

NILS C. WALLENTIN.

Witnesses:

HOWARD E. BARLOW,
E. I. OGDEN.