

No. 710,144.

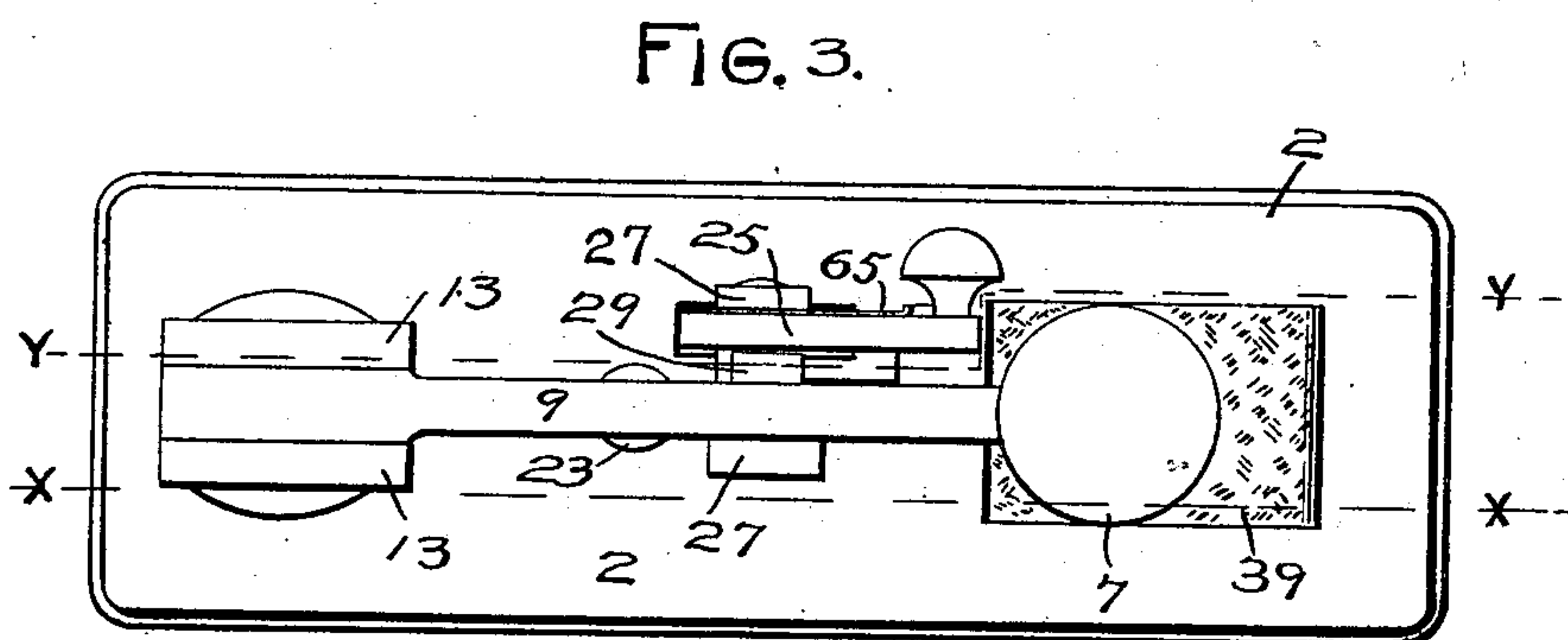
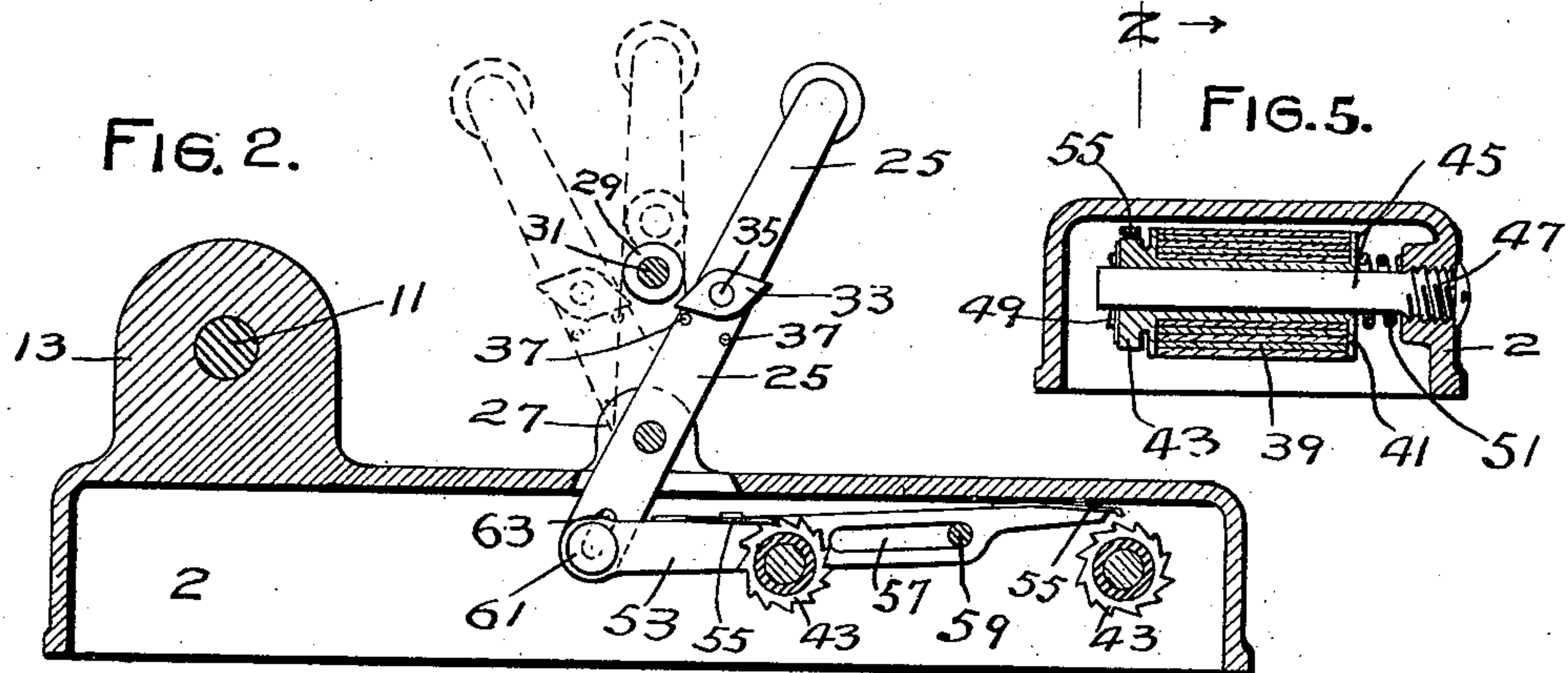
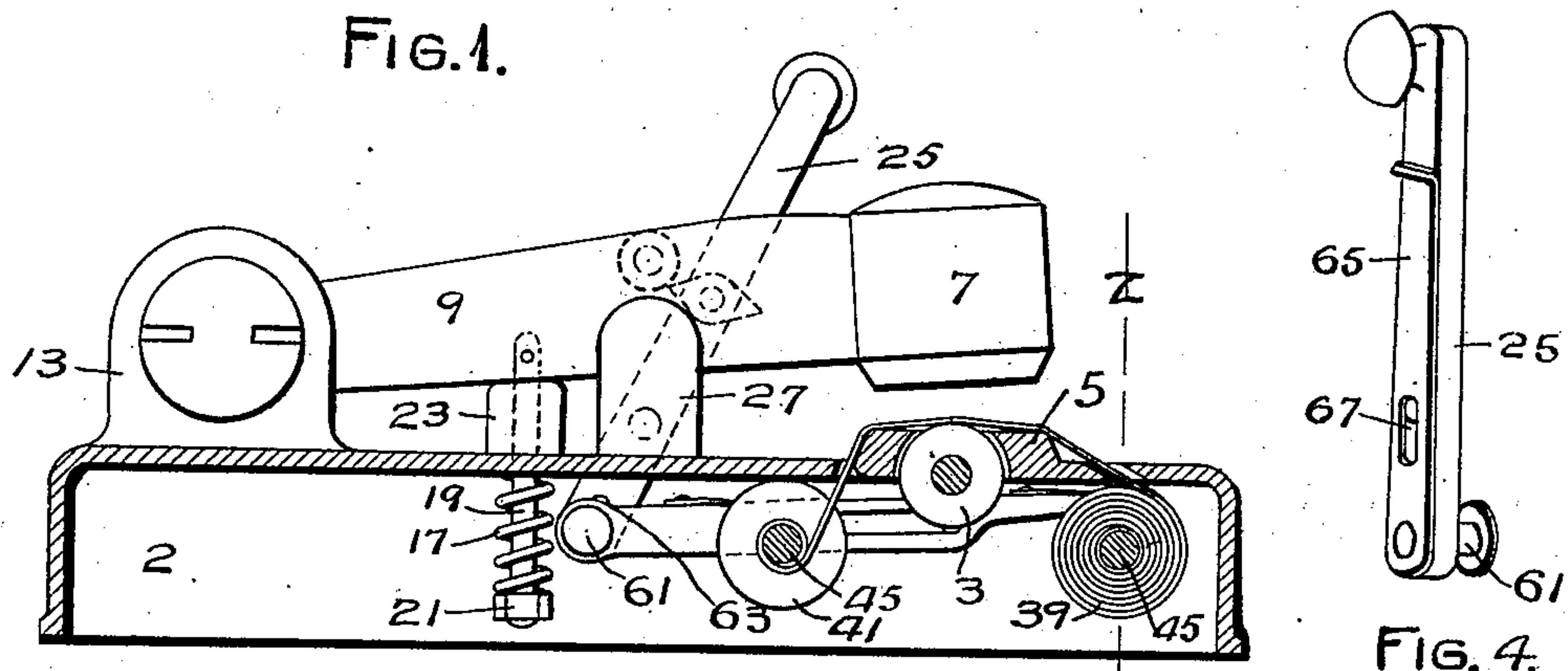
Patented Sept. 30, 1902.

H. DE WALLACE.

OPERATING DEVICE FOR DATING OR OTHER STAMPS.

(Application filed June 22, 1899.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

HARRY DE WALLACE, OF ST. PAUL, MINNESOTA.

OPERATING DEVICE FOR DATING OR OTHER STAMPS.

SPECIFICATION forming part of Letters Patent No. 710,144, dated September 30, 1902.

Application filed June 22, 1899. Serial No. 721,423. (No model.)

To all whom it may concern:

Be it known that I, HARRY DE WALLACE, of the city of St. Paul, county of Ramsey, State of Minnesota, have invented certain new and useful Improvements in Operating Devices for Dating or other Stamps, of which the following is a specification.

This invention relates to improvements in devices designed for operating dating or other stamps; and the objects I have in view are to provide means whereby the plunger or hammer may be quickly and easily operated and a uniform stroke will at all times be obtained. By this means a uniform impression will be made by the stamp, and where a ribbon is used over the type-wheels for the purpose of making the impression upon the paper the wear upon the ribbon will be even, thereby increasing the life of the ribbon. By this means also the splashing or blurring of the ink on the ribbon in making the impression is also entirely avoided.

The invention also relates to a ribbon shift and feed device connected with the plunger-operating means, whereby the ribbon is fed at a uniform rate of speed in either direction as the stamp is operated.

The invention consists generally in the constructions and combinations hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal section on the line $x x$ of Fig. 3, showing my improvement applied to a dating-stamp. Fig. 2 is a longitudinal section on line $y y$ of Fig. 3, showing the means for feeding the ribbon and also showing the means by which the plunger of the stamp is raised and released. Fig. 3 is a plan view of the stamp shown in Figs. 1 and 2. Fig. 4 is a perspective view of the operating-lever, showing the slide arranged thereon for shifting the ribbon-feed. Fig. 5 is a transverse vertical section on the line $z z$ of Fig. 1.

In all of the drawings, 2 represents the base of the stamp, which may of any suitable or preferred construction. In those instances in which the stamp is used for dating purposes the base is provided with suitable type-wheels or dies 3 and 5, which may be of any usual or preferred construction. As the ar-

range ment of the type-wheels or dies and the means for supporting and adjusting them does not form any part of my present invention, I have considered it unnecessary to show in detail herein the construction and arrangement of such wheels or dies. I have shown in Fig. 1 a type-wheel 3 and die 5, and any number of such wheels or dies may be employed, or type-wheels or dies of any preferred construction and arrangement may be used instead.

7 represents a suitable plunger or hammer which is mounted in any suitable manner above the type-wheels and dies and is adapted to be forced down thereon, so as to press the paper upon such wheels and dies. This plunger may be arranged upon or form part of a lever 9, mounted by a suitable pivot 11 in a bearing or support 13 upon the base of the device. A suitable spring 17 is connected to the plunger or its supporting-lever and tends to move said plunger toward or against the type-wheels and dies. This spring may be connected to the plunger or its operating-lever in any suitable manner. As shown in Fig. 1, a rod 19 is pivoted to the lever 9, passes through the top of the base 2, and is provided at its lower end with an adjustable nut 21. The spring 17 surrounds the rod 19 between the adjustable nut 21 and the under surface of the top of the base 2. A rubber block 23 is preferably arranged surrounding the rod 19 between the top of the base 2 and the lower surface of the lever 9, on which rubber block the lever rebounds to raise the hammer from the dies. A lever 25 is pivoted between lugs 27 upon the base 2, one of said lugs preferably extending up and alongside the lever 9, so as to form a guide for said lever in its up-and-down movement. The side of the lever 9 is provided with a wheel or roll 29, arranged upon a stud 31, and the lever 25 is provided with a pivoted double-surfaced cam 33, which is mounted upon a stud 35. The side of the lever is also provided with pins 37, which limit the movement of the cam 33 in both directions. A roller or other suitable device upon the lever 25 might be substituted for the cam 33. It will be noted that by moving the lever 25 backward or forward from the position shown in full lines in Fig. 3 to the positions shown in dotted lines in the same figure the

plunger is raised, thereby putting the spring 17 under tension, and said plunger is then quickly released, permitting the spring to exert its full pressure upon the plunger and lever and causing the plunger to strike a quick sharp blow upon the die and type of the type-wheels. By rapidly moving the lever back and forth the plunger may be made to operate at any desired degree of speed, and at each movement of the lever either forward or back the plunger descends, causing an impression upon the paper.

In Figs. 1 to 5 I have shown means for feeding the inking-ribbon that may be used in connection with a stamp having my improvement applied thereto. As here shown, the ribbon 39 is mounted upon spools or wheels 41 and passes through slots in the base 2 and over the surface of the die and type-wheels. The spools or wheels 41 are each preferably provided with a ratchet-wheel 43, and these spools are preferably mounted upon studs 45, said studs being provided with threaded portions 47, by means of which they are screwed into the base 2. A pin 49 is inserted through a hole in the end of the stud, and a spring 51 is arranged upon the stud between the base and the end of the spool. This spring exerts sufficient pressure upon the spool to cause it to remain at all times in the position to which it is moved by the operating device herein referred to. By this means the ribbon is kept taut at all times. An operating-rod 53, provided with pawls 55, is arranged within the base 2, said rod being preferably provided with a slot 57, through which a pin 59 in the base extends. The end of this rod is connected with the lower end of the lever 25 by means of a pin or stud 61, that passes through a slot 63 in the lower end of the lever. One end of the stud 61 is connected to a slide 65, arranged upon the lever 25 and held between the same and the lug 27 of the base. This slide is provided with a slot 67, through which the pivot of the lever extends. By means of this slide the end of the rod 53 may be raised or lowered, and thereby one or the other of the pawls 55 brought into position to engage with the corresponding ratchet-wheel 43. As the lever 25 is operated the ratchet-wheel 43, that is engaged by one of the pawls 55, is turned step by step. The forward movement of the lever moves the ratchet-wheel one step, so that said wheel is moved one step for every two impressions made by the stamp.

The operation of the device will be readily understood from the foregoing detailed description of its construction.

Various modifications or changes in the details of the construction will suggest themselves and may be employed without departing from my invention.

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

1. The combination, in a stamp, with a

spring-actuated plunger, of a pivoted lever, a cam or projection on said lever arranged to engage said plunger, whereby as said lever is moved on its pivot in either direction said plunger is raised against the tension of its actuating-spring and quickly released, for the purpose set forth.

2. The combination, in a stamp, with a spring-actuated plunger, of the pivoted lever 25, a cam or projection arranged upon said lever and adapted to engage said plunger and raise the same against the tension of its actuating-spring at each movement of said lever either in the forward or backward direction, for the purpose set forth.

3. The combination, in a stamp, with a spring-actuated plunger, of the pivoted lever 25, the pivoted cam 33 located on said lever and adapted to engage and operate said plunger at each stroke of said lever, for the purpose set forth.

4. The combination, in a stamp, with a plunger, type-wheels or dies and inking-ribbon, of an operating-lever, and means connected with said lever for feeding said ribbon one step in either direction with every other stroke of said lever, for the purpose set forth.

5. The combination, in a stamp, with a plunger, type-wheels or dies and inking-ribbon, and means for supporting said ribbon, of a pivoted operating-lever 25, a rod 53 connected with said lever and adapted to engage either of the ribbon-supporting wheels and feed the ribbon one step in either direction with every other stroke of said lever, and means for shifting the position of said rod, for the purpose set forth.

6. The combination, in a stamp, with a plunger, type-wheels or dies, an inking-ribbon and means for supporting said ribbon, of a pivoted operating-lever 25, a rod 53 connected with said lever and adapted to engage either of the ribbon-supporting wheels and feed the ribbon one step in either direction with every other stroke of said lever, and a slide 65 provided on said lever and adapted to shift the position of said rod, substantially as described.

7. The combination, in a stamp, of a base with a plunger mounted thereon, a spring to actuate said plunger to perform the stamping movement, a lever pivoted on said base, a cam provided on said lever and adapted to engage and raise said plunger against the tension of said spring when said lever is operated in either direction, substantially as described.

8. The combination, in a stamp, with a plunger and type-wheels or dies and inking-ribbon, of a vertically-pivoted operating-lever provided with means at each stroke for operating said plunger, and means connected with said lever for feeding said ribbon in either direction, substantially as described.

9. The combination, in a stamp, with a plunger and type-wheels or dies and inking-

5 ribbon, of a pivoted operating-lever provided with means with each stroke for operating said plunger, and means for feeding said ribbon in either direction, substantially as described.

10 10. In a stamp, the combination, of a plunger and type-wheels or dies and inking-ribbon, with an operating-lever provided with means for moving said plunger from its seat with each stroke of said lever, and means for

returning said plunger to its seat when each stroke of said lever is completed.

In testimony whereof I have hereunto set my hand, this 19th day of June, 1899, at Minneapolis, Minnesota.

HARRY DE WALLACE.

In presence of—

M. E. GOOLEY,

ADDIE F. HOLMES.