

No. 680,911.

Patented Aug. 20. 1901.

J. E. COSTELLO.  
LETTER BOX.

(Application filed Nov. 1, 1900.)

(No Model.)

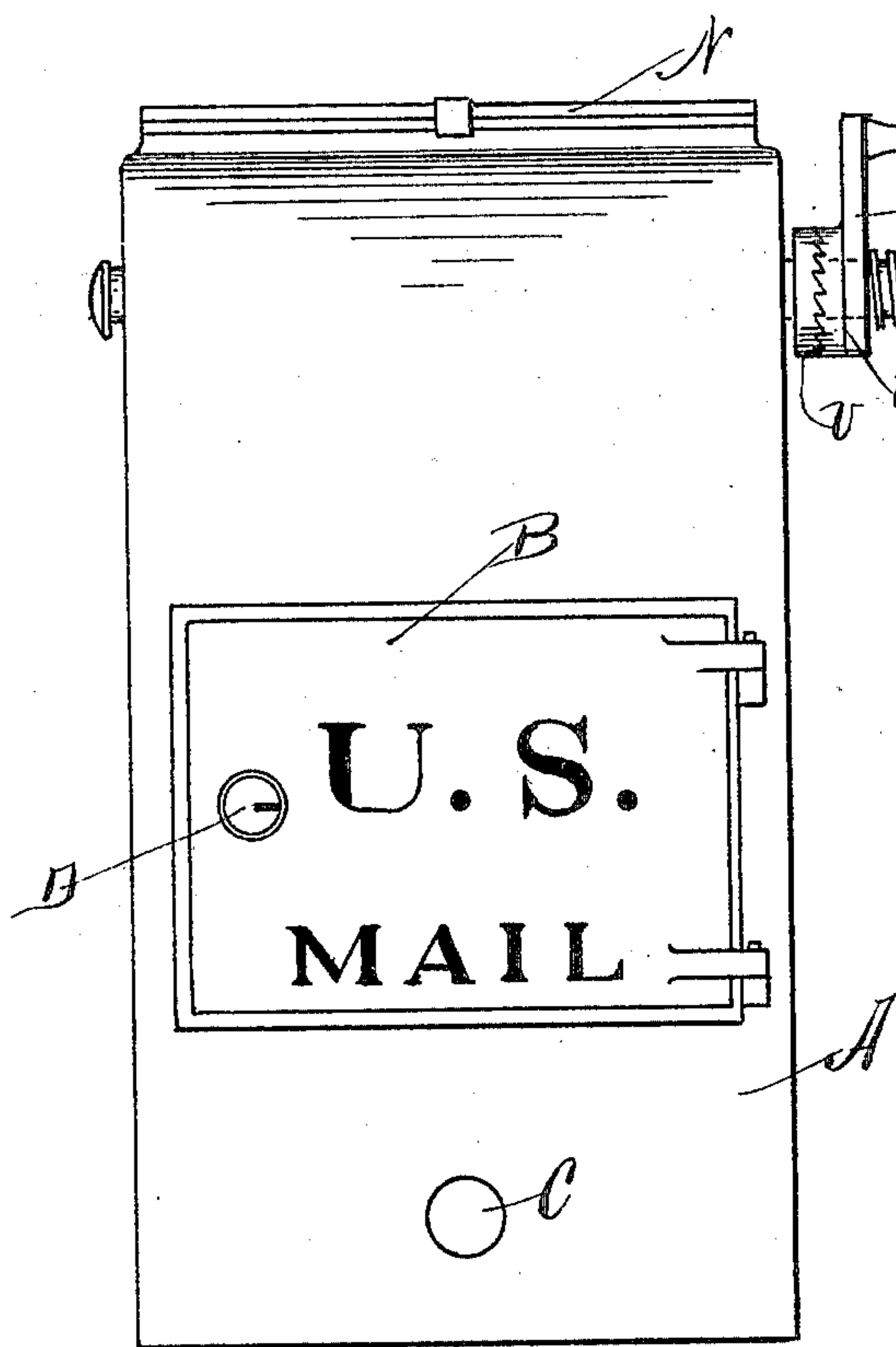


Fig. 1

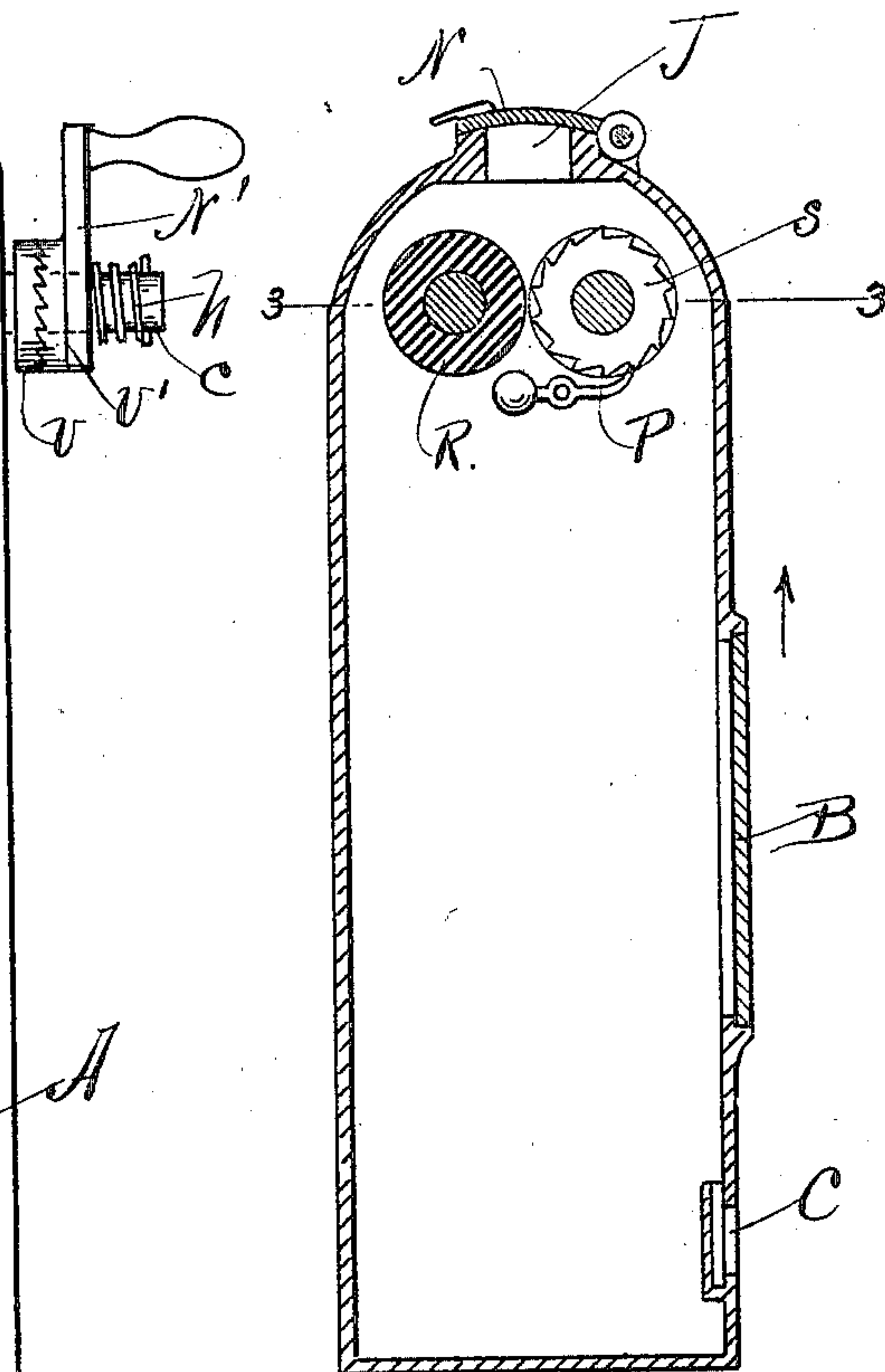


Fig. 2.

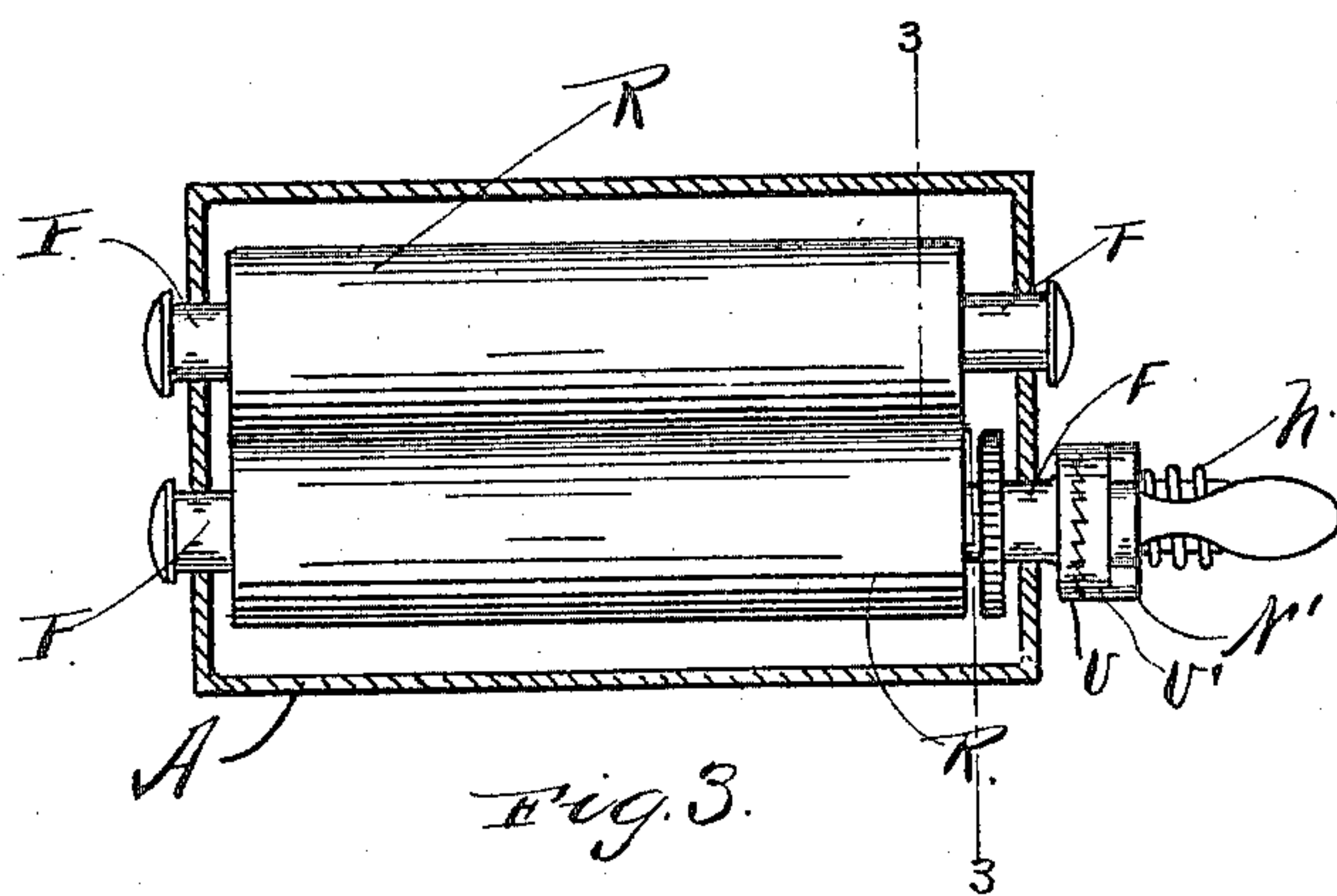


Fig. 3.

Witnesses.

C. S. Marsh.  
A. L. Makepeace

Inventor.

John E. Costello.

By Arnold & Barlow.  
Attorneys



# UNITED STATES PATENT OFFICE.

JOHN E. COSTELLO, OF PROVIDENCE, RHODE ISLAND.

## LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 680,911, dated August 20, 1901.

Application filed November 1, 1900. Serial No. 35,122. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN E. COSTELLO, a resident of the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Letter - Boxes; 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.

This invention relates to the class of letter-boxes designed for private use, the object being to provide a box, to be attached to the door or doorway of a private residence or office to receive mail-matter, that shall not be too conspicuous on account of its size, but be so constructed and arranged as to hold all the letters, &c., that the larger boxes will. It is also carefully designed to protect its contents from being damaged by the weather and from all liability of being stolen.

It is fully described and illustrated in this specification and the annexed drawings.

Figure 1 represents a front elevation of the letter-box. Fig. 2 represents a vertical cross-section taken on line 2 2 in Fig. 3 looking toward the right, showing the ratchet and pawl. Fig. 3 shows a horizontal section of the box, taken through the center of the rolls on line 3 3 in Fig. 2, showing the relative position of the rolls, case, and the crank, with its clutch.

The construction and operation of my invention are as follows:

A is a case made, preferably, of cast metal in about the proportions of nine by five by two and one-half inches and having an opening J in its top of proper dimensions to receive letters and small packages. A cover N to close the opening J is hinged to the top of the case at one side of the opening. A door B is made on the front of the case about midway between the top and bottom and hinged at one edge to the side of the case and provided with a suitable lock D on the other edge to secure the door. An opening C is made in the front below the door B and closed by a glass inside to allow of the inspection of the inside without opening the door. A little way below the opening J in the top of the case a pair of horizontal rolls R R are placed,

with bearings F F made in the sides of the case. The shaft of one of the rolls F projects far enough through the side of the case to receive a crank N', which is placed on it to turn it by, and a ratchet-wheel S is made fast on the shaft that has the crank just inside the case, and a pawl P is held on a stud in the side of the case, so as to engage with the ratchet-wheel S and prevent the rolls from being turned backward, and to still further prevent rolls from being forced back by means of the crank I make the crank loose on the shaft of the roll and put a side ratchet-wheel v fast on the shaft and a like ratchet-wheel v', facing in the opposite direction, fast on the crank N'. A spiral spring h is put on the shaft between the crank and a pin c near the end of the shaft to press the two ratchet-wheels v v' together, so that they will engage and turn the rolls in one direction, but will be allowed by the spring to separate and slide by each other when the crank is turned backward.

The rolls R R are covered with an elastic material, like rubber, so that a single letter or a package of half a dozen can be turned in at the same time.

The operation is this: The cover of the box is turned back, and the ends of the letters are inserted between the rolls, which are then turned by means of the crank, so as to carry them down into the box. The elasticity of the covering of the rolls admits of several letters being put in at one time. The action of the rolls is such that the letters are pressed into the box, and twice as many can be put in a box by means of them as can be put into a box of like capacity where gravitation is depended upon. The rolls also close the entrance to the box, and nothing can be drawn out, as they will not turn backward because of the ratchet-wheel and pawl, and the pawl is located below the ratchet, where it is next to impossible to tamper with it so as to allow the rolls to be turned back.

One great objection to private letter-boxes has been their great size, making them too conspicuous and clumsy in appearance; but by use of the rolls I am enabled to reduce them to less than one-half the size otherwise required for the same capacity.

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

In a letter-box the combination of a case  
5 having an opening in its top, a pair of rolls placed just under said opening and having bearings in the sides of the case, a ratchet-wheel on one of the rolls just inside the box with a pawl, a crank held on the shaft of one  
10 of said rolls just outside of the case, a ratchet-wheel fast on said crank, a ratchet-wheel fast

on said shaft, a spring on the shaft outside of the crank to press the two ratchet-wheels outside the box together, substantially as described.

In testimony whereof I have hereunto set my hand this 25th day of October, A. D. 1900.

JOHN E. COSTELLO.

In presence of—

BENJ. ARNOLD,  
EDGAR S. MARSH.