

No. 697,513.

Patented Apr. 15, 1902.

F. L. MERCER.
BAG OR WRAPPER PRINTING DEVICE.

(Application filed Nov. 2, 1901.)

(No Model.)

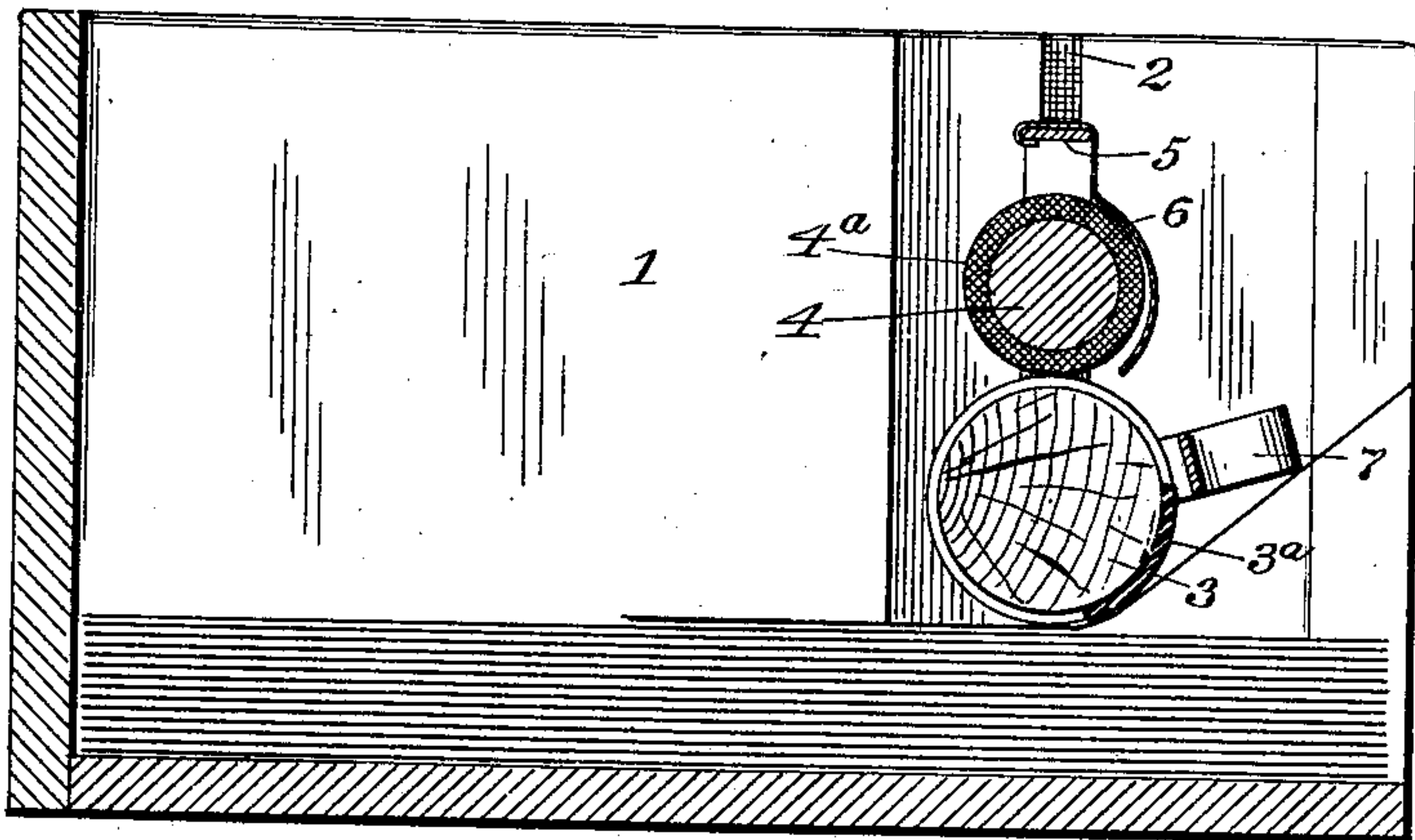


Fig. 1

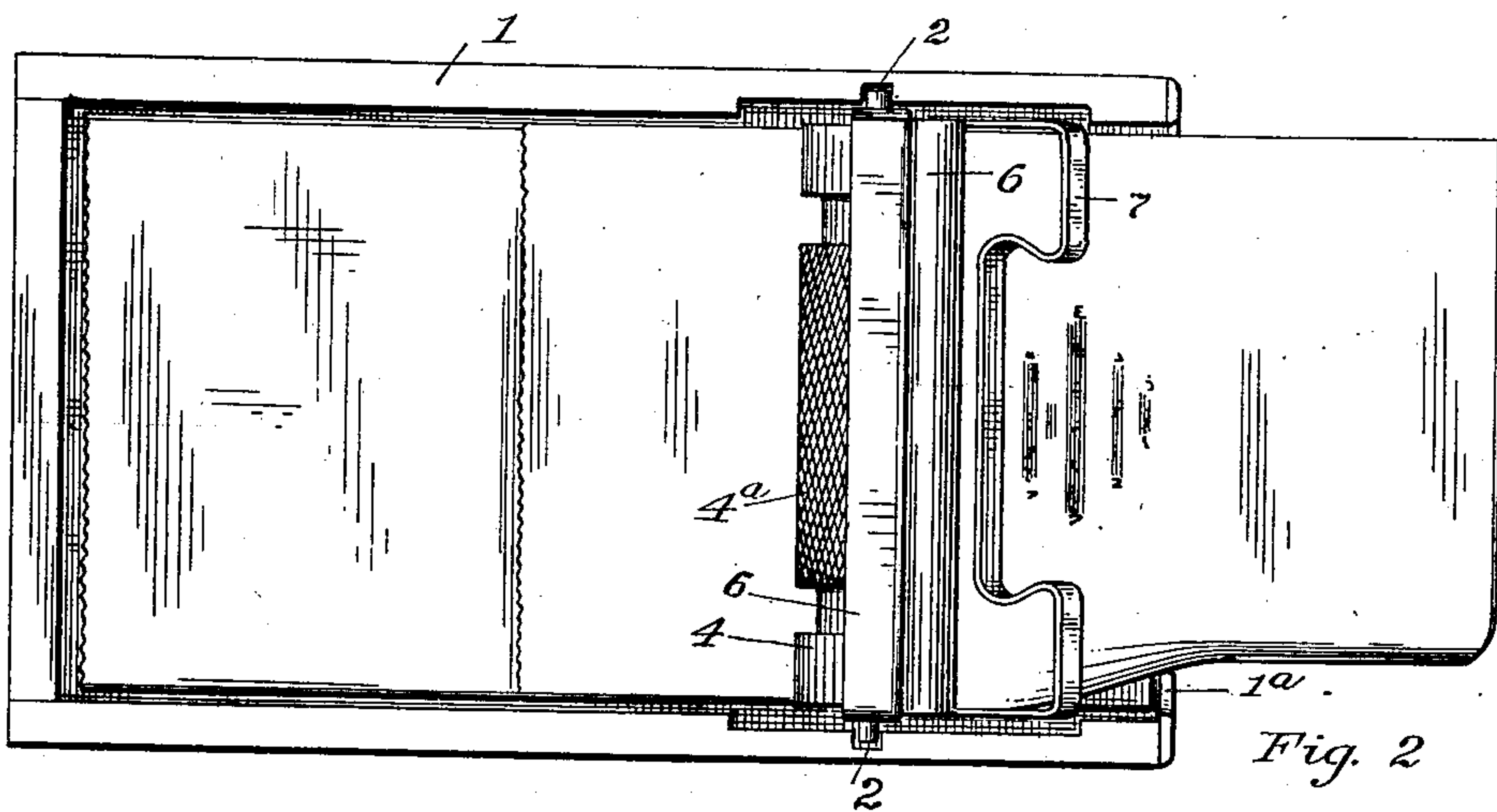


Fig. 2

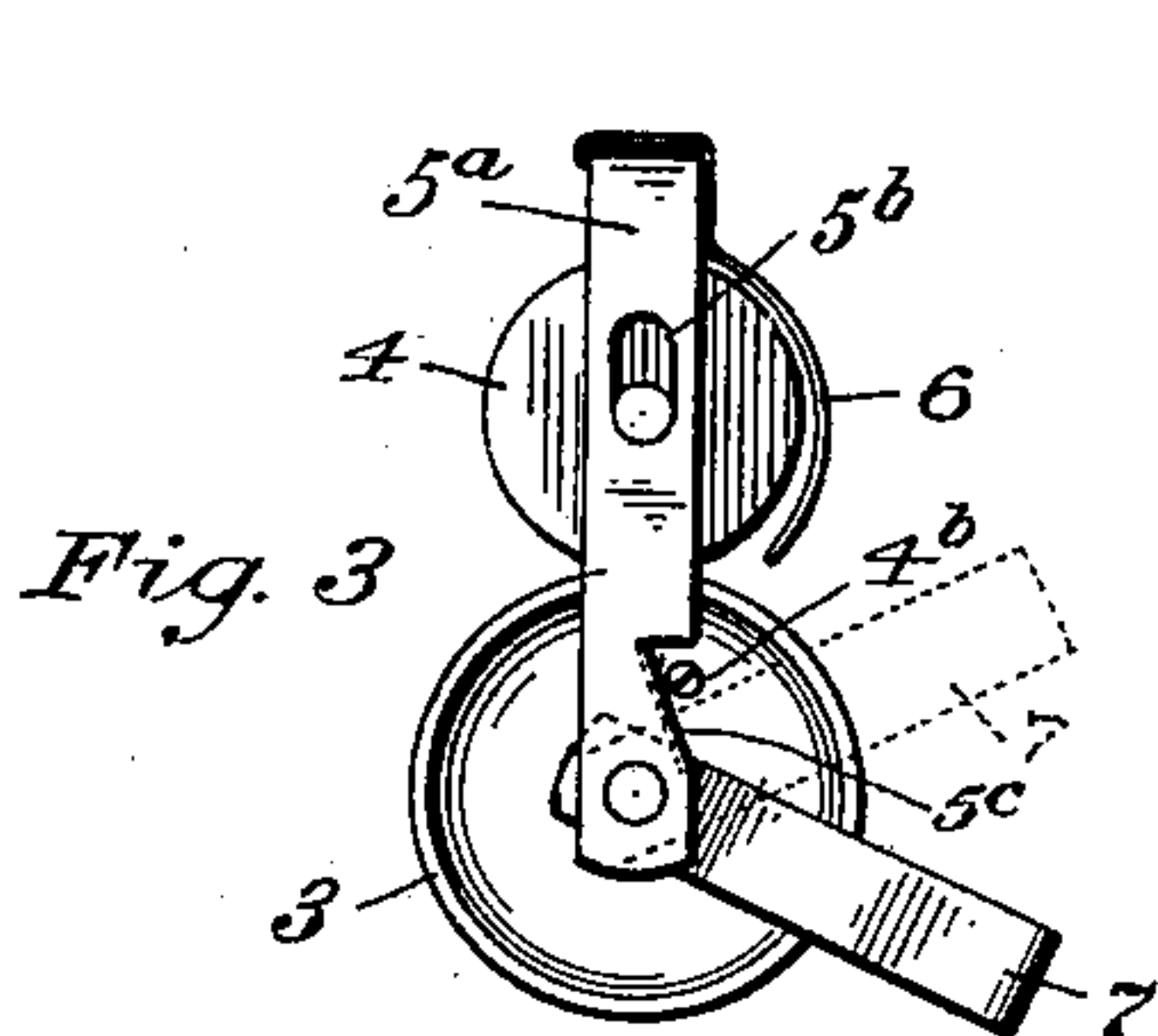


Fig. 3

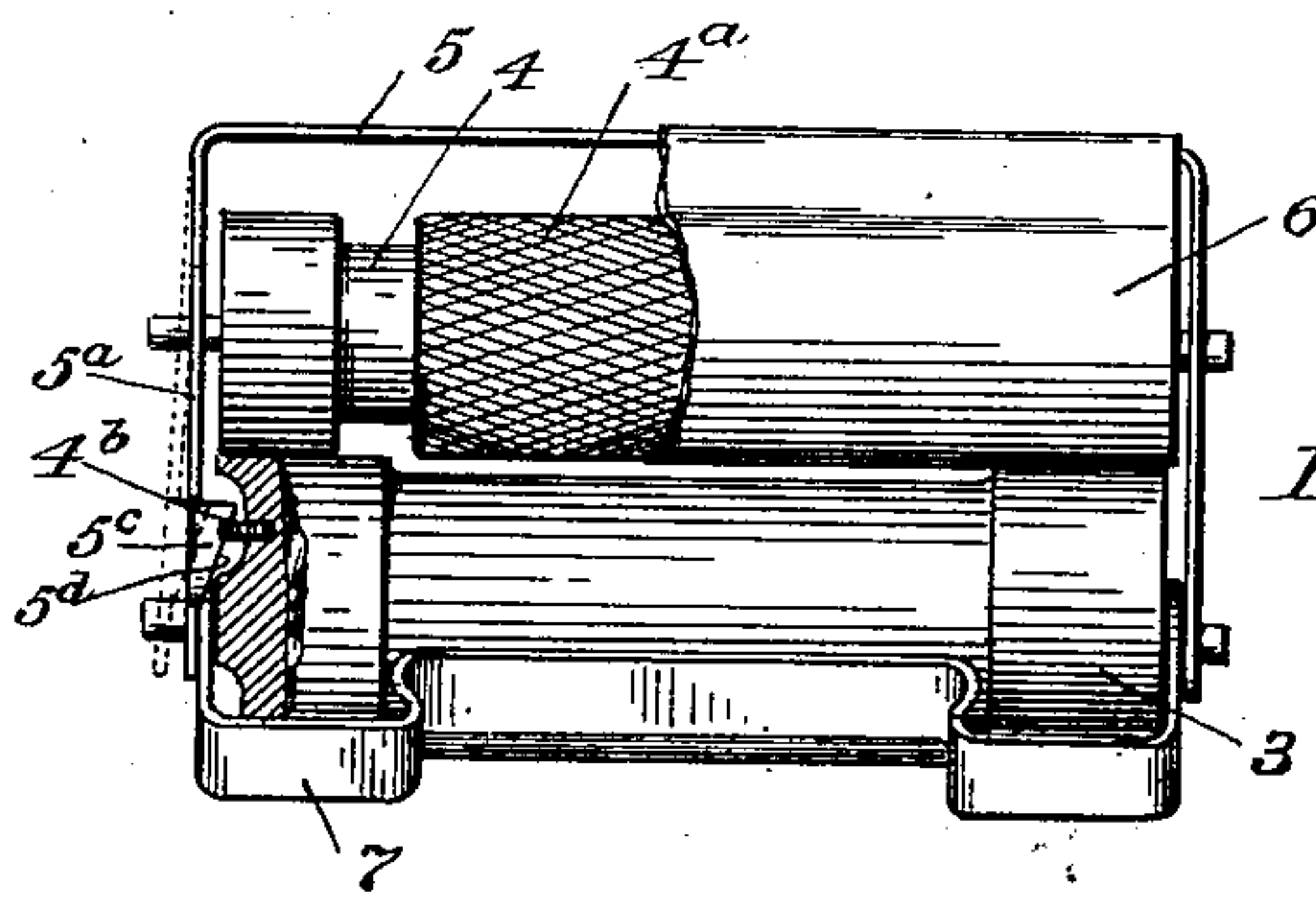


Fig. 4

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BAG OR WRAPPER PRINTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 697,513, dated April 15, 1902.

Application filed November 2, 1901. Serial No. 80,944. (No model.)

To all whom it may concern:

Be it known that I, FRANK L. MERCER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Bag or Wrapper Printing Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Heretofore it has been the custom of retail dealers in groceries and other merchandise who use sacks or bags or wrappers to cause their advertisements or business-cards to be printed upon such bags or wrappers at some printing-office or else to use a rubber hand-stamp and separately stamp each bag or wrapper when needed. The printing of bags or wrappers at a printer's office is expensive, and the use of a hand-stamp is in numerous respects troublesome and time-consuming, and, moreover, the impression of a hand-stamp is frequently imperfect and unsightly and seldom symmetrically located.

The object of the present invention, therefore, is to provide an economical apparatus or device whereby the bag or wrapper can be printed with practically little more effort than is required on the part of the dealer or his clerk in taking a bag or wrapper from its ordinary holder, and not only this, but the printed impression will be uniform in character and location.

The nature of the invention is set forth in the following description and claims.

In the accompanying drawings, in which I have shown but one embodiment of the invention, Figure 1 is a longitudinal vertical sectional view. Fig. 2 is a plan view. Fig. 3 is an end view of the printing apparatus removed from the bag or wrapper holder. Fig. 4 is a front view of said printing apparatus, parts being broken out and one part being in section to illustrate details.

1 denotes the bag-holder, shown to be of ordinary box form, open at the top and at one end, with interior dimensions proper to just receive a bundle or package of bags. The inner ends of the side walls of the holder, near the front end thereof, are shown to be provided with vertical slots or ways 2, in which

are located the shafts of the inking and printing rollers. The printing-roller is designated 3 and the inking-roller 4, and both these rollers are carried or journaled in a yoke-frame 5, having a springing arm 5^a. The inking-roller 4 is located in the yoke-frame above the printing-roller, and the bearings of the inking-roller in the yoke-frame are elongated, as indicated at 5^b, Fig. 3, to permit vertical play of that roller, and therefore nice accommodation to the type-surface on the printing-roller below. The bearings of the printing-roller 3 are shown to be not elongated, and hence this roller has a fixed relation vertically to the yoke-frame. The inking-roller 4 can be furnished with a gum, felt, or other proper surface 4^a for applying ink to the type of the printing-roller below. The printing-roller 3 has any appropriate printing device 3^a attached to its surface. The horizontal upper part of the yoke-frame 5 can have a guard 6 attached thereto to extend around over the front side of the inking-roller, as shown, to prevent contact of the fingers of the user with that roller.

The spring-arm 5^a is shown to have an inward projection 5^c, with cam edge 5^d, and hinged on the opposite ends of the shaft of the printing-roller is a yoke-lever 7. This yoke-lever when lifted upward (see dotted lines, Fig. 3) impinges the cam edge 5^d and springs the arm 5^a outward on the end of the shaft. (See dotted line, Fig. 4.) The head of the printing-roller next the cam projection is furnished with a stop-pin 4^b, that abuts against the cam projection 5^c when the yoke-lever 7 is down and the arm 5^a in its resting or normal position.

The ends of both the inking and printing rollers are made with laterally-projecting heads, somewhat like those of a spool, the surfaces of one or both being roughened or otherwise made so that when motion is given to the printing-roller it will likewise operate the inking-roller.

In the practical use of the apparatus as shown the printing apparatus is lifted out of its ways in the holder and a handful of bags laid in the bottom of the holder, and after this the printing apparatus is replaced, as indicated in Fig. 1. To print a bag or wrapper, the end of that uppermost in the package is

taken with the fingers and given a slight lift upward and a pull outward, the direction of the lift and pull being indicated in Fig. 1. When the bag or wrapper is lifted, the yoke-lever 7 is lifted, and the spring-arm 5^a consequently thrown outward, thereby permitting the revolution of the printing-roller upon the further pulling of the bag or wrapper. One revolution of the printing-roller will usually suffice to make the impression on the bag or wrapper. Hence if the bag or other thing to be printed be of the ordinary length the pulling-hand is lowered to let down the yoke-lever in time to allow the spring-arm 5^a to return to its normal position, and therefore stop any further revolution of the roller by the contact of the stop-pin 4^b against the cam projection 5^c. A little practice in this printing operation will soon develop the skill necessary to work the apparatus with ease. The lifting of the yoke-lever 7 is practically momentary or sufficient to release the printing-roller from the projection 5^c.

It is to be noted that the weight of the printing apparatus as a whole should be sufficient to make the impression. Springs can be used to supplement the weight. The elongation of the bearings of the inking-roller not only makes that roller yielding, but permits gravity to give some pressure in inking the type.

In order that the uppermost bag or wrapper only shall be drawn out, a narrow stop 1^a along one of the front edges of the holder is provided, this stop affording sufficient abutment to prevent the withdrawal by friction of the articles below, so that when first taking the upper bag or wrapper in the fingers its corner next the said stop is given a slight inward turn or twist to liberate that part from such abutment. This operation is performed simultaneously with the movement that lifts the yoke-lever 7. It is also to be noted that if each bag or wrapper be given a similar initial upward lift and pull they will all receive the printed impression at a corresponding location.

The invention as illustrated in the drawings is susceptible of modification without departing from the essence thereof; but the construction shown is simply and economically made.

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

1. In a printing apparatus, a holder for the articles to be printed, combined with a printing-roller and an inking device therefor, a lock

between the roller and its carrying-frame for limiting the rotation of said printing-roller, and a lever arranged to operate said lock to effect the release thereof by the manipulation of the article to be printed.

2. In a printing apparatus, a holder for the articles to be printed, combined with a printing-roller and an inking device therefor, a stop device on said printing-roller, an automatically-movable abutment for said stop, and a lever arranged to release said abutment from the stop device on the roller by the manipulation of the article to be printed.

3. In a printing apparatus, a holder for the articles to be printed, combined with a printing-roller and an inking device therefor, a stop device on said roller, a frame in which said printing-roller and inking device are mounted, a spring-actuated abutment in said frame coacting with the stop device to limit the movement of said roller, and a lever to be actuated by the manipulation of the article to be printed to release said abutment from engagement with said stop device.

4. In a printing apparatus, a holder for the articles to be printed, combined with a printing-roller and an inking-roller therefor, a stop device on said roller, a frame in which said printing-roller and inking device are mounted, a spring-actuated abutment in said frame coacting with said stop device to limit the movement of said roller a cam edge or surface on said spring, and a lever to be actuated by the manipulation of the article to be printed to release said abutment from engagement with said stop device.

5. In a printing apparatus, a holder for the articles to be printed, combined with a printing-roller and an inking device therefor, a stop device on said roller, a frame in which said printing-roller and inking device are mounted, a spring-arm constituting a part of said frame, a projection from said arm coacting with said stop device on the inking-roller to limit the movement of the roller, a cam edge on said projection, and a lever to be actuated by the manipulation of the article to be printed to act on the cam edge to release the projection from the said stop device on the inking-roller.

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

FRANK L. MERCER.

Witnesses:

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SAMUEL W. LATHAM.