

No. 789,420.

PATENTED MAY 9, 1905.

C. E. GLADDING.
RURAL MAIL DELIVERY APPARATUS.

APPLICATION FILED DEC. 30, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

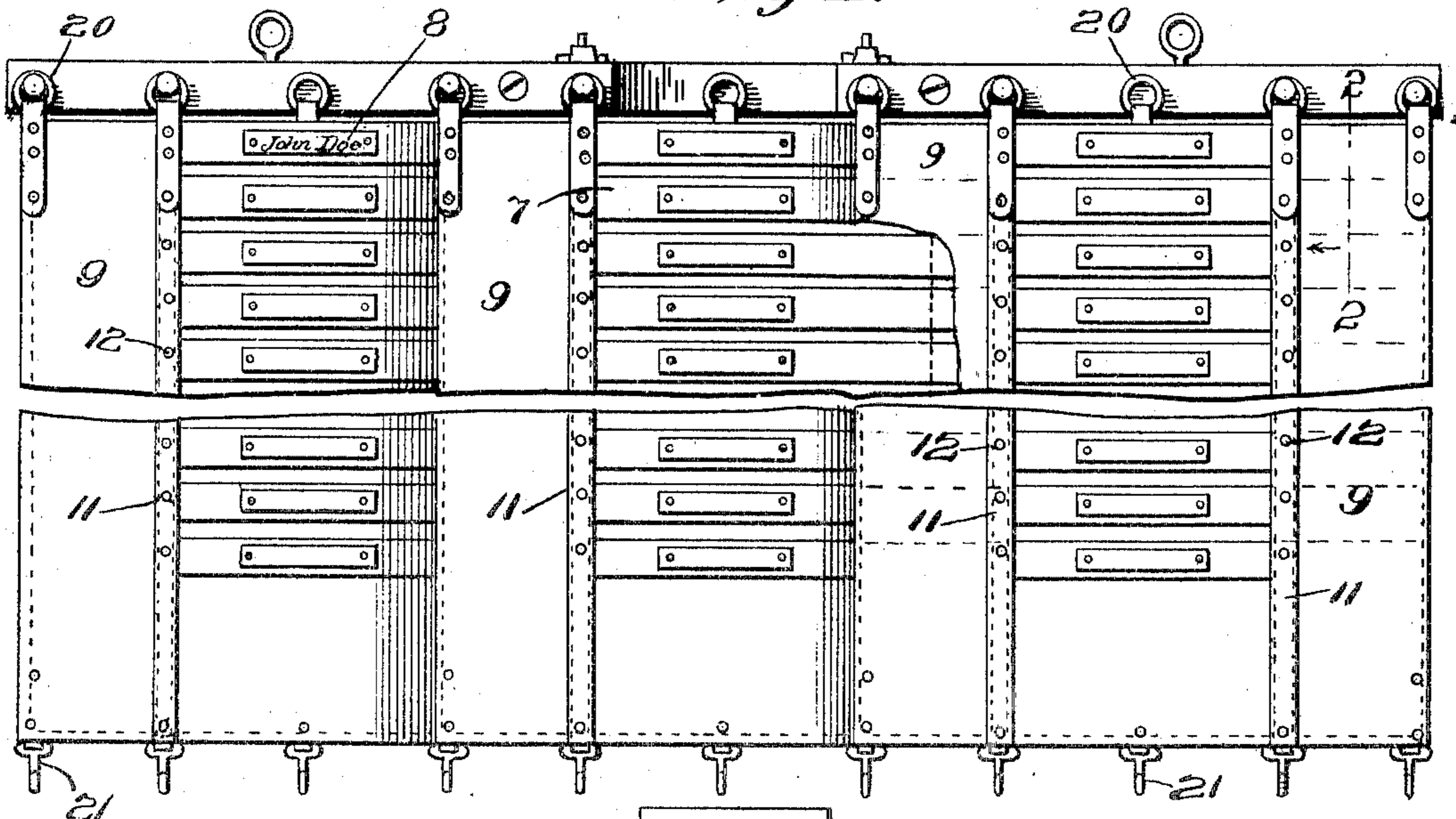


Fig. 2.

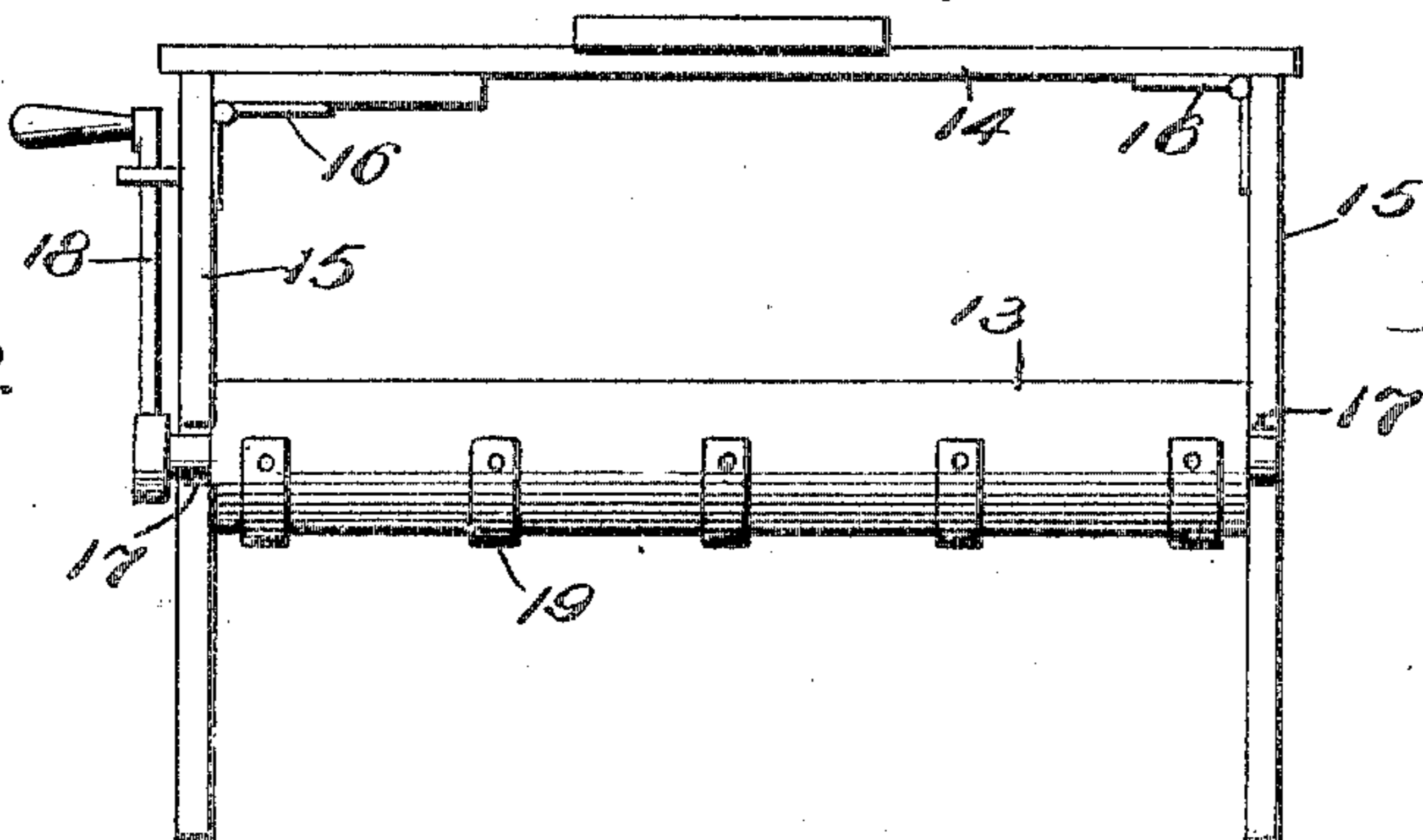
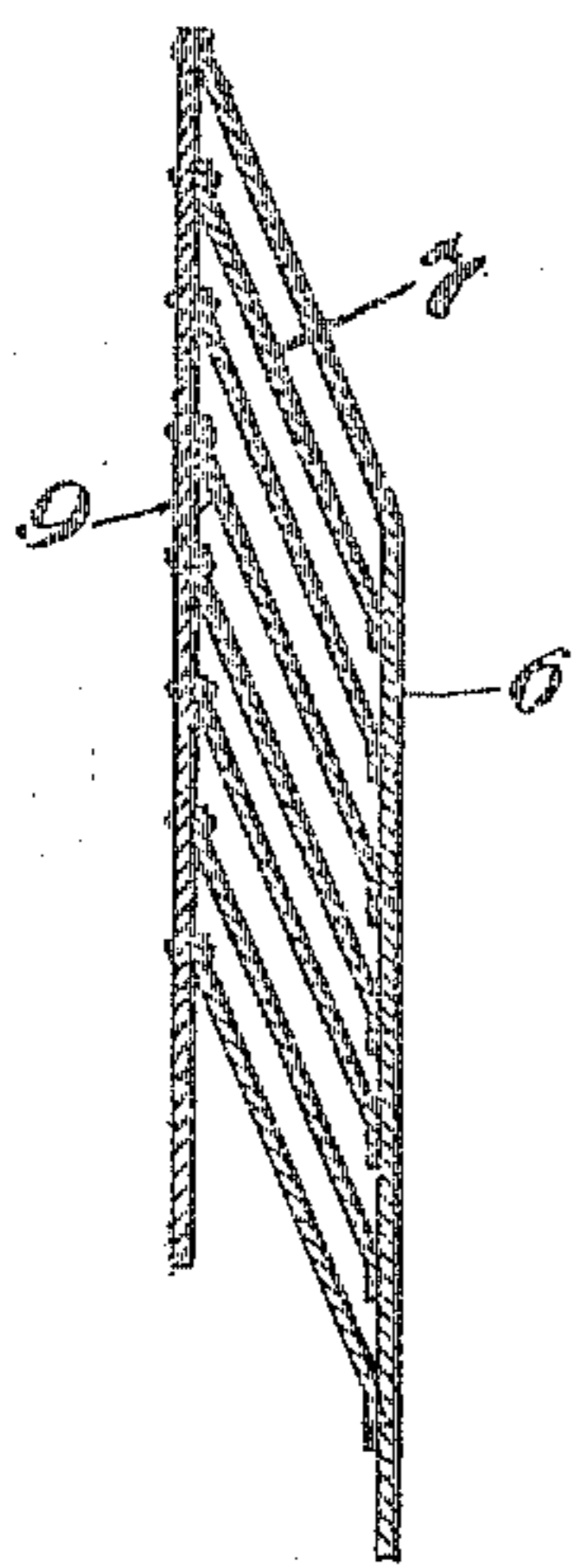
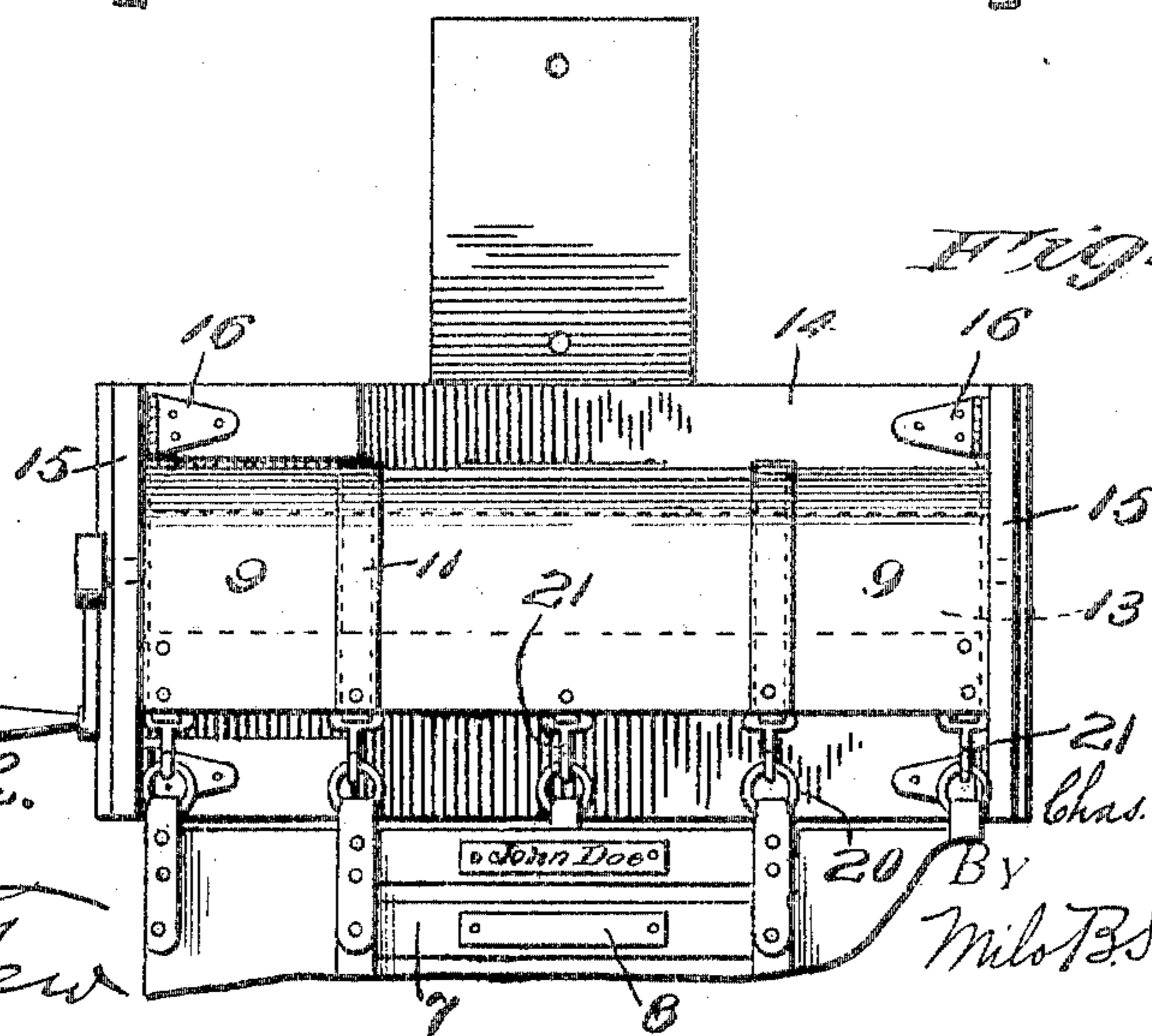


Fig. 4.

Fig. 3.



WITNESSES:

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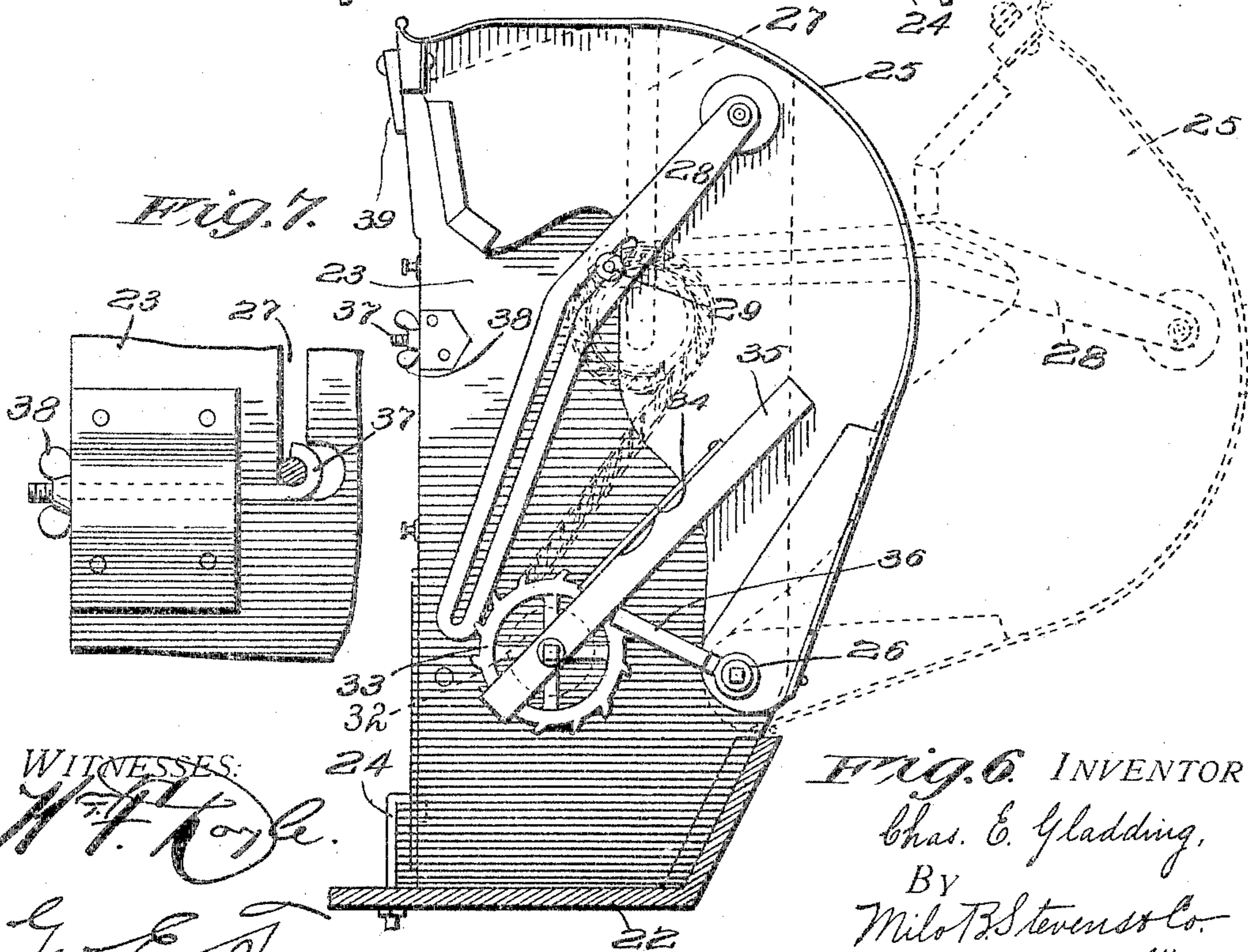
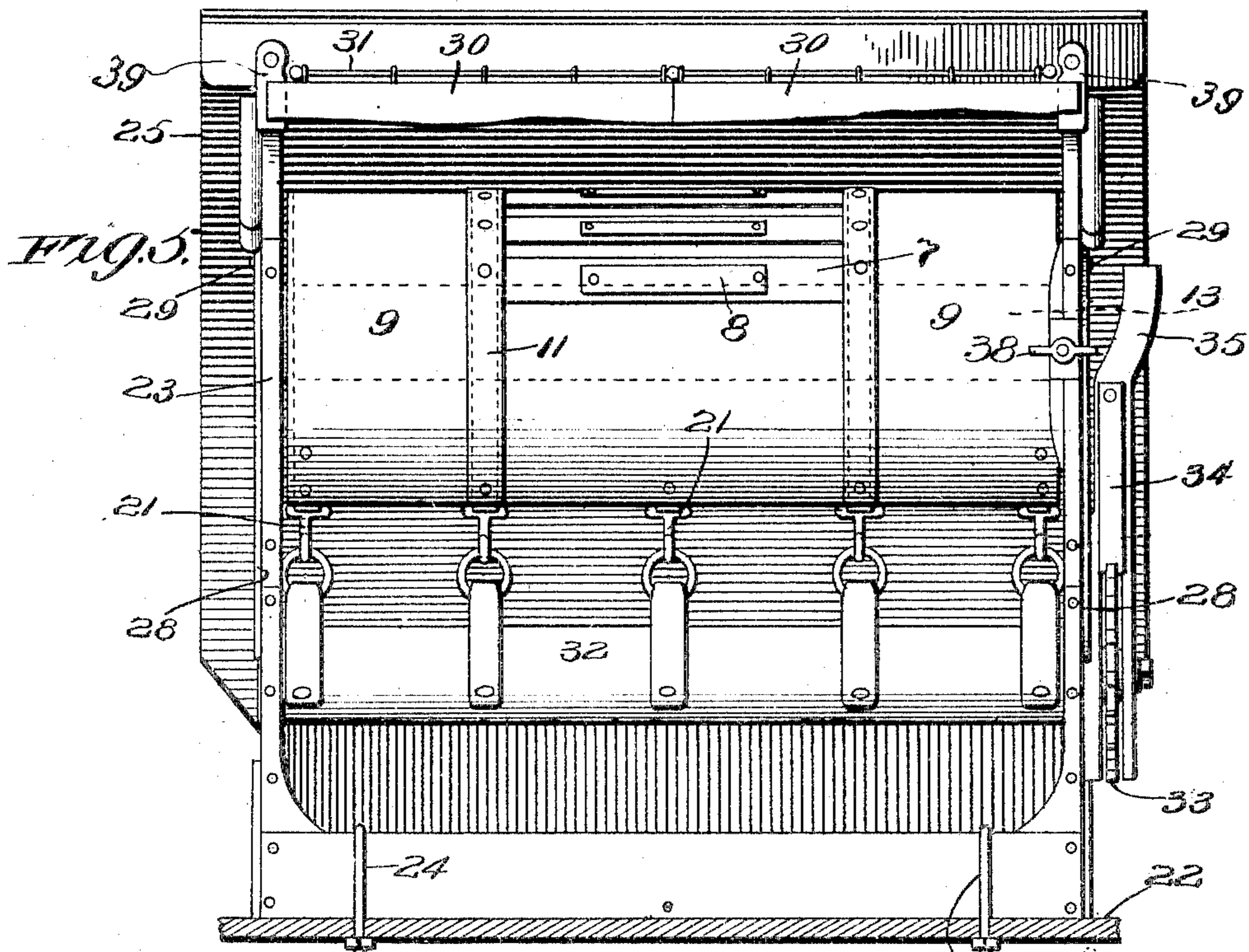
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

CHARLES E. GLADDING, OF COLUMBIA CROSSROADS, PENNSYLVANIA.

RURAL-MAIL-DELIVERY APPARATUS.

SPECIFICATION forming part of Letters Patent No. 789,420, dated May 9, 1905.

Application filed December 30, 1904. Serial No. 239,032.

To all whom it may concern:

Be it known that I, CHARLES E. GLADDING, a citizen of the United States, residing at Columbia Crossroads, in the county of Bradford and State of Pennsylvania, have invented new and useful Improvements in Rural-Mail-Delivery Apparatus, of which the following is a specification.

This invention is an apparatus designed particularly for rural free-delivery service.

It has for its principal object to provide means whereby the carrier may easily and quickly assort his mail according to the person to whom it is to be delivered.

A further object is to provide means whereby the mail so assorted may be carried in the wagon and delivered from there upon reaching the boxes or residences of the persons for whom the mail is intended.

Rural-mail routes are, as a rule, so arranged as to serve one hundred or more boxes or families, and it is the usual practice for the postmaster of the receiving-office to deliver to each rural-route carrier the mail belonging to his route. This mail is then assorted in various ways by the carrier and delivered to the route.

The invention herein described is for the use of the carrier and will be found to greatly facilitate the work of assorting the mail, carrying it with safety and freedom from wet and dirt, and readily delivering the same at the proper time.

I make use of a number of bags or pouches, each one of which contains a series of pockets, with a pocket for each box or family on the route, said pockets being arranged in the order in which the boxes are reached as the route is traveled. These bags are adapted to be hung up and filled in the post-office, so that the carrier can assort his mail as fast as it is given to him by the postmaster. After the mail is assorted the bags are fastened together at their ends and wound up on a roller supported by a convenient frame in the office, from which the roll is then removed and placed in the wagon or casing on the carrier's wagon. This casing is provided with another roller, to which the end of the bag is con-

nected and on which the bags are wound as the delivery proceeds.

The apparatus is illustrated in the accompanying drawings, wherein—

Figure 1 is an elevation of the bags hung in position to receive the mail. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is a front view of a frame, showing the bags connected together and being wound up on the roller. Fig. 4 is a top view of the parts shown in Fig. 3. Fig. 5 is a front elevation of the casing which is carried on the wagon. Fig. 6 is a side elevation thereof. Fig. 7 is a detail of a brake to hold the rolls tight.

Referring specifically to the drawings, the bags, of which there are preferably three or more, are made of canvas and comprise a backing 6, to which is stitched a series of pockets 7, one below the other. The pockets are preferably comparatively wide and shallow and overlap each other, as shown. Each pocket has thereon a tag 8 to indicate the box or family to which it belongs, and these tags are changeable as occasion demands. At the ends the pockets are covered by a facing 9, to which the upper edges of the pockets are stitched. Longitudinal reinforcing-strips 11, riveted, as at 12, to the front edges of the pockets, serve to prevent sagging. A bag having pockets of the shape and construction shown has been found to be particularly advantageous for the purpose for which it is to be used. The manner of constructing the bag, as above set forth, closes the ends of the pockets, making the mouth of each pocket of much less width than the width of the pocket, so that letters and the like can be tucked in sideways without danger of falling out when the bags are wound on the rollers. This construction also allows newspapers and long packages to lie lengthwise, which puts them parallel to the axis of the roller when the bag is wound up, so that there is small liability of breaking the packages or bundles, and the roll is not made unwieldy and out of shape.

As stated, the mail for each box or family is distributed into the pockets by the carrier, and when all the mail has been so distributed the bags are wound up on the roller, as indi-

cated at 13, removably held in a frame which may be conveniently hung upon the wall in the post-office. Said frame consists of a back-board 14 and two side pieces 15, hinged thereto, as at 16, so that when not in use they may be folded against the back-board out of the way. The journals of the roller fit in slots 17, cut in the side pieces, and a detachable crank-handle 18 is provided to turn the roller and wind the mail-bags thereon. The roller 13 is provided with snap-hooks, such as indicated at 21, connected to straps 19 to engage the rings 20 at the end of one of the bags. When one bag is wound up, the next is hitched to the end thereof by means of similar rings 20 and snap-hooks 21. Three bags will usually be found sufficient to carry the mail for an ordinary route. After being wound up the bags form a roll ready to be lifted out and taken to the delivery-casing on the carrier's wagon. Said casing is preferably placed on the front end of the wagon or carriage, taking the place of the dashboard thereof. Referring to Figs. 5 and 6, 22 indicates the wagon-bed, and 23 the frame of the casing, fastened to the bed by hook-bolts 24. The casing has a cover or hood (indicated at 25) and extending over the top and front thereof. This hood is preferably made of metal, and it is pivoted at 26 to the sides of the casing-frame. Said sides are slotted, as indicated at 27, to receive the journals of the roller upon which the bags are wound, and, as will be seen from Fig. 6, these slots are covered by the sides of the hood when the latter is closed. Slotted arms 28, which slide under the heads of bolts 29, serve to guide the hood and limit its outward swing. At the front—that is, at the side toward the carrier as he sits in the wagon—the casing has waterproof curtains 30, which slide upon a wire 31 and can be drawn when necessary. Extending across the lower part of the casing under the roll formed by the bags is a roller 32 in all essential respects similar to the roller 13. The axle of this roller carries at its end, outside the casing, a ratchet-wheel 33, adapted to be engaged by a pawl 34, carried by a handle 35. Another pawl, 36, prevents back slip.

In the delivery operation the roll of bags made in the post-office is lifted from the frame above described and placed in the casing on the wagon, as shown in Fig. 5, the hood 25 being thrown back to permit the same. The end of the outer bag is then hooked to the roller 32, and as fast as the boxes or delivery-places are reached the bags are unwound from the roller 13 and wound up on the roller 32 by means of the pawl and ratchet. The empty bags are thus wound on the lower roll. When the end of the route is reached, they may be rewound on the roller 13 by throwing out the pawls 34 and 36 and applying a crank 18 to

the roller. This roller is then carried to the post-office for the next day, unrolled in the frame shown in Figs. 3 and 4, and the bags hung up again as in the beginning.

To prevent the roll of bags from unrolling too rapidly in the casing, I provide a brake consisting of a hooked rod 37, which is let into the side wall of the casing and is arranged to hook around the journal of the roll when it is put in place in the slot 27. The rod can then be tightened by a nut 38 to bring any desired pressure on the journal. This keeps the bags taut and insures a tight roll on the roller 32. Buttons 39 normally hold the hood closed over the casing.

The dimensions of the parts will depend upon circumstances; but I have found by use that each bag may be made about two feet wide and six feet long, with each pocket six or eight inches deep, and that three such bags will accommodate an ordinary rural-mail route of, say, from one hundred to one hundred and twenty-five families and that all the bags when wound up on the roll will make a roll of about one foot in diameter. The casing to carry this can be very readily constructed to fit within and upon the front of the vehicles usually furnished rural-mail carriers, or it may even be carried upon a sulky. The frame of the casing is preferably made of wood and the hood of light metal, such as galvanized or painted iron, and the hood serves to effectually keep out wet and dirt.

The apparatus will be found of great convenience for rural-mail carriers. As each box is reached the rolls are turned to bring the corresponding pocket to the front, and a carrier can readily take the mail therefrom without the necessity of assorting the same from the mail directed to other persons and without removing his gloves in cold weather. The construction of the bag is especially effective in forming a neat even roll and in preventing loss of mail from the pockets thereof.

What I claim as new, and desire to secure by Letters Patent, is—

1. A mail-delivery bag comprising a backing, a series of pockets secured thereto and extending across the same, and facings which cover the end portions of the mouths of the pockets, whereby the mouth of a pocket is of much less width than the width of the pocket, substantially as described.

2. In a mail-delivery apparatus, the combination with a bag, and a roll having means to attach the end of the bag thereto, of a frame having hinged side pieces slotted to removably receive the journals of the roll, and means to turn the roll in the frame, to wind the bag thereon.

3. In a mail-delivery apparatus, the combination with a casing having a pair of rollers extending horizontally across in the same, one of which is removable, and a mail-bag con-

nected to the rollers and arranged to be wound from one to the other, of a swinging hood hinged to the casing and arranged to open and close over the same.

5 4. In a mail-delivery apparatus, the combination with a casing having closed slotted sides, and mail-bag rolls supported therein, one of the rolls being removable and having journals which fit in said slots, of a hood
10 hinged to the casing and constructed to swing

over the top thereof, and over said slots, to close the same.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES E. GLADDING.

Witnesses:

GEO. E. TEW,

M. R. KUNSMAN.