

No. 884,034.

PATENTED APR. 7, 1908.

N. J. NELSON.

MAIL BAG CATCHING AND DELIVERING APPARATUS.

APPLICATION FILED AUG. 27, 1907.

Fig. 1.

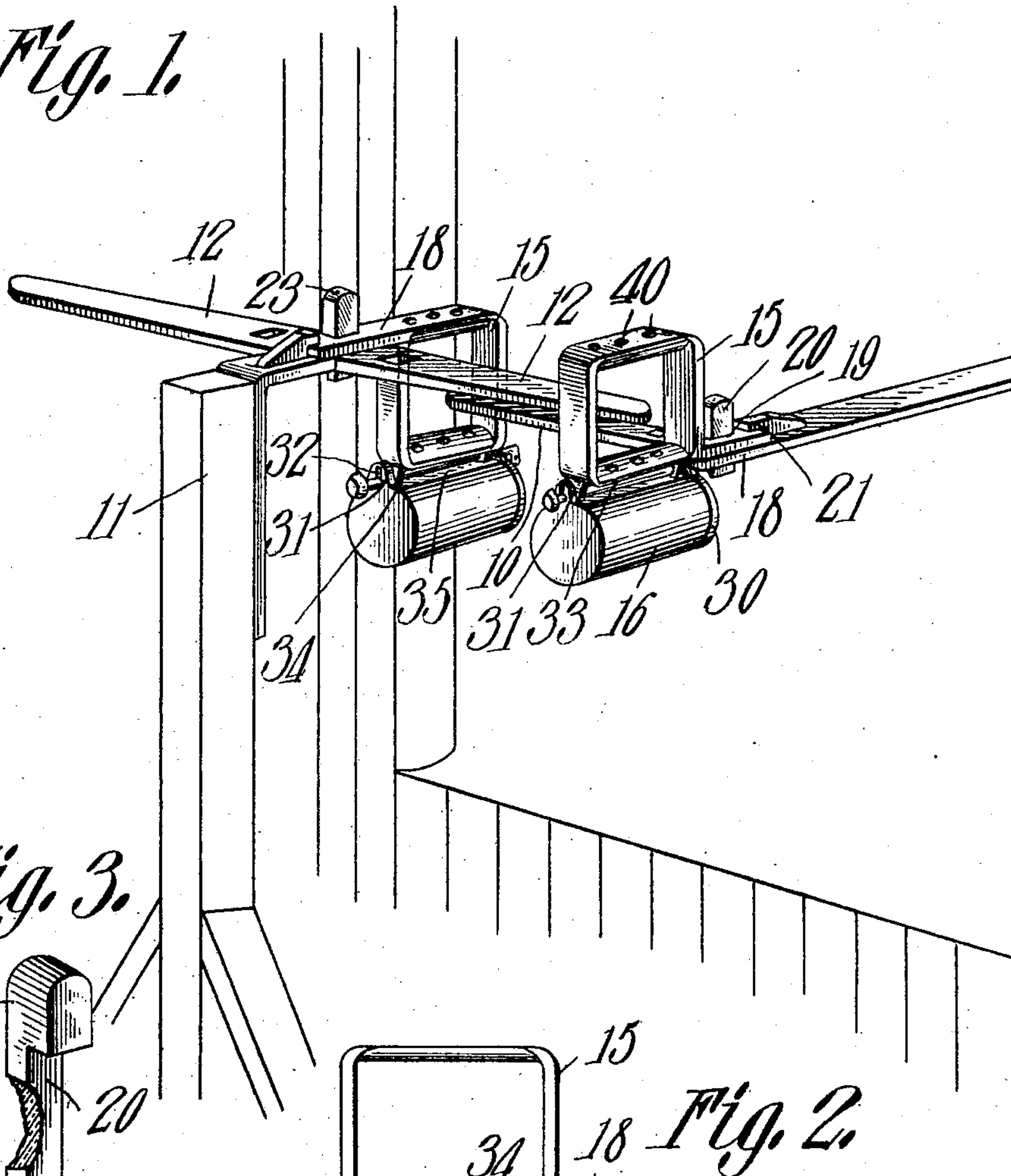


Fig. 3.

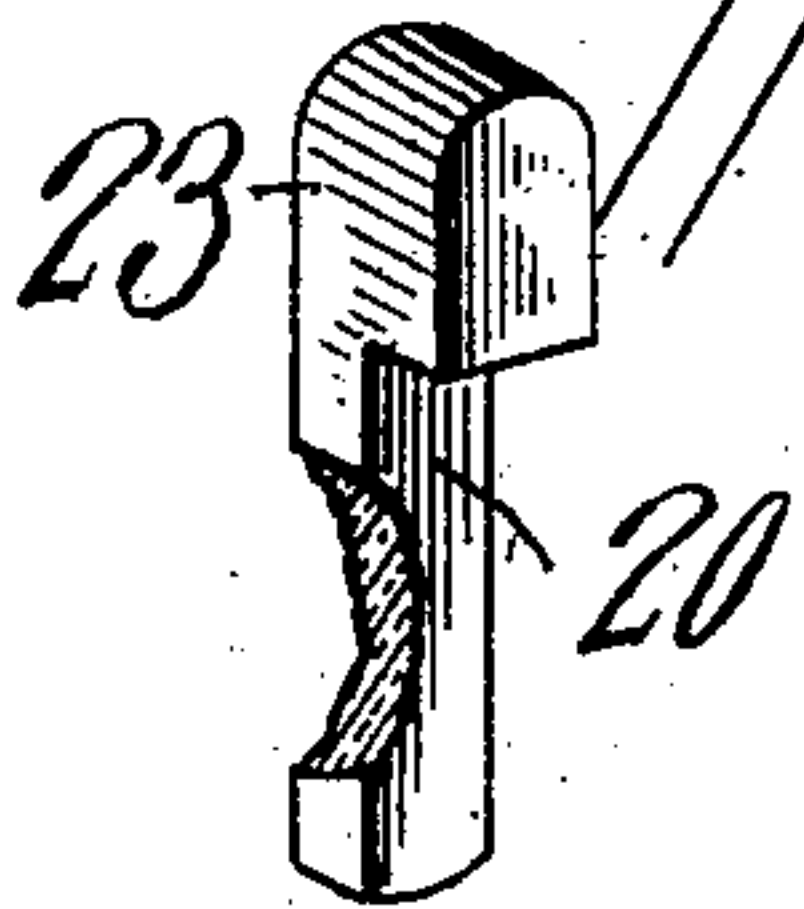


Fig. 2.

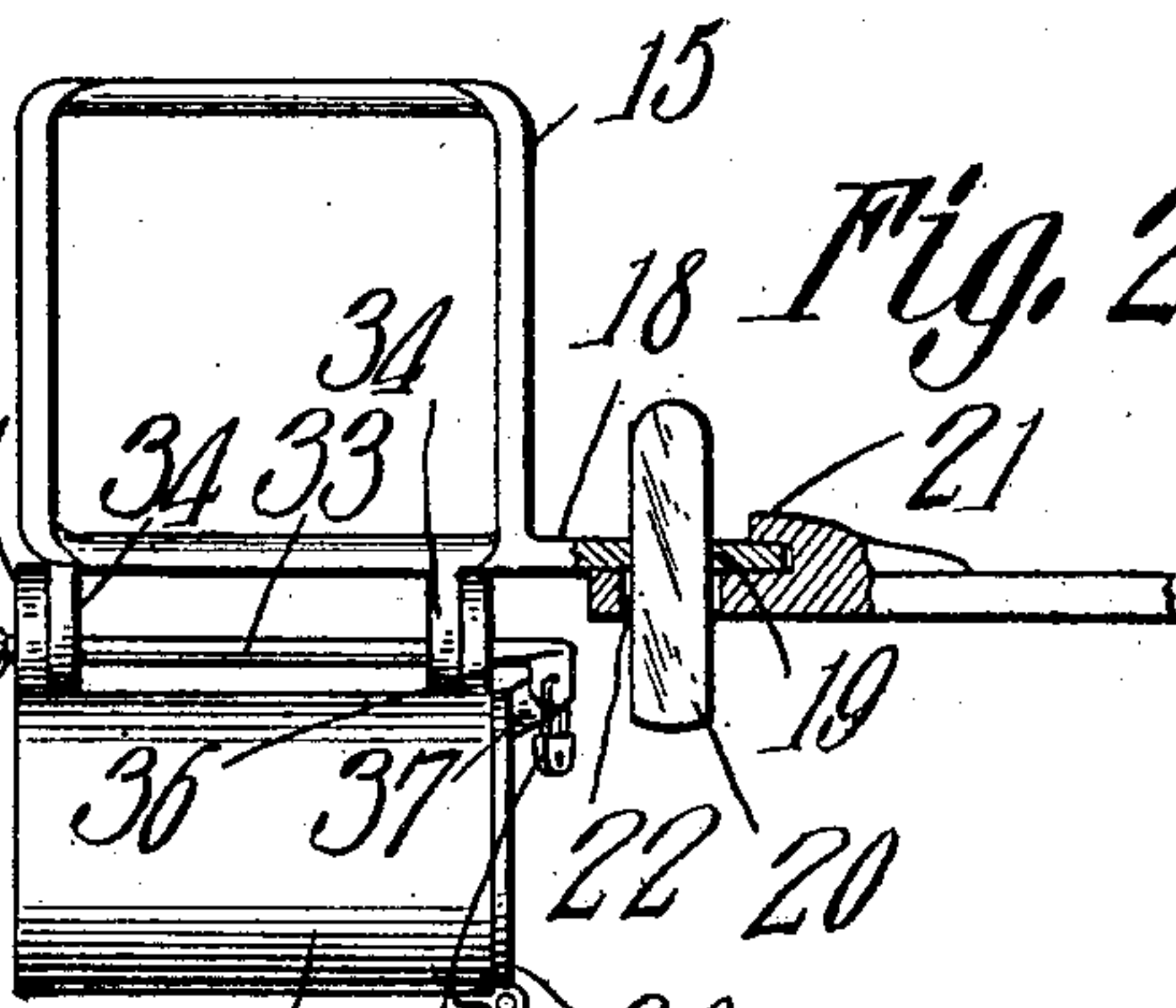


Fig. 4.

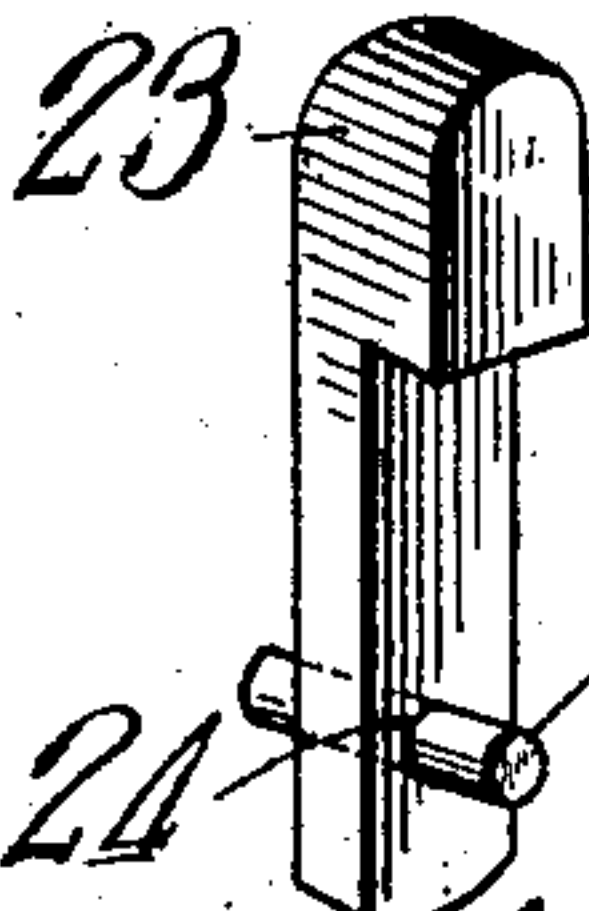
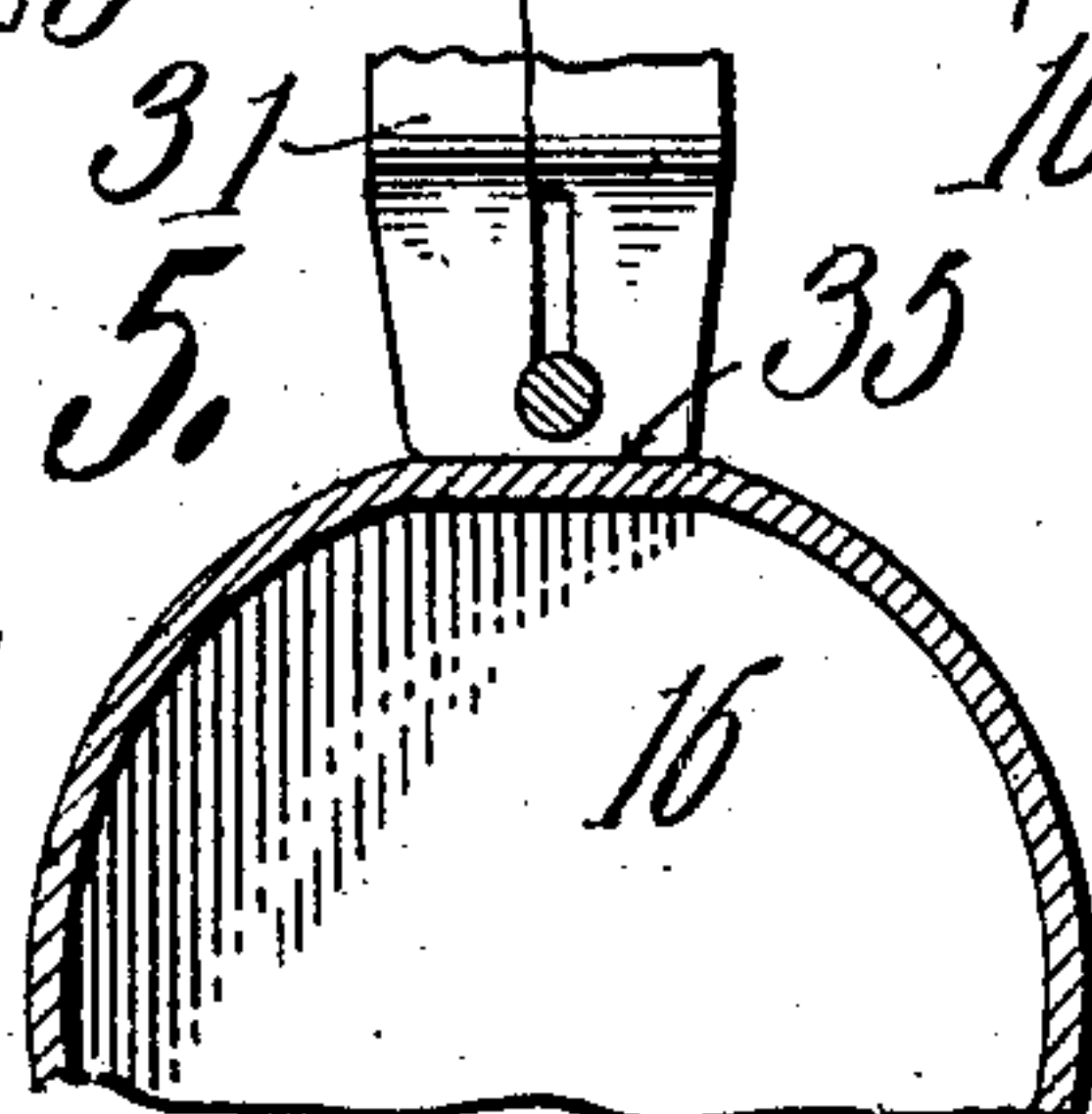


Fig. 5.



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MAIL-BAG CATCHING AND DELIVERING APPARATUS.

No. 884,034.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed August 27, 1907. Serial No. 390,348.

To all whom it may concern:

Be it known that I, NELS J. NELSON, a citizen of the United States, residing at Red Wing, in the county of Goodhue and State of Minnesota, have invented a new and useful Mail-Bag Catching and Delivering Apparatus, of which the following is a specification.

This invention relates to devices of that class employed for delivering mail, packages, train orders, and the like between moving trains and stations, and has for its principal object to provide the holders of the mail bags or other receptacles with breakable fasteners, which, when subjected to the shock and the strain of the catchers, will readily part and permit the removal of the holders or receptacles.

A further object of the invention is to provide a breakable fastener in the form of a holding pin which may be formed of terra-cotta, glass, light wood or other frangible material.

A still further object of the invention is to provide a support of such nature as to avoid the placing of abnormal strain on the pin before the catching and delivering operation.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a perspective view of a mail catching and delivering apparatus embodying the invention. Fig. 2 is a side elevation drawn to an enlarged scale of one of the mail bag or other receptacle carrying rings and its support. Fig. 3 is a detail perspective view of one form of pin detached. Fig. 4 is a similar view illustrating a slightly modified construction. Fig. 5 is a cross sectional view of the upper portion of the receptacle.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In carrying out the invention, the catcher arm 10 may be of any ordinary construction, and is preferably mounted in the usual man-

ner so as to be free to swing within the mail car. The crane or stationary catcher or deliverer 11 may be of the ordinary type, and preferably is provided with oppositely directed catcher arms 12.

The matter to be delivered may be in the form of mail, train orders, or packages, and may be attached to the supporting rings 15 in any manner, but it is preferred to secure to each of the rings a casing 16 that may be formed of sheet metal or of woven wire, in order to protect the contents from injury.

The ring 15 is preferably of rectangular form, although any other shape may be adopted, and the edges of its upper and lower bars are tapered in order to facilitate the introduction of the catcher arm. From one corner of the ring projects an arm 18 having an opening 19 for the passage of a holding pin 20, and this arm is arranged to extend under a small shoulder 21 projecting from the upper portion of the catcher and serving to support the weight of the carrying ring and receptacle in order to avoid unnecessary strain on the pin. The opening 19 is placed in alinement with an opening 22 that is formed in the catcher, and the pin 20 is then inserted, said pin serving to retain the ring in proper position and acting to prevent rotative movement thereof, it being observed that both of the openings are rectangular, and that the pin is of corresponding shape in cross section in order that the carrying ring may be held outward in proper position to be engaged by the catcher.

The pin 20 is preferably provided with an enlarged head 23 to limit its downward movement, and in some cases the lower end of the pin may be provided with an opening 24 for the reception of a small retaining pin 25 in order that it may be firmly held in place. The pin is preferably formed of some readily frangible material, such as terra-cotta, or glass, but it may be made of light wood, or of any other material which will be readily broken under the shock of the catching and delivering operations.

The stationary and train carried members are arranged to coöperate in a manner common in devices of this class, the train catcher engaging the carrying ring supported by the stationary member, and vice versa, and as soon as the catchers engage the rings, the pins will be broken and will offer no further obstruction to the release of such ring.

The receptacle 16 is preferably in the form of a cylindrical casing having at one end a hinged door 30 and at the opposite ends of the upper portion of the receptacle are lugs 31 having key hole openings 32 for the passage of a locking rod 33. The ring is provided with downwardly extending lugs 34 also having key hole openings for the passage of the rod, and the lower edges of the lugs 34 are flattened and are arranged to engage against the flattened upper face 25 of the receptacle in order to hold the latter from turning with respect to the ring. The rod 33 is cylindrical in cross section in order to pass through and snugly fit within the larger portions of the key hole openings, and at one end of the rod is a lug 36 that is flattened to pass through the narrower portions of said openings, this lug when turned coming into alinement with a lug 37 on the door 30. The two lugs have openings for the reception of a suitable lock 38. When the receptacle 16 is not in use mail bags or any other receptacle may be hung to the rings, the latter being preferably provided with openings 40 for the insertion of hooks or other similar connections.

With a device constructed in accordance with this invention the whole of the ring is open for the reception of the catcher device, and the parts may be better located with reference to each other, and the operation may be carried on with greater certainty than where a portion of the area of the supporting rings is taken up by the carriers on which they are hung.

I claim:—

1. In a device of the class specified, a receptacle supporting ring, and a breakable fastener therefor.

2. In a device of the class specified, a receptacle support, a carrier therefor, and a breakable fastener between the support and the carrier.

3. In apparatus of the class described, a receptacle supporting ring, a carrier therefor, and a breakable pin connecting the ring and carrier.

4. In apparatus of the class described, a receptacle supporting ring having a laterally extended perforated arm, a carrier having an opening therefor, and a breakable pin ar-

ranged to extend through said openings and connecting the ring to the carrier.

5. In apparatus of the class described, a receptacle carrying ring, a perforated arm projecting therefrom, a perforated support having a shoulder or bracket with which the end of the arm engages, and a breakable pin extending through the openings of the arm and carrier.

6. In apparatus of the class described, a receptacle supporting ring, a perforated arm extending therefrom, a perforated carrier, the perforations of both the arm and the carrier being of non-circular form, and a breakable pin extending through said perforations and also of non-circular form in cross section.

7. In apparatus of the class described, a receptacle carrying ring having a laterally extended arm provided with a rectangular opening, a carrier also having a rectangular opening and provided with a supporting shoulder for the reception of the arm, and a headed pin of rectangular form in cross section, said pin extending through said openings.

8. In apparatus of the class described, a carrying ring, a receptacle having a flattened upper face, lugs projecting from the receptacle and the ring, the lower ends of the ring lugs being flattened to engage the flattened face of the receptacle and prevent turning of the latter, and a locking rod arranged to extend through openings in said lugs.

9. In apparatus of the class described, a carrying ring having a pair of depending rods, a receptacle having a pair of vertically extending lugs, all of the lugs being provided with key hole openings, a locking rod arranged to extend through the openings and provided at one end with a locking lug, and a receptacle door also having a locking lug, substantially as specified.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

NELS J. NELSON.

Witnesses:

JAS. M. WALKER,
WM. F. SALTER.