No. 898,208. PATENTED SEPT. 8, 1908.

G. M. FOLEY.

MAIL POUCH CATCHING DEVICE.

APPLICATION FILED MAR. 9, 1908.

2 SHEETS—SHEET 1.

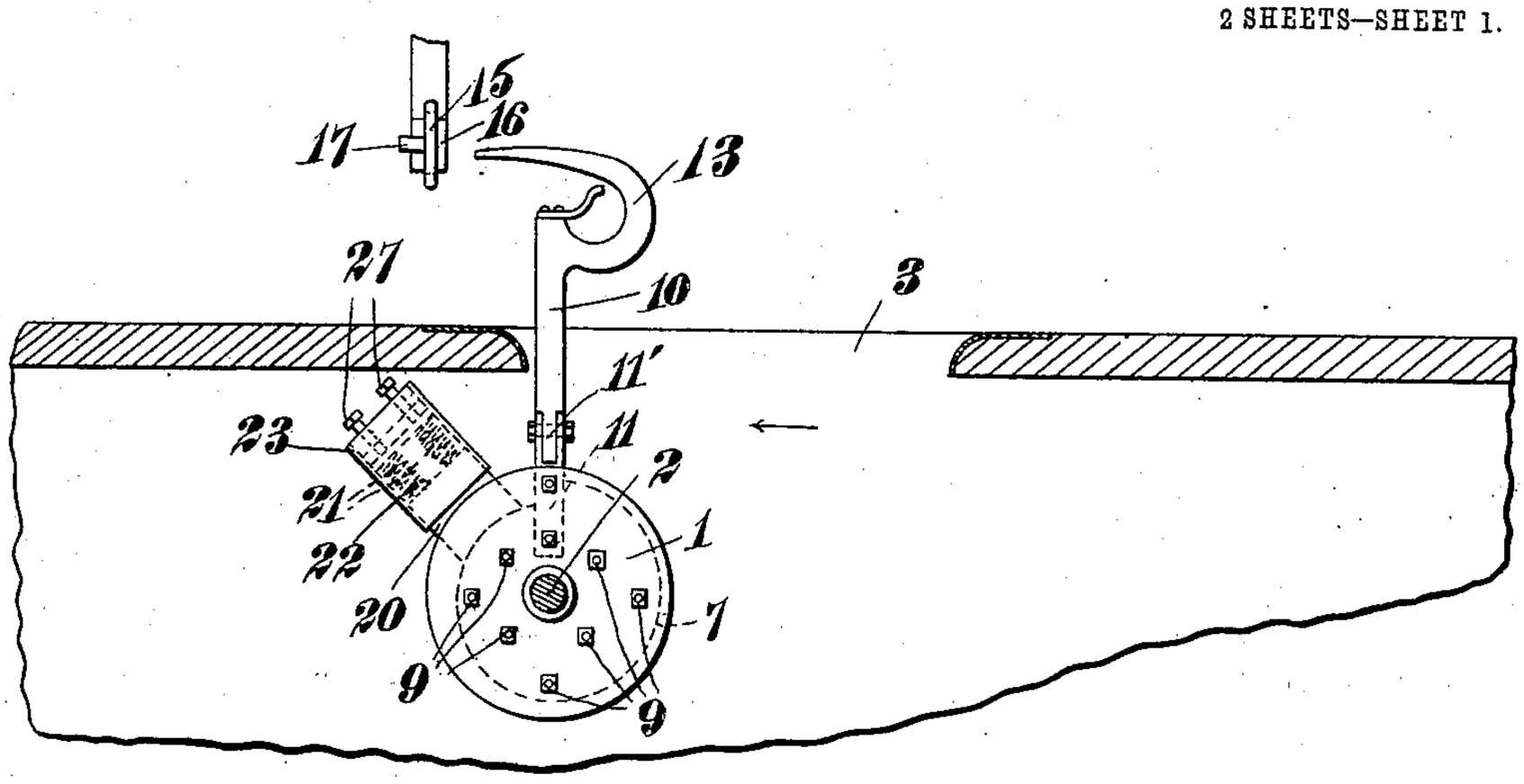

Fig. 1.

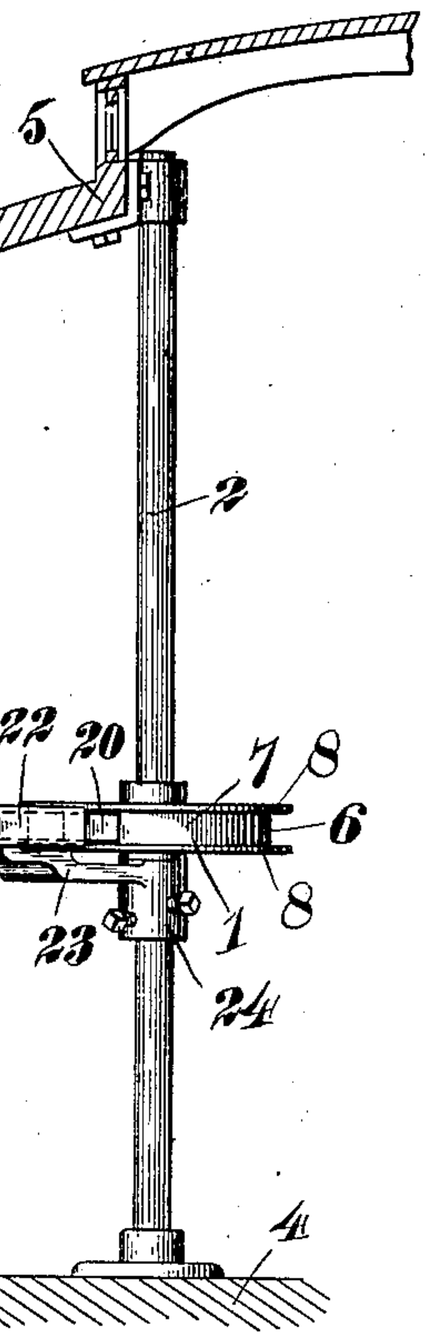

Fig. 2.

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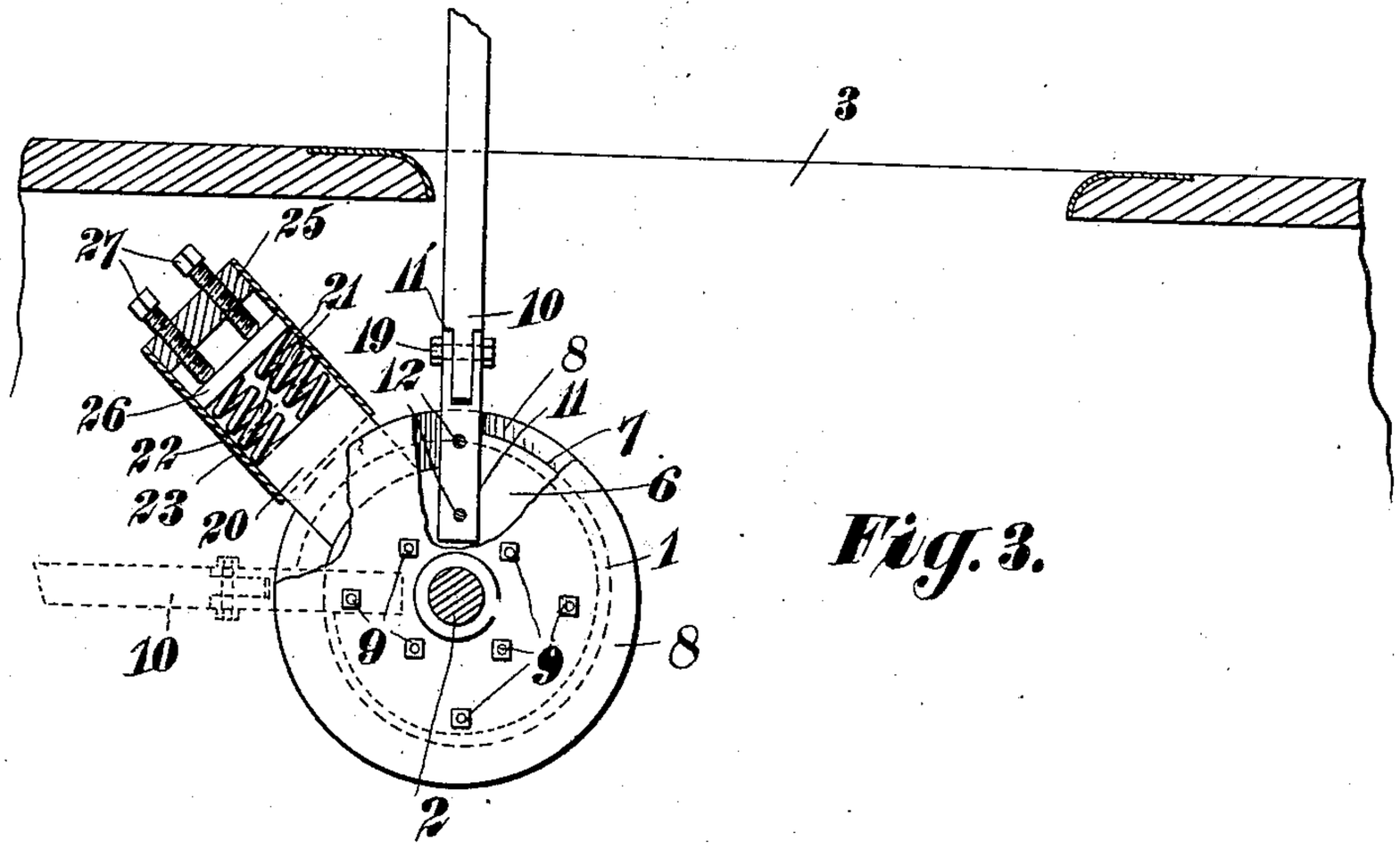

Fig. 3.

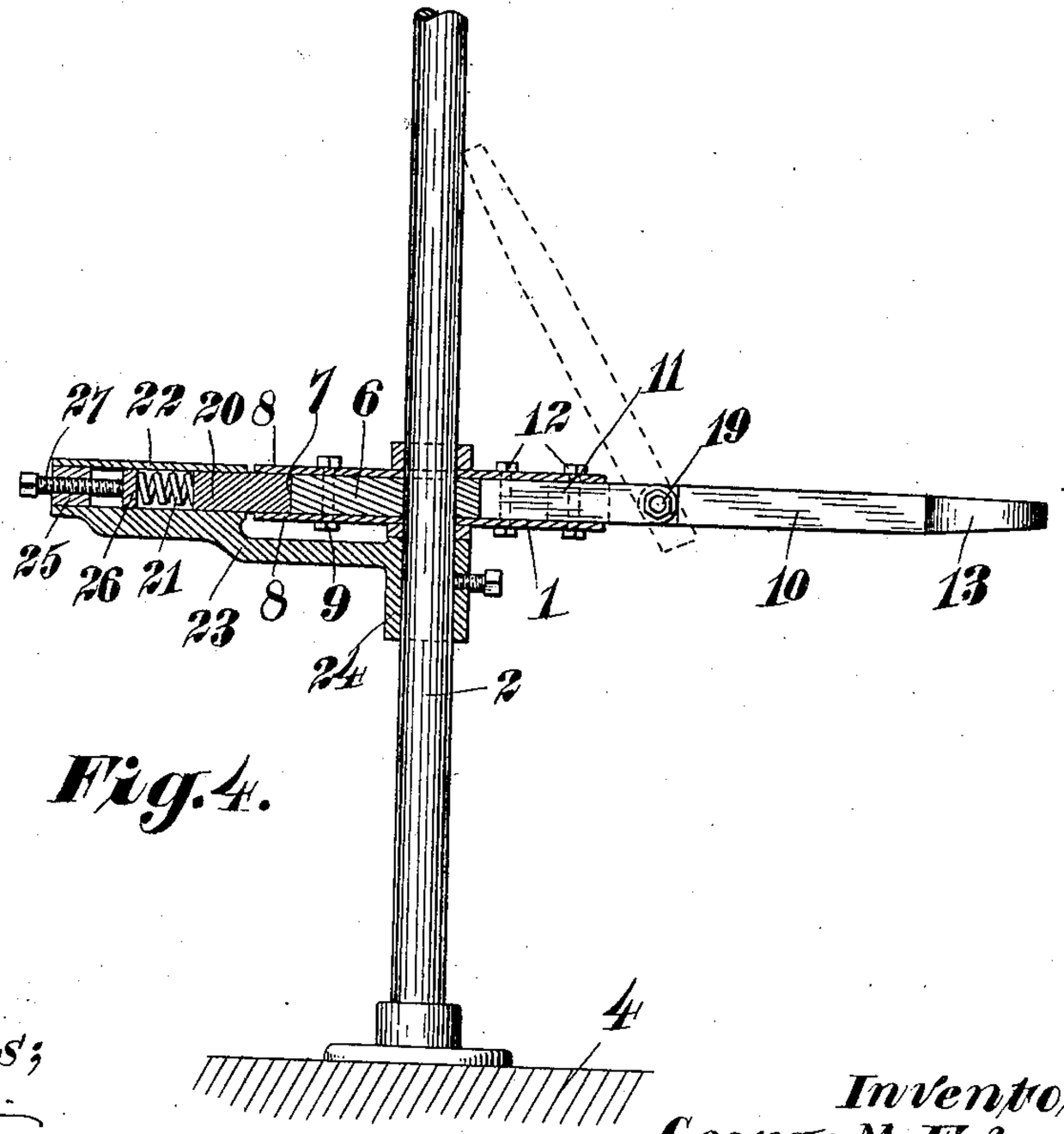

Fig. 4.

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UNITED STATES PATENT OFFICE.

GEORGE M. FOLEY, OF CHICAGO, ILLINOIS.

MAIL-POUCH-CATCHING DEVICE.

No. 898,208. Specification of Letters Patent. Patented Sept. 8, 1908.

Application filed March 9, 1908. Serial No. 419,839.

To all whom it may concern:

Be it known that I, GEORGE M. FOLEY, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Mail-Pouch-Catching Devices, of which the following is a specification.

My invention relates to mail pouch catching devices and the object of my invention is to provide a device for catching the mail pouches by a rapidly moving train from the cranes located at various points beside the track, without undue strain or shock to the pouches.

A further object of my invention is to provide a device as mentioned which will catch the mail pouch and automatically deliver the same within the car.

A further object of my invention is to provide a device as mentioned which will require no attention of the mail clerk beyond setting it in initial or catching position.

Other objects will appear hereinafter.

With these objects in view my invention consists generally in a rotary member mounted within the mail car adjacent to the door and adapted to rotate on a vertical axis, a catching arm extending laterally from said member and adapted to swing through the doorway of the car, and a friction device in engagement with the rotary member, the whole being arranged so as to increase the friction as the arm swings inwardly to gradually bring the same to rest within the car.

My invention further consists in a rotary member and a pouch catching arm as above mentioned in combination with a cam-face formed on said member and a friction shoe in engagement with said cam, the cam being arranged to increase the friction between the rotary member and the shoe as the arm swings inwardly.

My invention further consists in means for regulating the pressure of the friction shoe and in various details of construction and arrangements of parts all as will be hereinafter fully described and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a plan view of a mail catching device embodying my invention in its preferred form and illustrating the same arranged within a car, the side of which is shown in section, Fig. 2 is an elevation thereof, the adjacent portions of the car being shown in vertical transverse section, Fig. 3 is a view similar to Fig. 1 upon an enlarged scale with portions of the device broken away or illustrated in section, and Fig. 4 is a vertical section of the device.

Referring to the drawings 1 indicates a rotary member mounted upon a vertical shaft or rod 2 fixed within a mail car adjacent to the door 3 and preferably to one side thereof. The shaft 2 is secured to the floor 4 and the roof 5 of the car and is preferably fixed against rotation. The member 1 comprises a disk 6 having a spiral shaped cam-face or periphery 7 and a pair of circular plates of greater diameter secured to the upper and lower faces of the disk 6 as by bolts 9. Extending radially from the rotary member 1 is the pouch catching arm 10. The arm 10 has its inner end arranged in a socket 11 formed in the disk 6 and held therein and between the plates 8 by bolts 12. The arm extends horizontally through the doorway 3 when in catching position and is provided with a pouch catching hook 13 on its outer end to engage the transfer device by which the pouch is secured to the crane.

14 indicates the crane arm and the transfer device comprises a ring 15 which is engaged by the hook 13, a block portion 16 by which it is secured to the crane arm and a depending eye 17 to which the pouch 18 is secured. In arranging the device on the crane arm the ring is placed in a vertical plane at right angles to the direction of movement of the train, in which position it is readily engaged by the hook 13 and removed thereby. The inertia of the pouch causes the arm to swing backwardly and into the car. In order to give the arm sufficient resistance to the impact of the pouch and to properly engage the same, and to prevent the same from swinging too violently into the car I provide a friction device. This is arranged in engagement with the spiral cam-face 7, and as the arm swings inwardly the friction is gradually increased until the arm and the pouch are brought to rest without shock or jar.

20 indicates a friction shoe held in engagement with the cam-face 7 by the springs 21. These are arranged in a sleeve 22 formed on the end of an arm 23 which extends radially from a vertically disposed sleeve 24 mounted upon and fixed to the shaft 2. The sleeve 22 is preferably radially disposed with regards

to the rotary member 1 and its end is closed by a head or block 25.

26 indicates a follower arranged behind the springs 21 and 27 a pair of screws extending through the block 25 and in engagement with said follower. By turning the screws 27 the tension of the springs 21 may be adjusted to obtain the proper frictional contact between the shoe 20 and the cam 7. By referring to Fig. 3 it will be seen that as the arm swings inwardly the shoe 20 will be pushed backward against the tension of the springs with a constantly increasing frictional contact between the shoe and the cam-face, and the tension of the springs is so regulated that the arm 10 will be brought to rest before it engages the shoe, as illustrated in dotted lines in Fig. 3. The arm 10 is jointed as at 11′ and is arranged to swing upwardly upon a horizontal axis 19 when not in use as shown in dotted lines in Fig. 4.

Having described my invention what I claim as new and desire to secure by Letters Patent, is:

1. In a mail catching device a rotary member mounted within a mail car upon a vertical axis, a catching arm extending laterally from said member and adapted to swing through the doorway of the car, and a frictional device arranged in engagement with said rotary member and adapted to increase the friction as the arm swings inwardly to bring the same gradually to rest within the car, substantially as described.

2. In a mail catching device a mail car having a side doorway, in combination with a member rotatably mounted upon a vertical axis adjacent to said doorway and having a cam-face formed thereon, a pouch catching arm extending radially from said member and a friction device in engagement with said cam-face, substantially as described.

3. In a mail catching device a mail car having a side doorway, in combination with a substantially disk shaped member rotatably mounted upon a vertical axis adjacent to said doorway and having a spiral shaped peripheral cam-face, a pouch catching arm extending radially from said member and adapted to swing into or out of said car, and a spring pressed friction shoe engaging said cam-face, substantially as described.

4. In a mail catching device a member rotatably mounted upon a vertical axis, in combination with a cam-face formed on said member, a spring pressed friction shoe in engagement with said cam-face, a pouch catching arm extending radially from said member and means for regulating the pressure of said shoe on said cam-face, substantially as described.

5. In a mail catching device a member rotatably mounted upon a vertical axis, in combination with a cam-face formed on said member, a spring pressed friction shoe in engagement with said cam-face and a pouch catching arm extending radially from said member, said arm being jointed and arranged to swing upwardly when not in use, substantially as described.

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

GEORGE M. FOLEY.

Witnesses:
HELEN F. LILLIS,
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