

No. 879,816.

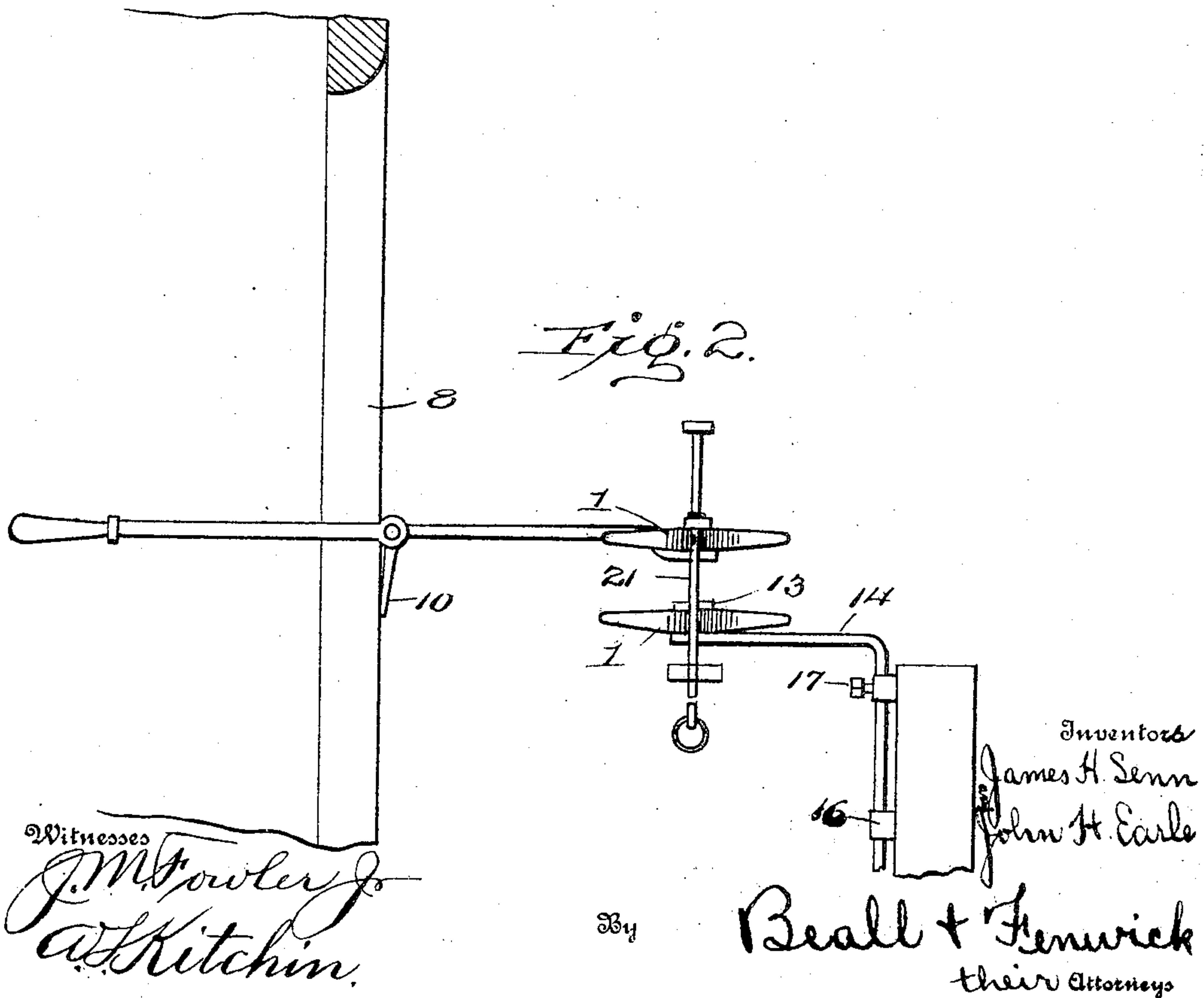
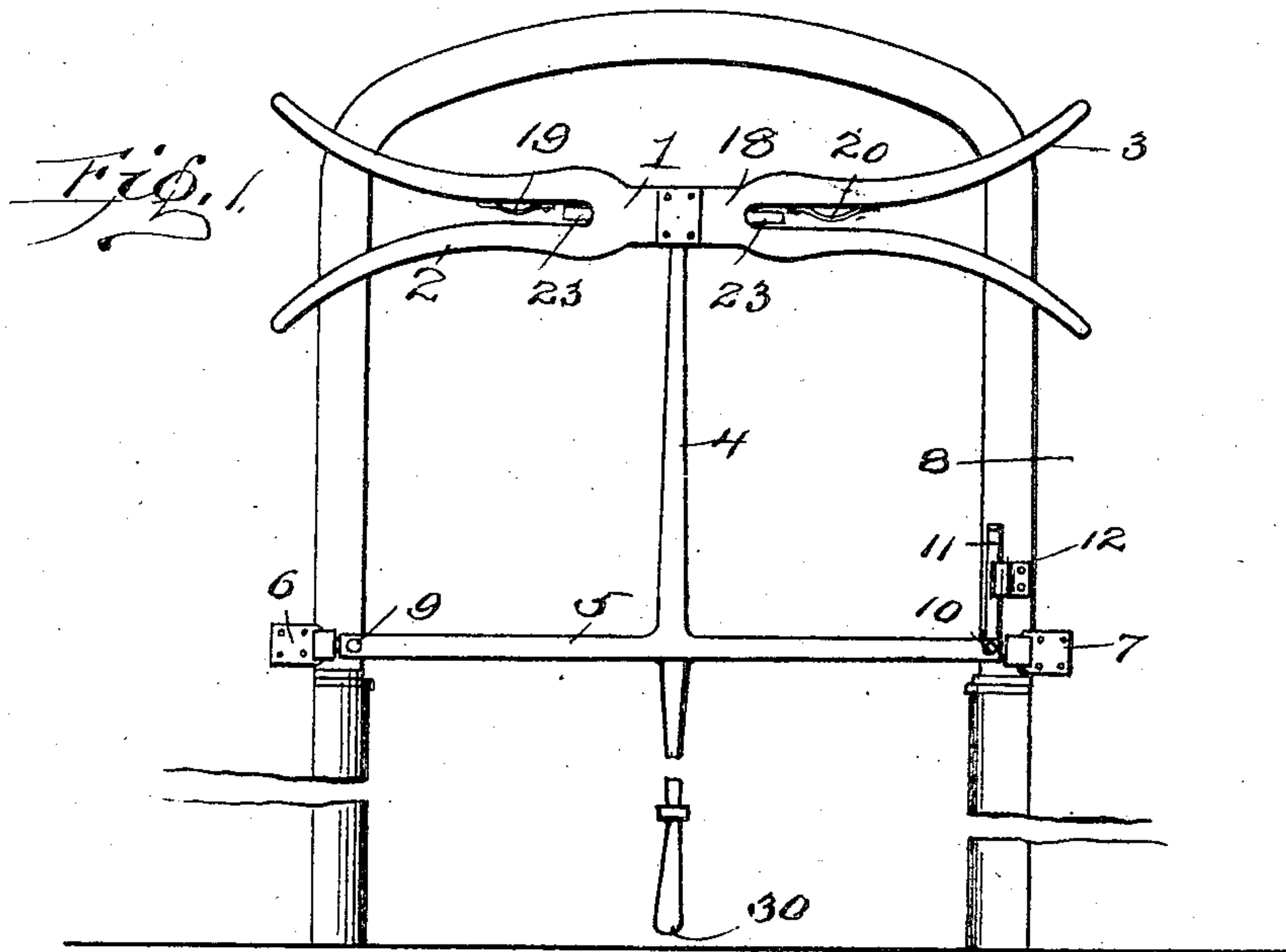
PATENTED FEB. 18, 1908.

J. H. EARLE & J. H. SENN.

MAIL CATCHER.

APPLICATION FILED SEPT. 24, 1907.

2 SHEETS—SHEET 1.



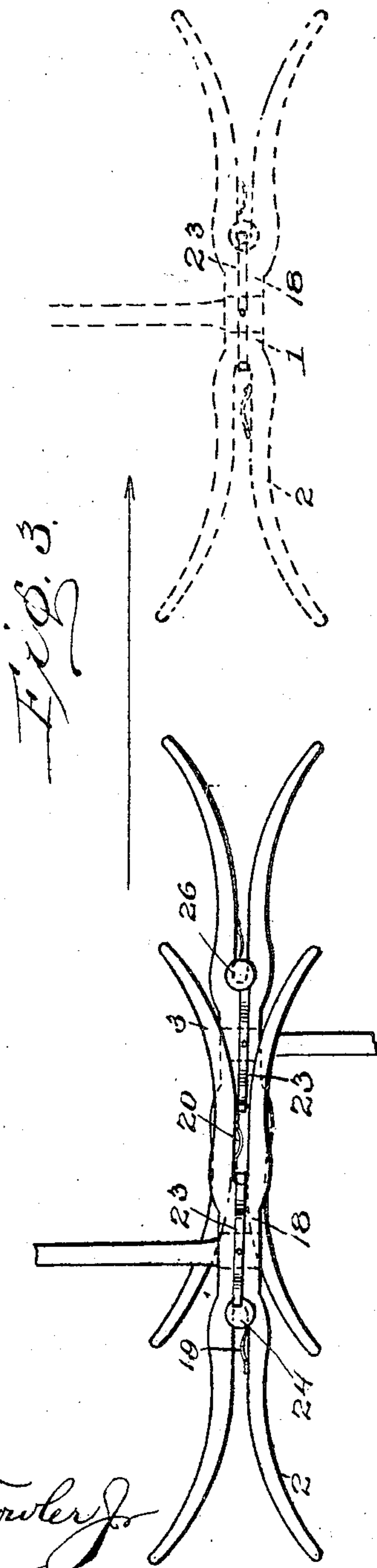
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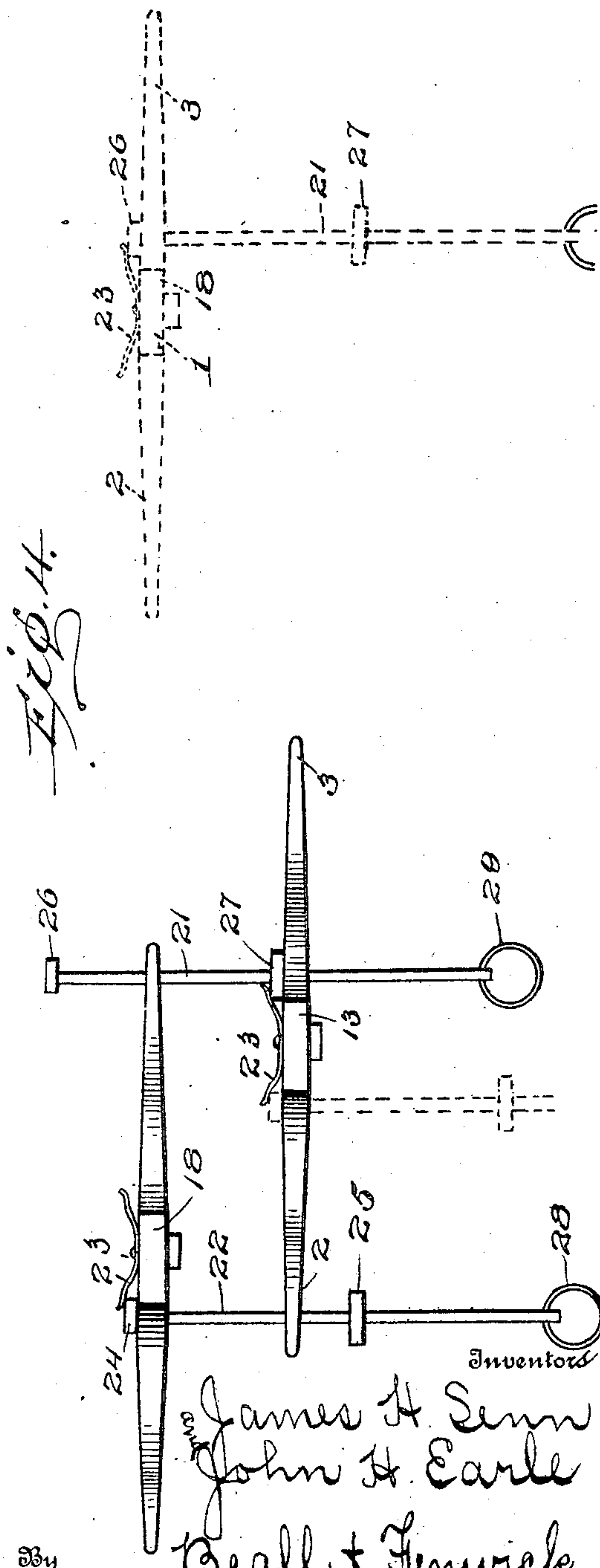
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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN H. EARLE AND JAMES H. SENN, OF GREENVILLE, SOUTH CAROLINA, ASSIGNORS OF ONE-THIRD TO WALTER WEST, OF GREENVILLE, SOUTH CAROLINA.

MAIL-CATCHER.

No. 879,816.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed September 24, 1907. Serial No. 394,391.

To all whom it may concern:

Be it known that we, JOHN H. EARLE and JAMES H. SENN, citizens of United States, residing at Greenville, in the county of Greenville and State of South Carolina, have invented certain new and useful Improvements in Mail-Catchers, of which the following is a specification.

This invention relates to improvements in mail grabs, and particularly to grabs or catchers that are designed to deliver and receive mail bags from moving trains.

The invention comprises the production of a mail bag sustaining device secured to a car, and a mail bag sustaining device positioned at a station for holding a mail bag in position to be "grabbed" or taken up by the mail bag sustaining device secured to the car.

The invention further comprises the production of a pivotally mounted arm positioned on the side or in the doorway of a car and having rigidly secured thereto a double forked mail bag receiving member provided with a plurality of springs for preventing the bag from becoming accidentally removed or dropped off.

The invention still further comprises the production of a bar formed with a plurality of stops designed to be operated by the forks of the mail bag sustaining member, either during the reception or delivery of the mail bag.

The object in view is the production of a mail bag delivering apparatus in which the "grab" or sustaining members are designed to receive a sustaining bar to which is secured the mail bag proper.

Another object in view is the production of a mail grab in which a bar is provided having various stops for sustaining the bar and providing means for holding the same in position on the sustaining member during the reception and delivery of the mail bag.

With these and other objects in view the invention comprises certain other novel constructions, combinations and arrangements of parts that will be hereinafter more fully described and explained.

In the accompanying drawings:—Figure 1 is a fragmentary side elevation of a car showing a catcher formed according to the present invention secured in the doorway

thereof. Fig. 2 is an end view of both the receiving and delivering members shown in their respective positions at the stations and on a car. Fig. 3 is a top plan view of the "grab" in the act of receiving and delivering the mail bag together with a view of the bag sustaining device upon the car shown in dotted lines after it has received the mail bag. Fig. 4 is a side elevation of Fig. 3.

In the drawings are disclosed a preferred embodiment of the present invention in which 1 is a bag sustaining member formed so as to provide forks 2 and 3. Member 1 is operated by an arm 4 that is formed integral with, or rigidly secured to a cross bar 5 which in turn is pivotally mounted in bearings 6 and 7. As clearly seen in Fig. 1, bearings 6 and 7 are secured upon opposite sides of a door in a car 8, so that the catcher or operating member 1 will be positioned centrally of the doorway. Arms or lugs 9 and 10 are formed on bar 5 so that when member 1 is in position for receiving and delivering a mail bag and bar 4 is projecting at right angles from the car as seen in Fig. 2 the same will rest against the side of the car and consequently sustains member 1 in correct position. Formed upon rod or bar 5 at substantially a right angle to member 10 is secured a member or lug 11 which is designed to rest against the side of the car when member 1 is in an upper or inoperative position as seen in Fig. 1. In this position it is held against movement by spring 12 and consequently the sustaining member 1 is held in an upper or raised position against the car.

In some instances it has been found desirable to shorten the bar 5 and to secure the same in bearing on one side of the door. When this is done, projection 11 is not necessary, as member 4 will engage spring 12 and be held in a vertical position.

A mail support or sustaining member or grab 13 is provided for the stations and are designed to be held in position by any desirable support, as for instance bar 14. It will be observed that bar 14 passes through clips or members 15 and 16 and is held against vertical movement by any suitable means as set screw 17. By this arrangement the grab or catcher 13 may be raised or lowered in order to be in a correct position for receiving

ing a mail bag from the grab or sustaining member 1 mounted upon the car 8.

The sustaining members or grabs 1 and 13 are made identical and therefore it will only be necessary to describe one. The grab 1 is made with a solid portion 18 and forks 2 and 3 extending therefrom. In each fork are provided springs 19 and 20 that are secured only at one end. These springs are designed to prevent the removal of bars 21 and 22 more fully hereinafter described. As heretofore described grab 13 is supported by a bar 14 and catcher 1 by a bar 4, and in addition, catcher 1 is provided with a spring 23 that is designed to firmly hold one of the bars 21 and 22 in position as seen in Fig. 4, where bar 22 is held firmly in position. It will be evident that a spring similar to spring 23 may be used on grab 13, but it is only necessary to be used upon grab 1 which is secured to the train. The jolt and jar of the train would be liable to jar the bar as 22 out of the fork if the springs 23 did not hold the same down, and spring 19 or 20 hold the same against lateral movement.

Bar 22 is provided with stops 24 and 25 for limiting the position of the bar and also provide operating means for supporting the same. Bar 21 is also similarly provided with stops 26 and 27.

In operation when it is desired to deliver a mail bag from a station along the track to a moving train and also from a moving train to the same station, the respective mail bags are secured to the rings 28 and 29 of rods 21 and 22 and then placed upon the grabs 1 and 13 as seen in Fig. 4, the grabs being in a position shown in Fig. 2. On the moving train the rod 22, for instance, is placed in position in fork 2 with stop 24 positioned below a spring 23. The grab 1 is then swung outward from the car until bar or member 4 is in a horizontal plane, the handle 30 being provided for an easy working of the bar 4. After having been swung out in this position, as seen in Fig. 2, the bar 22 will be in a position shown in Fig. 4, so that when the car passes grab 3, stop 24 will be below the grab. As the bar 22 enters between the forks 2 of grab 13 and engages spring 19 of grab 13 it will be forced past the same, as spring 23 of grab 1 will hold bar 22 until considerable strain has been brought to bear upon the same. When bar 22 strikes the inner end of fork 2 it will gradually ride up the same until stop 24 engages the lower edge of the grab and then stop 25 in turn will cause grab 1 to release stop 24. While this is being done bar 21 will also be moved from grab or catcher 13 to catcher 1. In first positioning bar 21 upon catcher 13 the lug or stop 27 is positioned so as to rest upon the upper surface of the same. This will permit bar 21 to extend a consider-

able distance above grab or catcher 1, as clearly seen in Fig. 4. As catcher 1 proceeds past catcher 13 bar 21 will engage spring 19 of catcher 1, and will be forced past the same as spring 19 of catcher 13 is of the same strength as spring 19 of catcher 1 and will resist a removal of bar 21. The weight of the mail bag will assist in resisting the removal of bar 21. After catcher 1 has passed catcher 13 and deposited a mail bag and also received one, it is brought up against the car as seen in Fig. 1 and the bar sustaining or mail bag hanger is removed from the catcher by that operator. The mail bag left at the station may be similarly removed by pulling the bar out of catcher 13 in any desired manner. This will leave free the catcher on the train, and also on the station, so that the same may be provided with the mail bag secured thereto, and the operation repeated as often as may be desired.

What we claim is:—

1. In a mail bag catcher, a body having a mouth adapted to receive a mail bag hanger, and a bowed spring curved at one end within said mouth for preventing accidental removal of the hanger, and means for moving said body into and out of operative position.

2. In a mail bag catcher a body provided with mouths at each end thereof and adapted to receive and hold a mail bag hanger, means mounted within said mouths for preventing an accidental removal of said hangers, and means mounted upon said body for steadying the hanger.

3. In a mail bag catcher, a body portion provided with a mouth at each end thereof and a bowed spring mounted in said mouths, said springs being adapted to permit the insertion of a hanger to said catcher and also adapted to retard removal of the same.

4. In a mail bag catcher, a body portion, means provided on each end thereof for catching a hanger, means positioned in said catching means for resisting the removal of a hanger after it has entered said catching means, and a spring for steadying a hanger positioned in said catching means.

5. In a mail bag catcher, a body portion, means formed thereon for catching a mail bag, means for moving said body portion into and out of operative position, an arm rigidly secured to said last mentioned means and a spring for engaging said arm for holding said body portion in an inoperative position.

6. In a mail bag catcher, means for receiving and delivering a mail bag hanger, and a hanger adapted to be engaged by said means, said hanger comprising a rod, a plurality of stops rigidly secured to said rod and spaced apart, and means for engaging a mail bag.

7. In a mail bag catcher, a body portion

formed with means at each end thereof for
engaging a mail bag hanger, one end being
designed to receive a mail bag hanger, and
the other end designed to deliver a mail bag
5 hanger, and hangers provided with stops
adapted to engage said hanger receiving
means, said stops being positioned on differ-
ent planes.

In testimony whereof we affix our signa-
tures in presence of two witnesses.

JOHN H. EARLE.
JAMES H. SENN.

Witnesses:

F. F. BEATTIE,
IRENE S. HOWARD.