

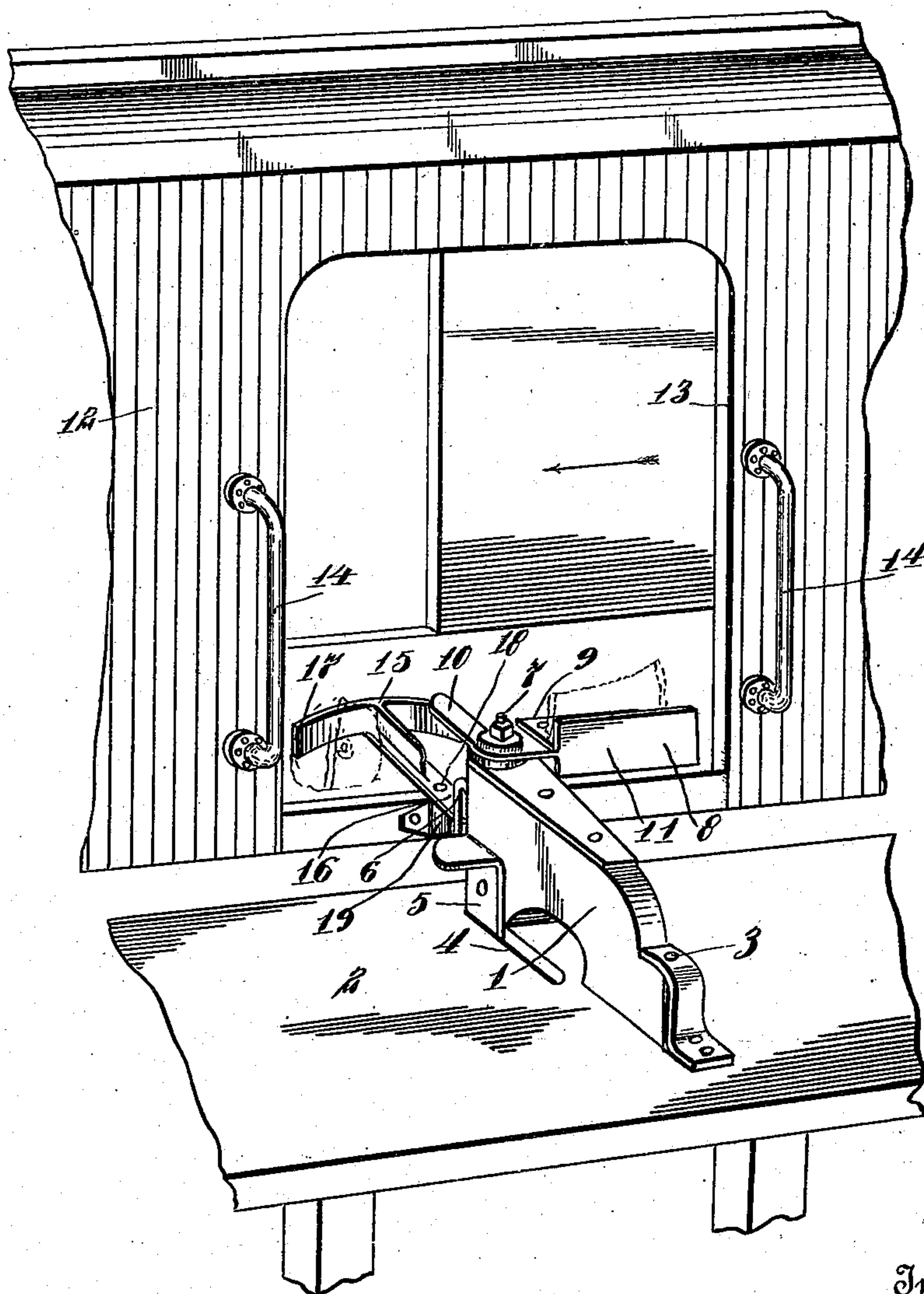
No. 847,960.

PATENTED MAR. 19, 1907.

D. MACK.  
MAIL BAG EXCHANGER.  
APPLICATION FILED JULY 30, 1906.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses  
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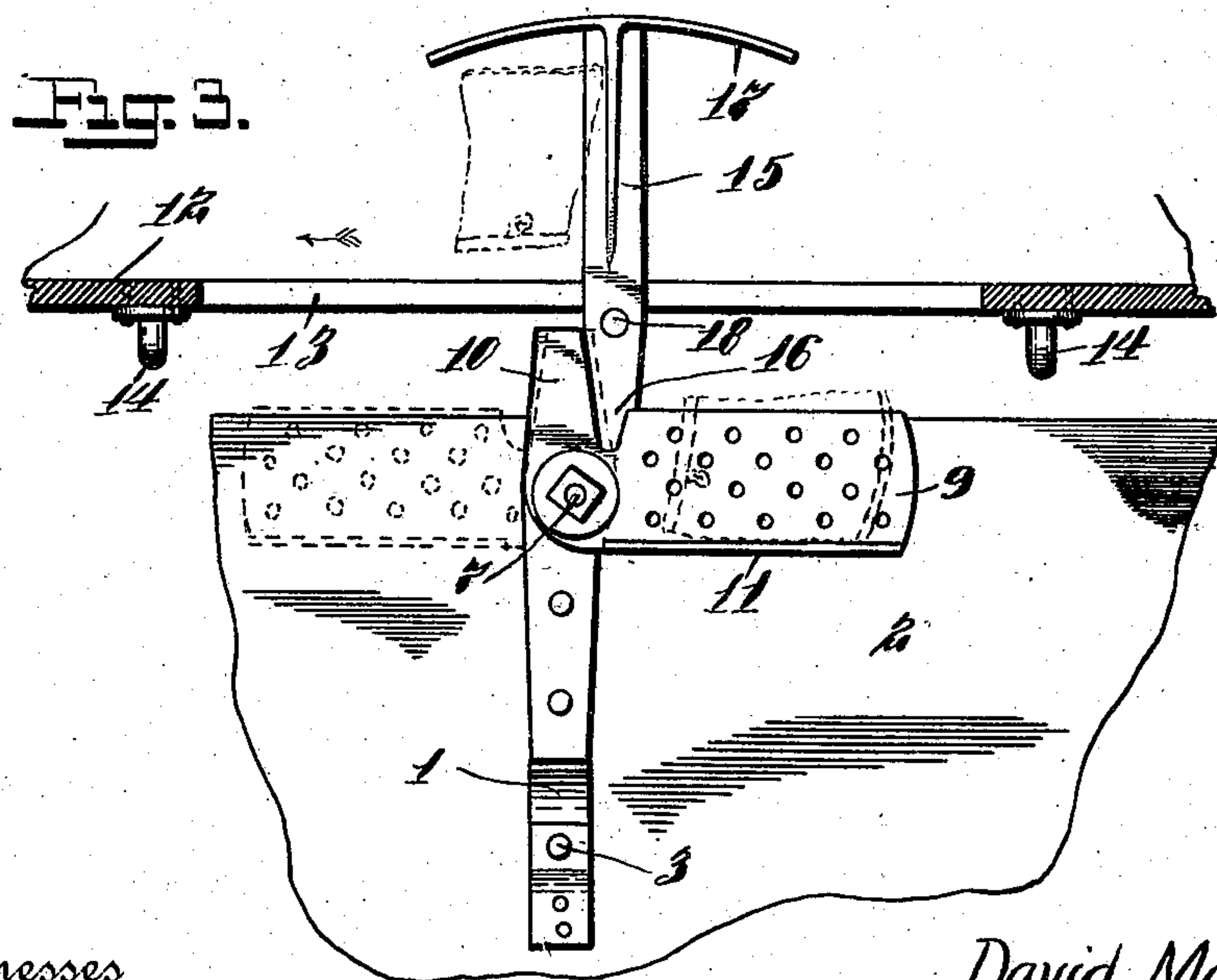
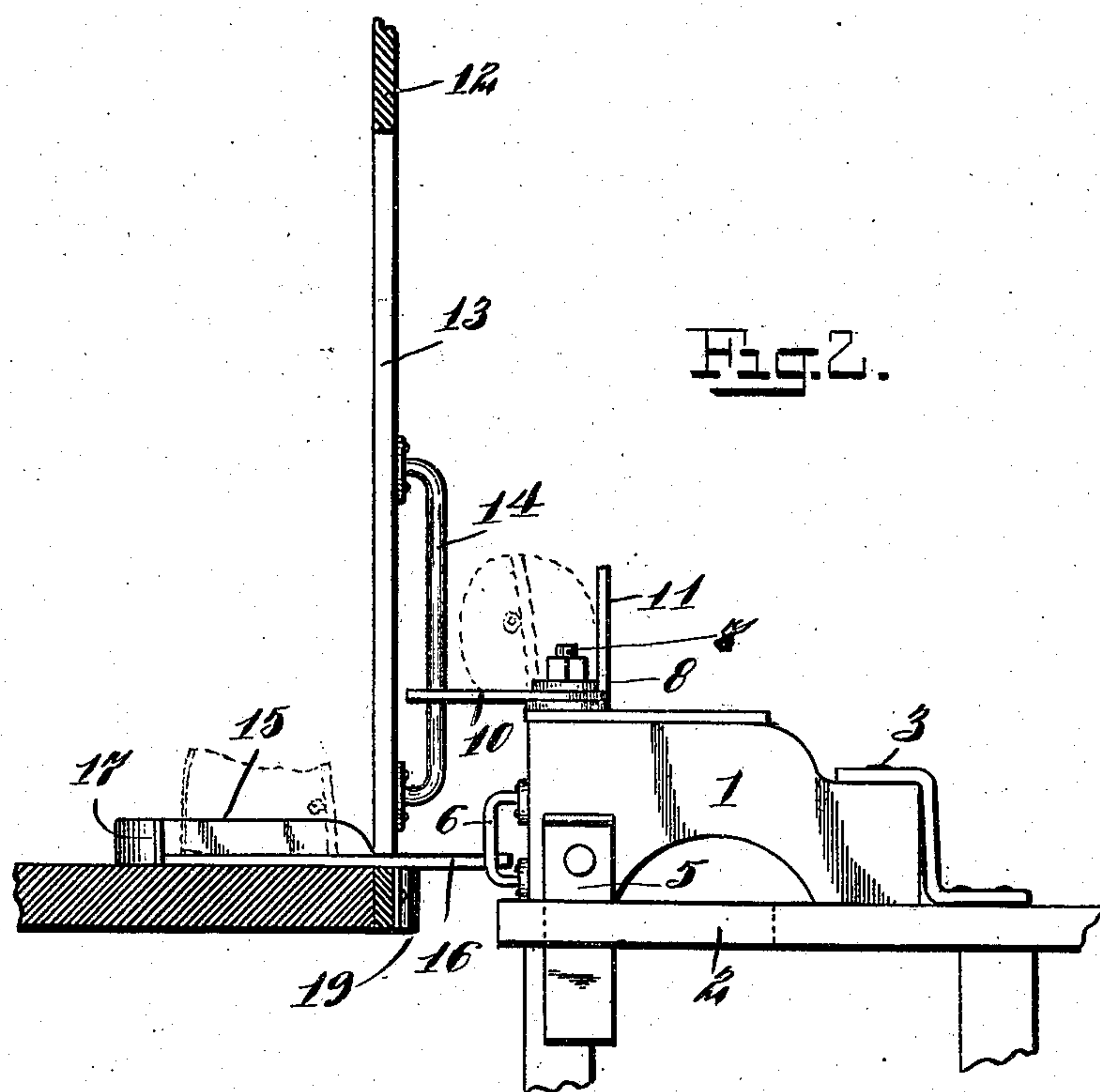
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2 SHEETS—SHEET 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

DAVID MACK, OF DANA, INDIANA.

## MAIL-BAG EXCHANGER.

No. 847,960.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed July 30, 1906. Serial No. 328,438.

*To all whom it may concern:*

Be it known that I, DAVID MACK, a citizen of the United States, residing at Dana, in the county of Vermilion and State of Indiana, have invented certain new and useful Improvements in Mail-Bag Exchangers; and I do 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.

My invention is an improved mail-bag exchanger for automatically-placing mail-bags at different stations in a moving-car and at the same time delivering mail from said car at said stations without the necessity of stopping at said stations; and it consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a stand and of a portion of a railway-car provided with my improved mail-exchanging devices. Fig. 2 is an elevation of the stand and a partial transverse sectional view of the car, and Fig. 3 is a top plan view of the stand and a partial longitudinal sectional view of the car.

At one side of a railway-track is a stand 1. The same is here shown as pivotally mounted at its outer end on a platform 2, as at 3, so that the said stand may be disposed at right angles to the track or swung around to a position substantially parallel with the same in order to dispose the free end of said stand near or move it from the track, as may be desired. To secure the stand in a position at right angles to the track, the platform is provided with a notch 4, and the stand is provided with a pivoted locking-bar 5, the lower end of which is heavier than the upper end thereof, and when the stand is in position for operation and at right angles to the track drops by its own weight into the said notch to hold said stand in such position. At the free end of the stand, which is presented toward the track, is a tappet 6, placed at a suitable height above the platform.

On the upper side of the stand, near the free end thereof, is a pivot-stud 7, which is vertically disposed and projects upwardly on said stand. A right-angular mail-bag-throwing element 8 is pivotally mounted at its angle on the said pivot-stud and comprises a mail-bag-receiving arm 9 and a tappet or operating arm 10. The said mail-bag-

receiving arm has a flange 11 at its outer side which extends above its upper side and below its lower side. For operation by a car moving in the direction indicated by the arrow in Fig. 3 the said mail-bag-throwing element is mounted as shown in full lines in said figure. For operation by a car moving in the opposite direction said mail-bag-throwing element must be turned over and disposed in the position indicated in dotted lines in said figure.

The car 12 is shown as provided on opposite sides of its door 13 with tappets 14, which project from the sides thereof and one of which strikes the tappet-arm 10 of the mail-bag-throwing element 8 and operates said element according to the direction in which the car is moving. On the bottom of the platform of the car, at one side thereof and in the center of the doorway, is a pivotally-mounted mail-bag-throwing element 15. Said mail-bag-throwing element 15 comprises a bar 16, the outer end of which forms a tappet to project beyond the side of the car, and a curved head 17 at the inner end of said bar, which forms a flange to engage a mail-bag placed on the car-platform in front of said bar and within said head or flange. The pivot 18 of the said mail-bag-throwing element 15 may be readily mounted in or unshipped from the socket element 19, secured on the side of the car-platform. The said element 15 is shown in operative position in the drawings.

Assuming that the mail-sack has been placed on the platform of the car in engaged position with reference to the element 15 and the latter has been disposed with its bar 16 at right angles to the car, so that its outer end projects beyond the car, and assuming that the relatively fixed mail-bag-throwing element 8 has been adjusted, as shown in Fig. 3, and that the sack of mail has been placed on the arm 9 thereof and that the car is in motion in the direction indicated by the arrow in Fig. 3, the operation is as follows: When the foremost tappet 14 of the car strikes the arm 10, the said element 8 is turned with such force as to cause it to throw the mail-sack therefrom into the car through the doorway of the latter, and as the tappet-arm 18 of the mail-bag-throwing element 15, carried by the car, strikes the tappet 6 of the stand said element 15 will be turned with such force as to throw the mail-sack from said element 15 onto the platform. It will be under-



stood that when the stand is disposed parallel with the track the mail-bag-exchanging mechanism will be put out of operation.

From the foregoing description, taken in  
5 connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion,  
10 and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined by the appended claims.

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

In a mail-bag exchanger, the combination of a car having a pivotally-mounted mail-bag-

throwing element having a tappet-arm to pro- 20  
ject beyond one side of the car, said car further provided with a tappet on said side, and a stand at one side of the track having a tappet to strike the tappet-arm of the said mail-bag-throwing element, and further provided 25  
with a pivotally-mounted mail-bag-throwing element having a tappet-arm in the path of the tappet carried by the car, for operation thereby, said stand being movable toward and from the track to put the said mail-bag- 30  
throwing element into and out of operation.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DAVID MACK.

Witnesses:

BLOOMER HELT,  
SAMUEL E. MALONE.