

No. 861,892.

PATENTED JULY 30, 1907.

J. A. POIRIER.

CAR FENDER.

APPLICATION FILED APR. 1, 1907.

Fig. 1.

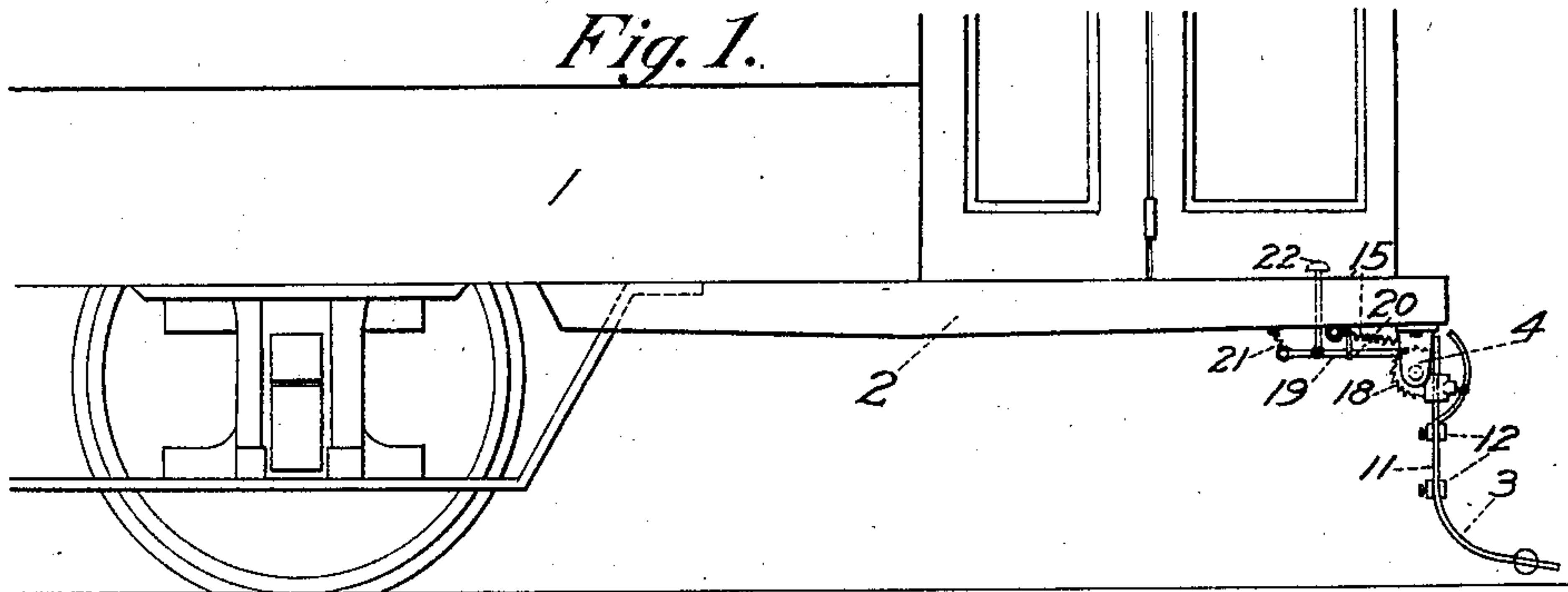


Fig. 2.

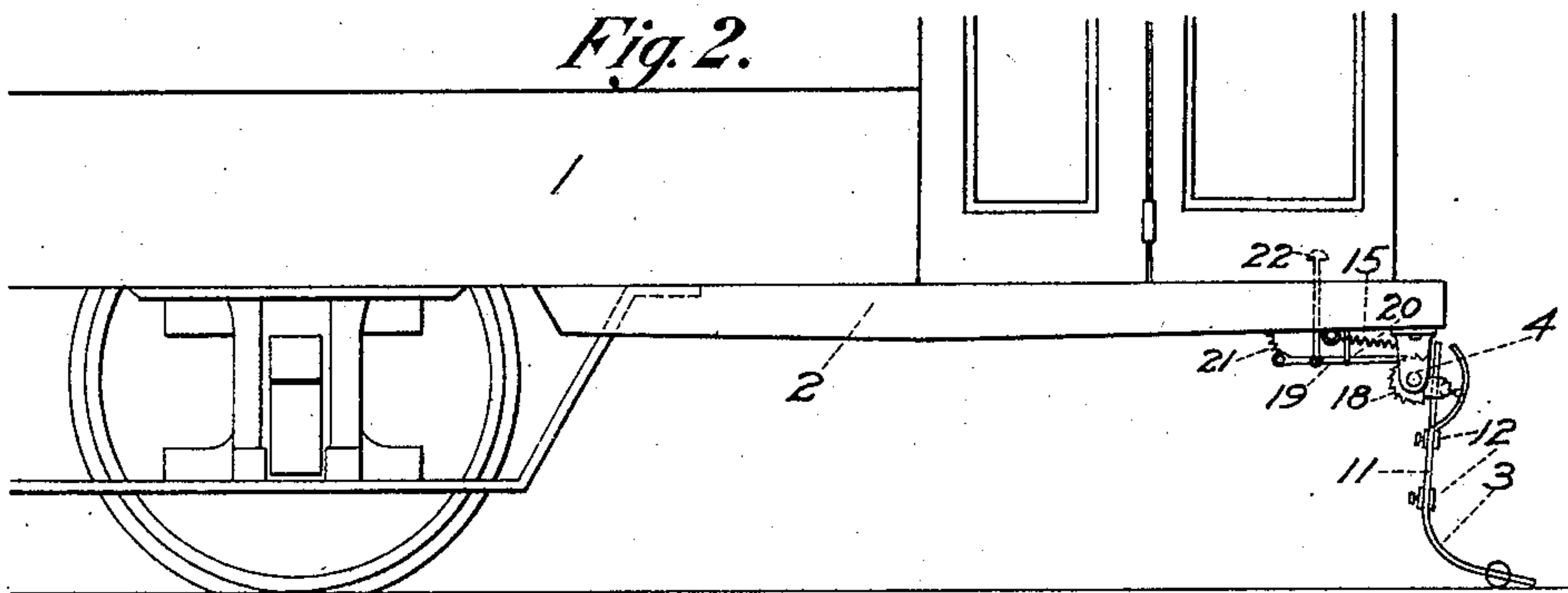


Fig. 4.

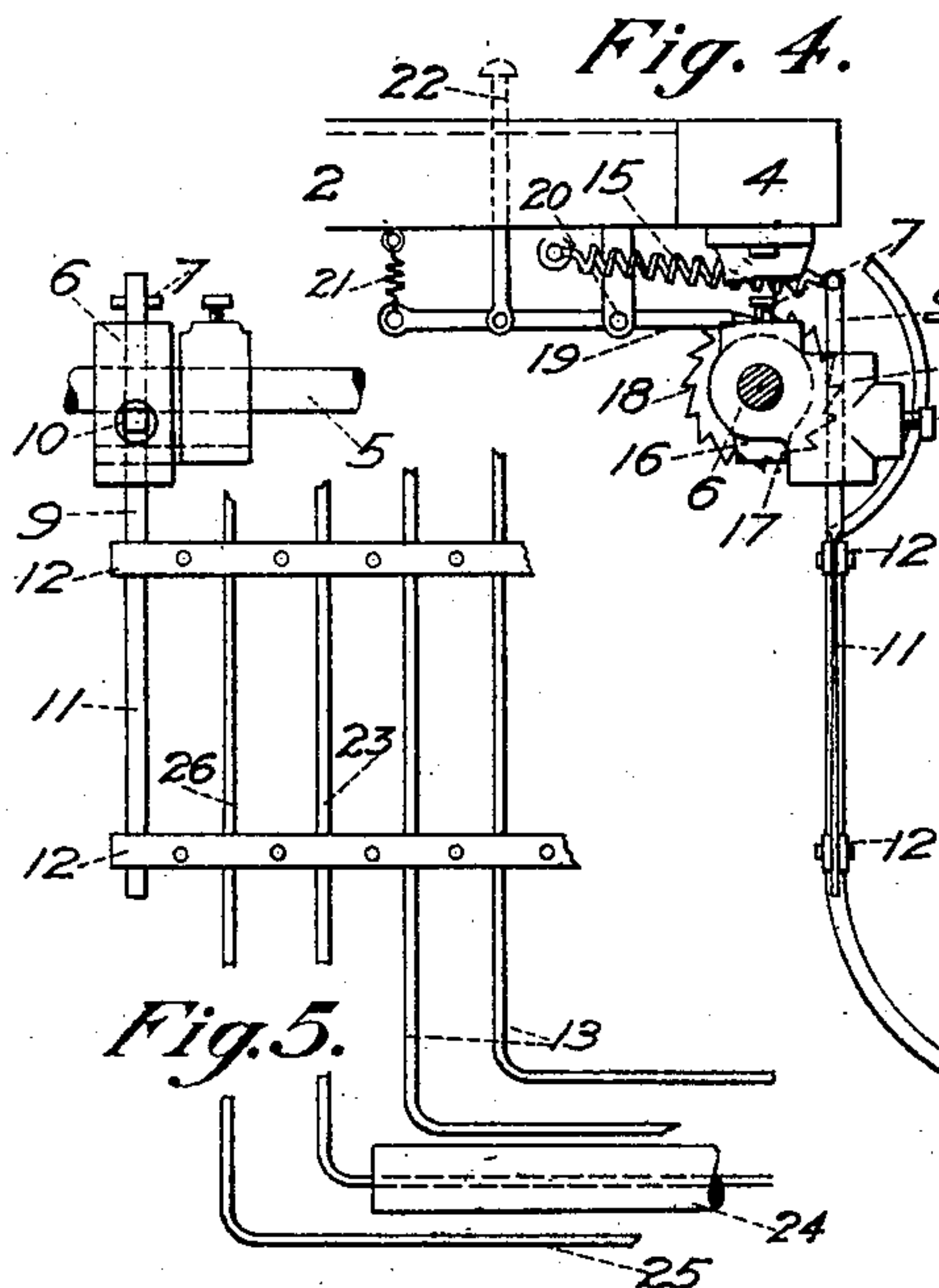


Fig. 3.

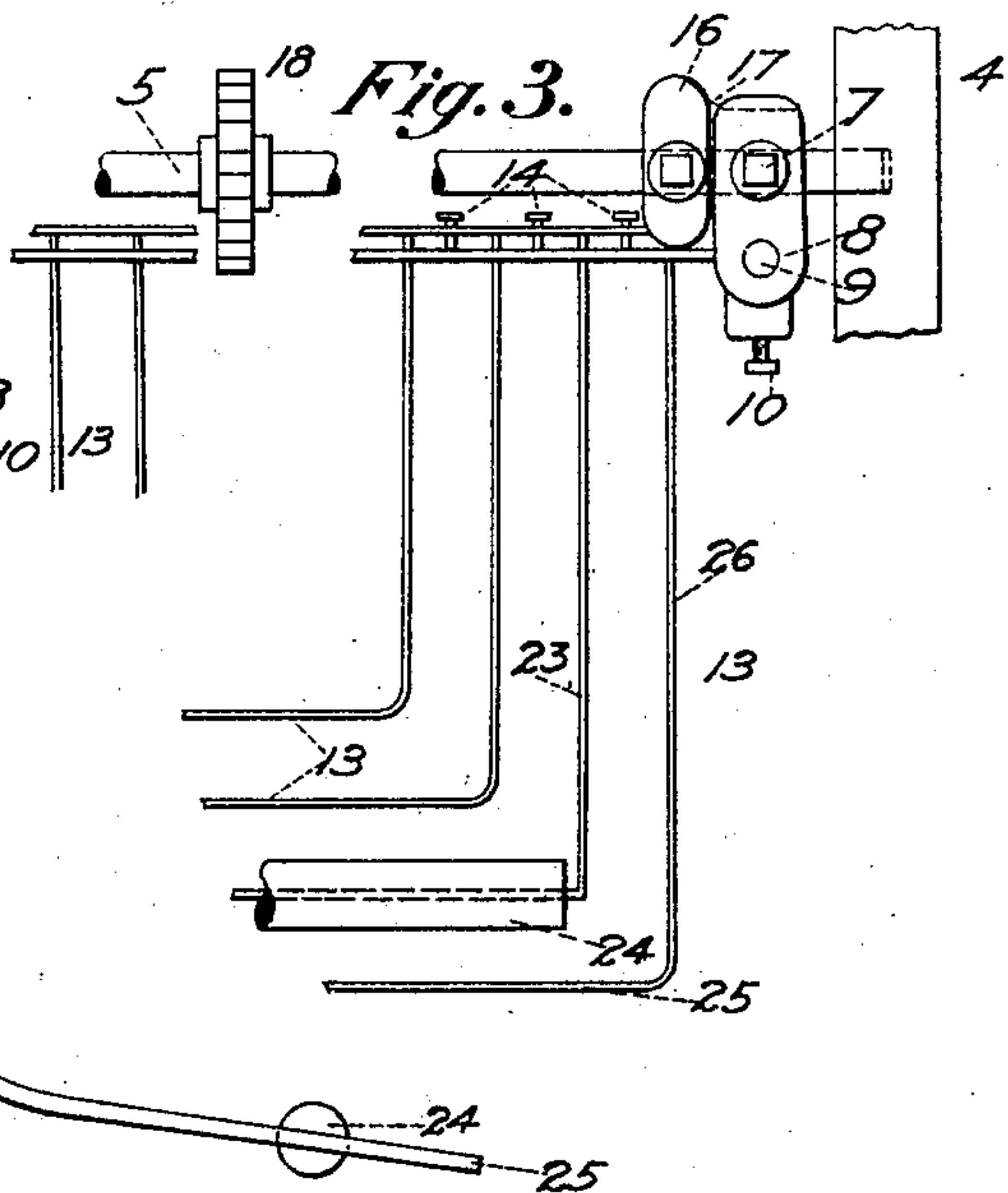
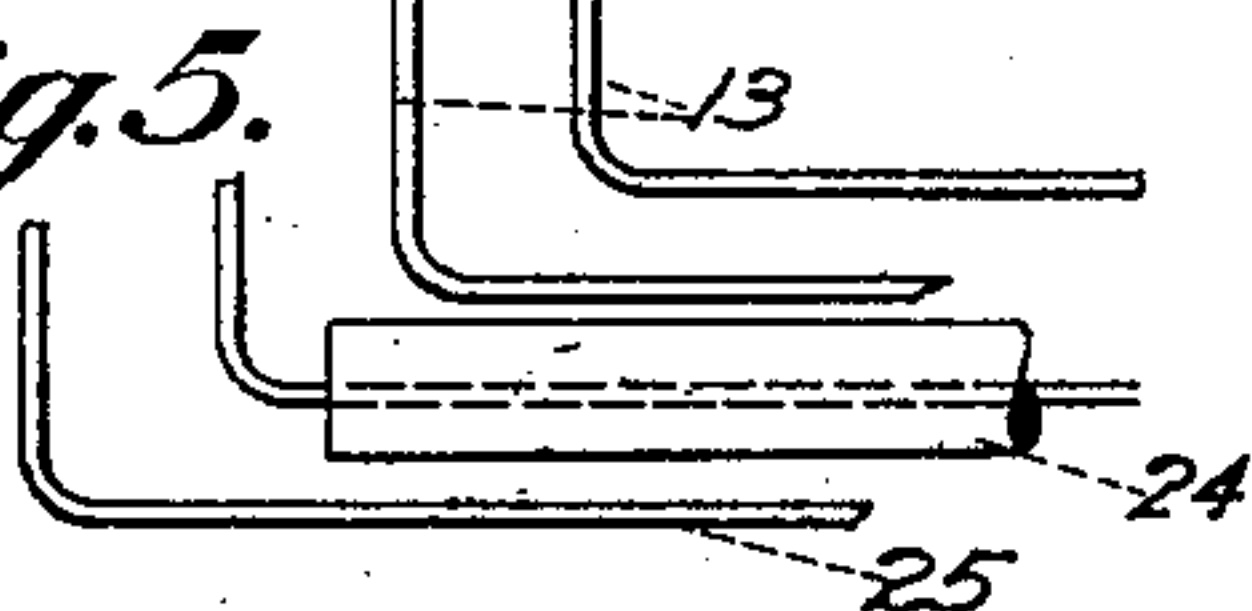


Fig. 5.



Witnesses,

Samuel B. Lincoln.
Arnold Sagraro.

Inventor:

Joseph A. Pirier
By E. Phébe J. Saignault.
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH A. POIRIER, OF WOONSOCKET, RHODE ISLAND.

CAR-FENDER.

No. 861,892.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed April 1, 1907. Serial No. 365,769.

To all whom it may concern:

Be it known that I, JOSEPH A. POIRIER, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have
5 invented a new and useful Car-Fender, of which the following is a specification.

My invention relates to improvements in car fenders, and the objects of my improvement are, first to provide a fender which will be automatically depressed and
10 maintained in a depressed position upon striking a person or object;—second, to provide means for the automatic return of said fender to its normal position; and third to provide facilities for the adjustment of this fender at any desired height.

15 I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1, is a side elevation of the forward part of a car to which my invention has been applied, the parts of my invention being shown in their normal relation.

20 Fig. 2, shows a similar view of a car, the parts of my invention being shown, however, in the relation which they assume in operation. Fig. 3, shows, in plan, a portion of the fender and its operating-mechanism, also on an enlarged scale. Fig. 4, represents, upon an enlarged scale, the fender and its operating-mechanism.
25 Fig. 5, shows a portion of the fender in front elevation.

Similar letters refer to similar parts throughout the several views.

Referring more particularly to the parts, 1, represents
30 the body of the car, which may be provided with forward side-bolsters 2, upon the lower side of which my fender is adapted to be attached.

Before proceeding to a detailed description of the same, it may be said that my invention comprises a
35 fender 3, carried normally in the position shown by Fig. 1. When this fender is struck by a body lying on the track it will rotate upon suitable pivots into substantially the position in which it is shown in Fig. 2.

Proceeding now to a detailed description of the
40 mechanism, this comprises a pair of brackets or hangers 4, carried respectively at each side of the car, and supporting a shaft 5, between them; this shaft 5, carries a pair of heads 6, attached thereto by clamping bolts 7; they are preferably located near the supports 4, and
45 they are provided with integral sockets 8, in which are mounted the fender-supports 9, which fender supports are secured in place by means of the clamping-bolts 10. As indicated, they are round above, and provided with flat extensions 11, below: to these extensions 11,
50 are attached two pairs of cross-bars 12, which cross-bars clamp between them a plurality of round iron members 13, which constitute the body of the fender: additional clamping screws 14, may be provided: as indi-

cated, these members are curved forwardly below. Helical springs 15, are attached to the tops of fender- 55 supports 9, to normally maintain the fender in the elevated position shown in Fig. 1.

I provide means for changing the adjustment of fender with relation to the operating mechanism by means of the collars 16, lying near the aforesaid heads 6, and 60 which carry laterally projecting dogs 17, which engage the aforesaid sockets 8, as is clearly shown in Fig. 4. I also provide means whereby the fender will maintain itself in the position into which it is moved when struck by a body in the manner described. This com- 65 prises a ratchet-wheel 18, which is rigidly mounted upon the shaft 5, and which coöperates with a lever 19, constituting a detent pawl for the same; this lever 19, extends toward the rear as shown in Fig. 4, having its fulcrum at 20, and is normally maintained in engage- 70 ment with the ratchet-wheel, by means of a spring 21: near its rear extremity, a push-rod 22, is pivoted, the upper extremity of which is adapted to be pressed by the motorman's foot, much in the same manner as he operates his gong. 75

It should be observed that in the construction of the fender, body member 23, adjacent to the outermost carries upon its horizontal portion a roller 24, which extends substantially from end to end of the same, and in front of this roller lies the horizontal portion 25, of 80 the outermost member 26, this peculiar construction is adopted for the purpose of preventing the roller 24, from catching the clothing of a person caught by the fender.

The mode of operation of the device is substantially 85 as follows:—A body lying upon the track, being struck by the fender operates to depress the front end of the fender, this tendency is resisted by the helical spring 15, should the body be sufficiently heavy to force the front end of the fender so low, the roller 24, prevents 90 it from fouling the track, the ratchet-wheel 18, and detent lever 19, now operate to hold it in this position. The fender is released and allowed to return to its normal position by depressing the push-bolt 22, as will be readily understood. The normal position of the fender 95 may be adjusted by means of the collars 16, with laterally projecting dogs 17, which lie in the path of sockets 8.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form 100 shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claims, or of mechan- 105 ical equivalents to the structure set forth.

I claim:

1. In a car fender, a transverse shaft, a fender carried thereby, means for normally maintaining said fender in an elevated position, automatic means for maintaining
5 said fender in depressed position, and adjustable collars carried by said shaft for regulating the normal position of said fender.
2. In a car fender, a transverse shaft, a fender carried thereby and normally in an elevated position, a ratchet-wheel carried by said shaft, a pawl coöperating therewith
10 and adapted to maintain said fender in a depressed position, a push-bolt for releasing said ratchet-wheel, and adjustable collars carried by said shaft, and adapted to determine the normal position of said fender.

3. In a car fender, in combination, a fender adapted to
15 be depressed, comprising pivoted side hangers, springs normally constraining the same, substantially vertical members carried thereby, cross-members carried thereby, a plurality of members carried by said cross-members, said
20 vertical members projecting above said transverse shaft, and protecting the mechanism thereof, a roller carried by a projecting horizontal member, and a second horizontal member carried forwardly of said roller.

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

Witnesses:

ELPHÈGE J. DAIGNAULTS,
EUGENE L. JALBERT.