

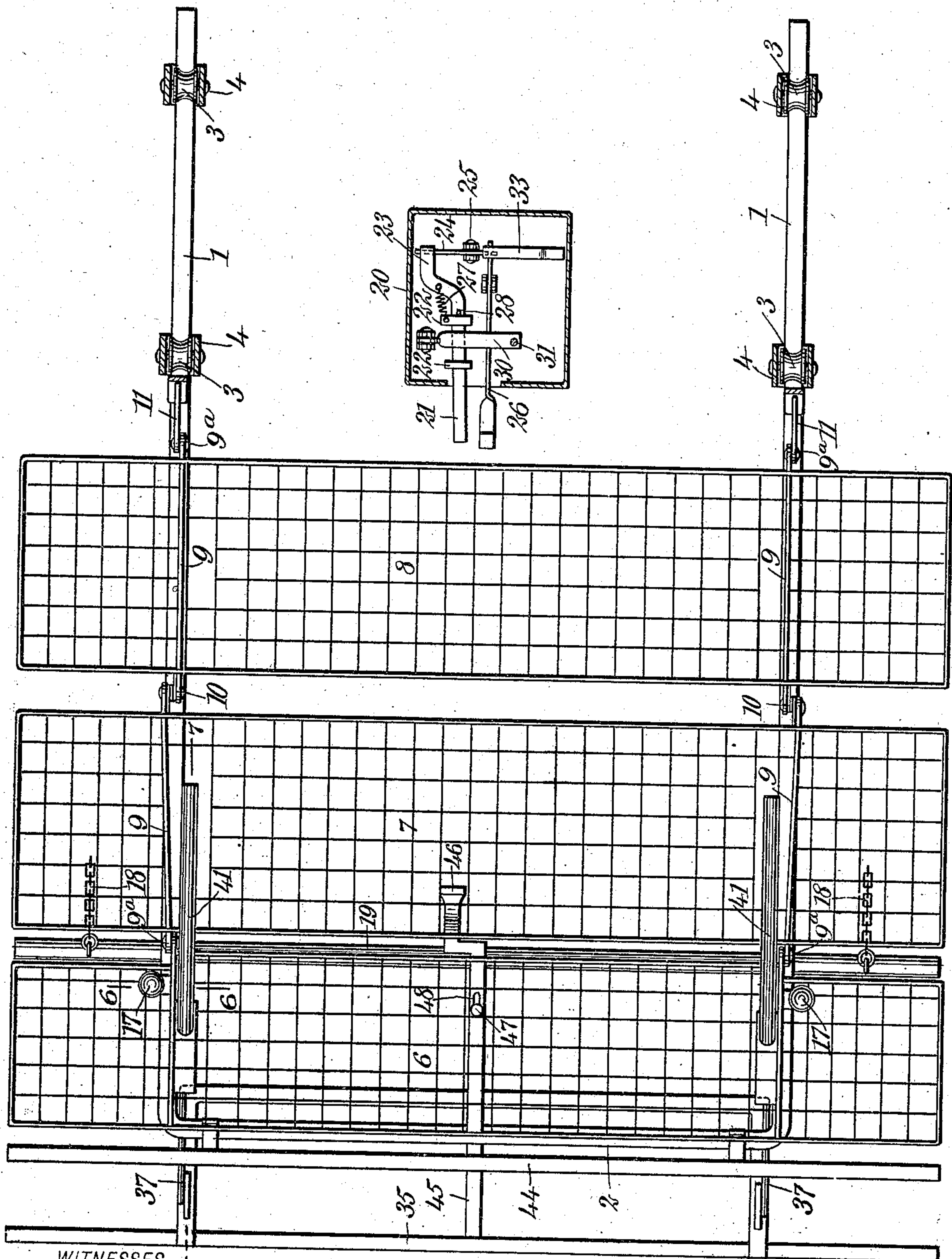
No. 881,849.

R. D'ORONZIO.
FENDER.

PATENTED MAR. 10, 1908.

APPLICATION FILED MAR. 12, 1907.

3 SHEETS—SHEET 1.



WITNESSES

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Fig. 1

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3 SHEETS—SHEET 2.

Fig. 2

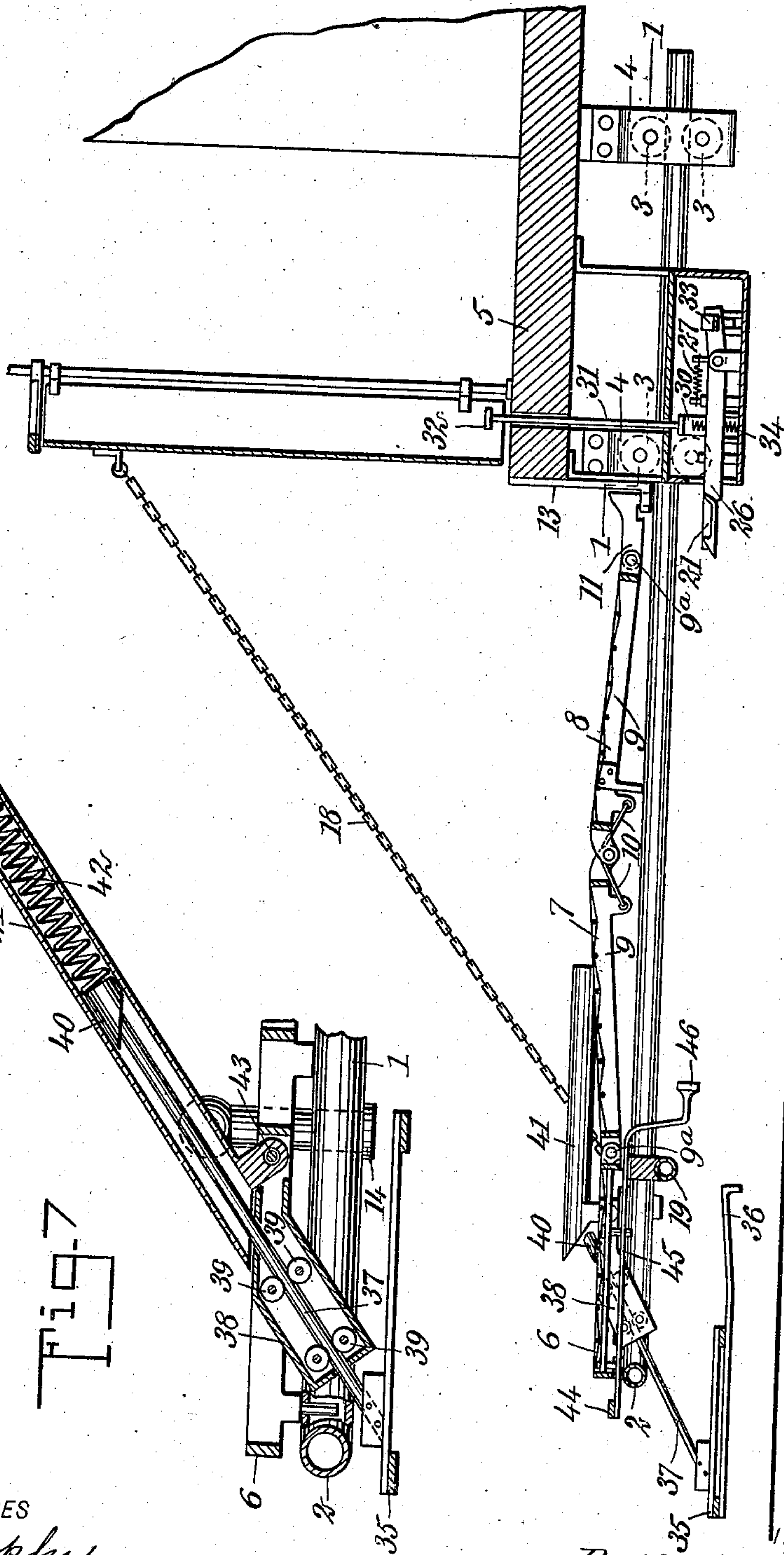


Fig. 7

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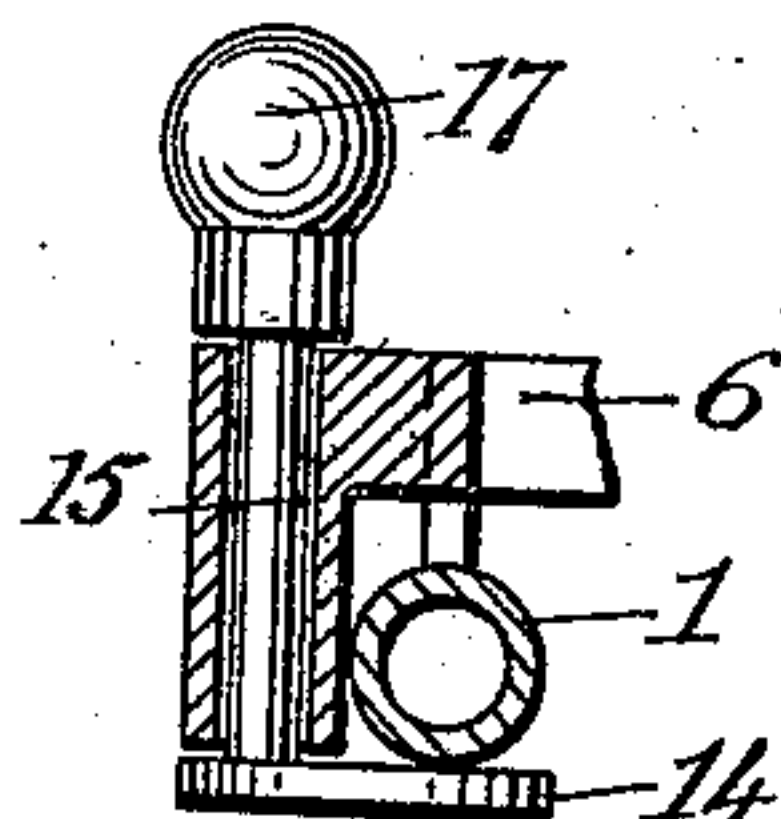
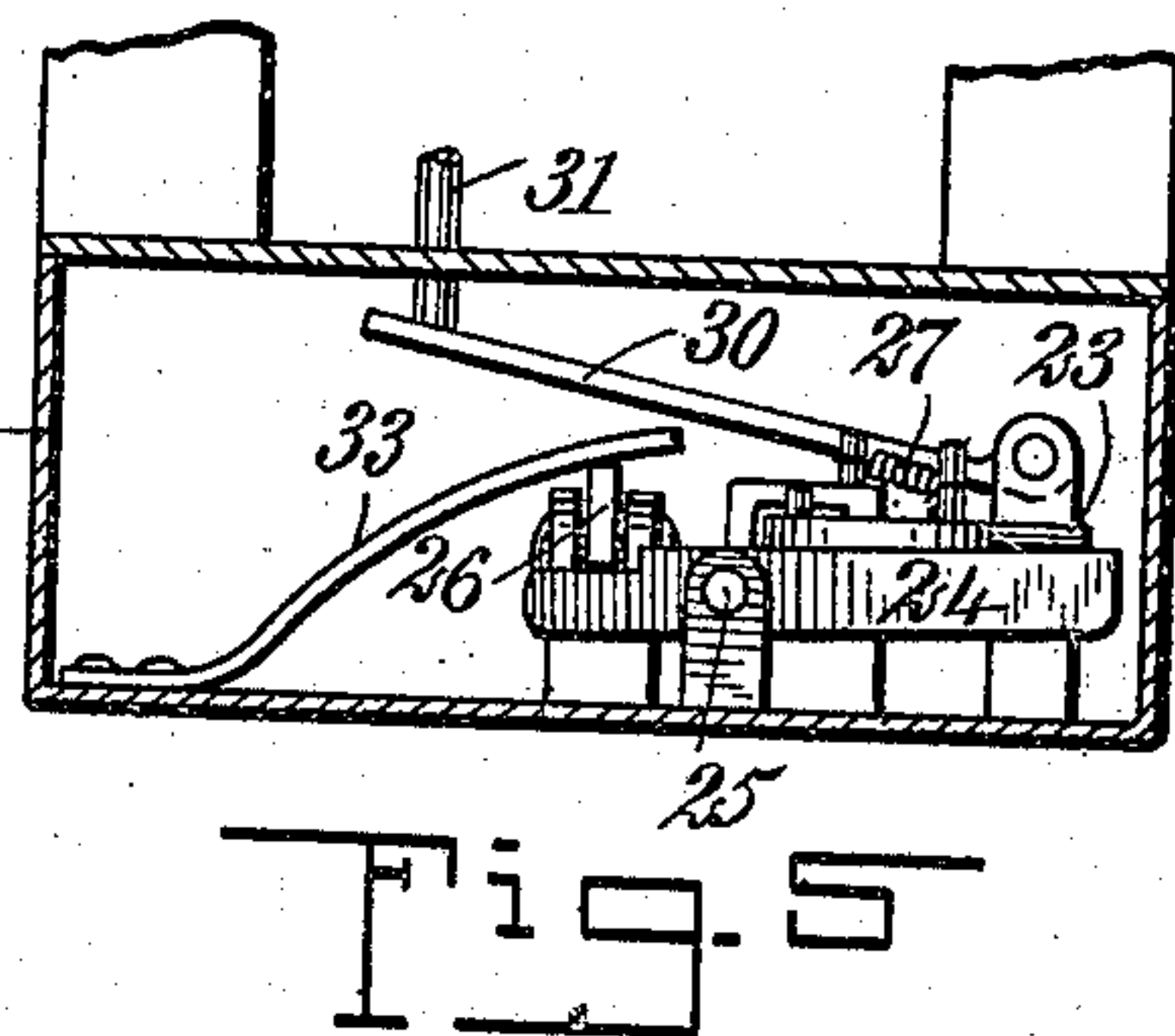
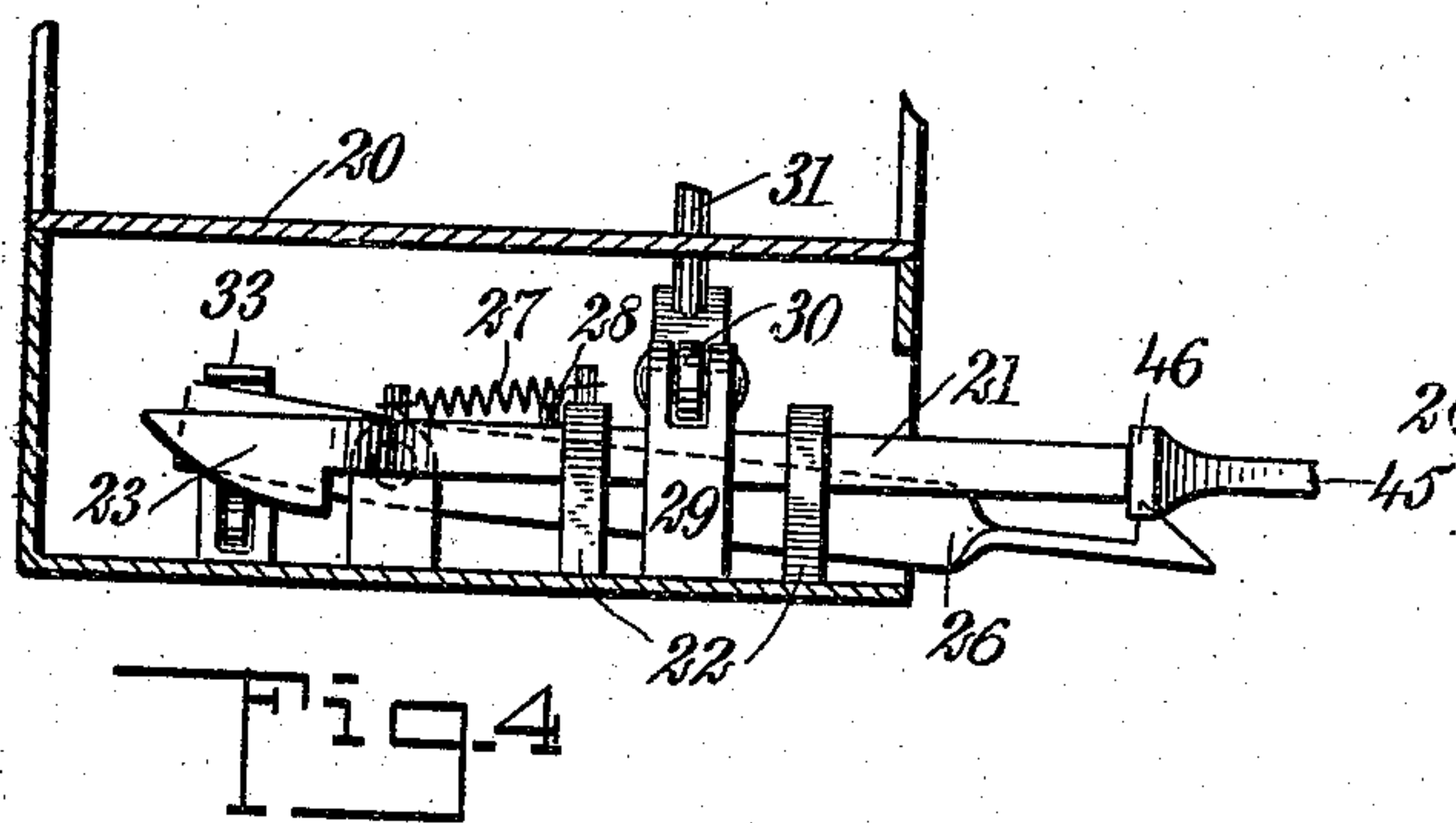
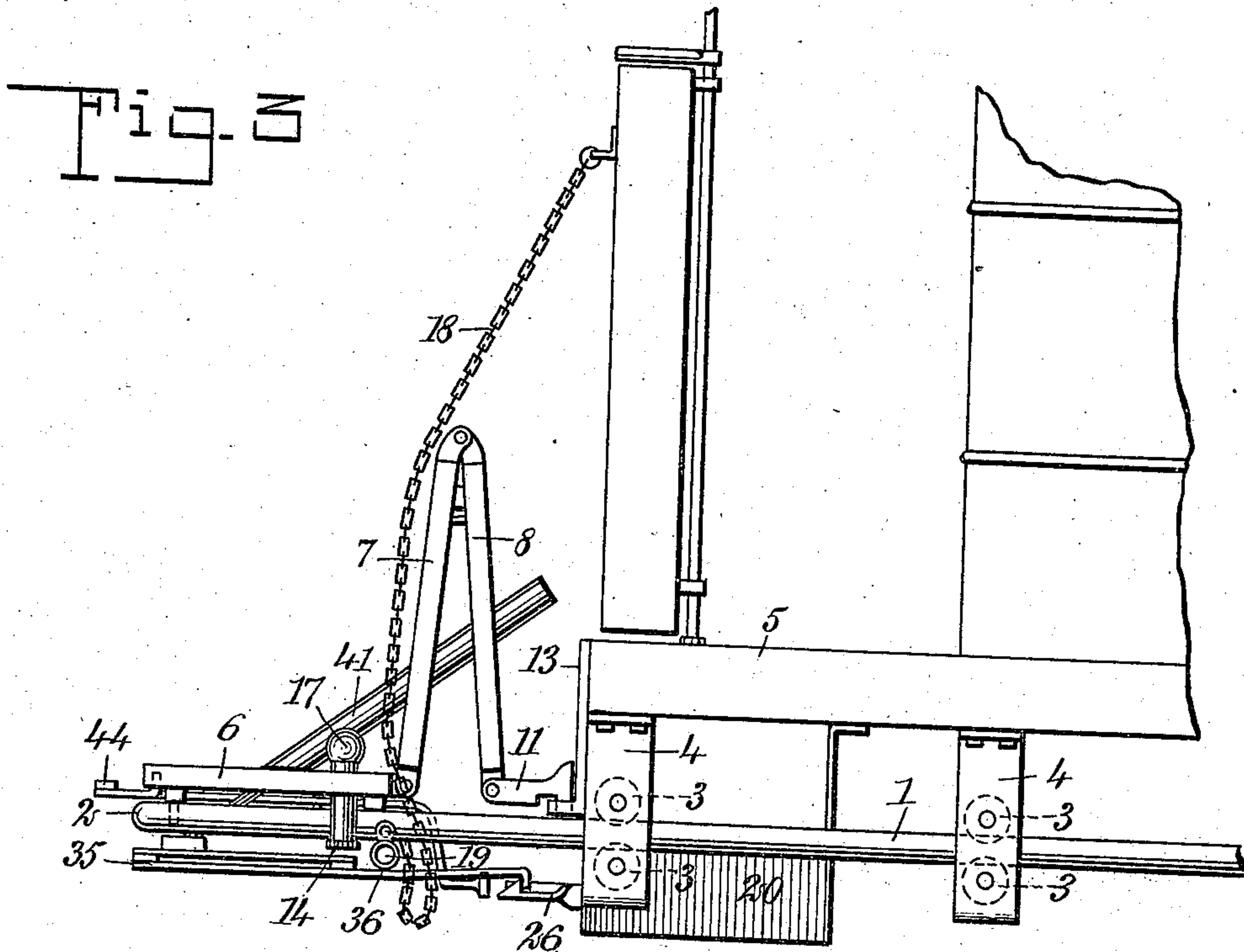
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3 SHEETS—SHEET 3.



WITNESSES
J. A. Proply
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UNITED STATES PATENT OFFICE.

RAFFAELA D'ORONZIO, OF NEW YORK, N. Y.

FENDER.

No. 881,849.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed March 12, 1907. Serial No. 361,911.

To all whom it may concern:

Be it known that I, RAFFAELA D'ORONZIO, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, county and State of New York, have invented a new and Improved Fender, of which the following is a full, clear, and exact description.

The invention is directed to improvements in car fenders of the character for which Letters Patent No. 785,482 were granted to me March 21, 1905, the objects, among others, of the present invention being to produce a fender of this type in which the locking mechanism for withholding the fender in a contracted position, will be removed to a protective point, and the movable portion located at the front of the fender will, when struck, have the force thereof overcome by suitable buffers.

A further object of the invention is the provision of novel means for supporting the fender frame, whereby it will be firmly held at the front of the car and may be moved back and forth without undue friction.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan of the fender showing the casing of the locking mechanism in section, said section being taken substantially on the line 1—1 of Fig. 2; Fig. 2 is a side elevation of the fender partly in section, showing the manner in which it is applied to the car platform; Fig. 3 is a side elevation of the fender as applied to the car when in contracted relation; Fig. 4 is a section through the casing containing the locking mechanism; Fig. 5 is a corresponding section taken at right angles to Fig. 4; Fig. 6 is a section on the line 6—6 of Fig. 1, and Fig. 7 is a section on the line 7—7 of Fig. 1.

The fender as preferably constructed, comprises a tubular frame consisting of side-bars 1 joined together at their forward ends by a crossbar 2, said side-bars being movably mounted between rollers 3 carried by brackets 4 depending from the platform 5 of a car. As shown in Figs. 1, 2 and 3, two brackets 4, spaced apart, are provided for each side-bar, a pair of rollers for receiving the side-bar being journaled in each bracket.

The bed of the fender is composed of three sections 6, 7 and 8, all of which are covered with a reticulated material, as woven wire, and are successively pivoted together at opposite sides through the projecting ends 9^a of cross-bars 9, two of such bars being fixed to each section. At the pivotal connection of the sections 7 and 8, which are the inner sections of the fender, coil springs 10 are provided, which act to normally hold them separated. To the inner projecting ends 9^a of the bars 9 carried by the section 8, latches 11 are pivotally connected, which are adapted to be engaged with apertured brackets 13 carried at the front of the car, as best shown in Figs. 2 and 3. The section 6 is held detachably fixed at the front of the tubular frame by arms 14 fixed to the lower ends of stems 15, the latter being vertically journaled in bearings of the section 6 and operable by a knob or handle 17 at the top of the fender, as illustrated in detail in Fig. 6. The fender is supported at the outer portion thereof when extended, by chains 18 connected to the dash-board or other fixed point of the car, and to a cross-bar 19 rigidly secured at the under side of the tubular frame.

Suspended under the platform of the car is a casing 20 which contains a locking mechanism for retaining the fender in contracted position. This mechanism comprises a bar 21 passing through an opening at the front of the casing and slidably mounted in bearings 22, the rear end of the bar which is within the casing being formed with a cam traveling over one end of a lever 24, the latter being engaged in the opposite side of its pivot 25 by a latching lever 26 arranged thereover. The lever 26 also passes through the opening within the front of the casing at one side of the bar 21. A spring 27 fixed to the bar 21 and to some fixed point, as for example, one of the bearings 22, forces the bar outwardly until arrested by a stop 28. Pivotaly mounted on a support 29 within the casing 20, is an arm 30, which passes over the latching lever 26, and is provided with a stem 31 best shown in Fig. 2 passing upwardly through the platform of the car, where it carries a head 32 adapted to be depressed by the foot of the motorman. This operation of the stem will act to depress the outer portion of the lever 26 against the ten-

sion of a flat spring 33, pressing the said lever at the opposite side of its pivot. The arm 30 is returned when the head 32 is released, by a spring 34.

- 5 Below the fender at its outer end, is a movable portion 35, having rigidly secured thereto a rearwardly-directed hook 36, said movable portion being carried on inclined rods 37 rigidly secured to it at opposite sides and
10 passing upwardly through roller-boxes 38, each box preferably containing two pairs of embracing rolls 39, as best shown in Fig. 7. The upper extremities of the rods 37 have heads 40 with beveled bottoms which sit flat
15 on the top of the boxes 38 when the movable portion 35 is projected. The heads 40 are slidable within tubular buffers 41, each being provided with buffer springs 42 in its upper end and pivotally connected at its opposite
20 and lower end at 43, this construction adapting the tubular buffers to lie flat on the top of the fender when the latter is extended and the portion 35 depressed, as illustrated in Fig. 2.
25 Slidable above the frame 2 is a releasing member or bar 44, from the center of which rearwardly extends a bar 45, which has a head 46 in alinement with the bar 21, and is limited in its sliding movement by a pin 47
30 passing through a slot 48, as best indicated in Fig. 1.

When the car is in motion with the fender extended, the movable portion 35 which is arranged in advance of the fender proper, on
35 striking an obstruction, moves upwardly and rearwardly under the action of the rods 37, the heads 40 thereof engaging the buffers 41 and automatically turning them into alinement therewith. As these heads move with-
40 in the guides, the springs 42 are encountered, which absorb the force of the blow and react to return the movable portion to depressed position.

In folding the fender up and locking it in
45 this position, the movable portion 37 is raised and carried toward the car together with the fender frame, the latter traveling between the roller supports. This movement of the frame causes the sections 7 and 8
50 of the fender to fold together in the manner shown in Fig. 3, openings in this frame being provided for the reception of the tubular buffers 41. As the hook 36 reaches the latching lever 26, it rides over the bevel end there-
55 of and thus locks the fender against further movement. When desired to extend the fender, the same is disengaged from the locking mechanism, by forcing in the releasing member 44, this operation causing the bar 21
60 to slide within the casing and depress the inner end of the locking lever through the intermediary of the cam 23 riding over one end of the lever 24; or the fender may be released by the motorman from the platform of the
65 car by depressing the head 32 as aforesaid.

Although the fender as hereinbefore described is the preferred embodiment of my invention, I, nevertheless, regard the precise construction as immaterial and consider that I am entitled to such modifications as fall
70 within the scope of the annexed claims.

Having thus described my invention I claim as new and desire to secure by Letters Patent.

1. In combination with a car, an extensible fender comprising a frame carrying a bed composed of a plurality of sections pivotally connected together, a locking mechanism located under the platform of the car for holding the fender in contracted position, and depressible means operable from said platform to operate said mechanism for releasing the fender.

2. In combination with a car having roller bearings located thereunder, an extensible fender comprising a frame movably mounted in said bearings having a bed composed of a plurality of sections pivotally connected together, and means for locking said fender in contracted position.

3. The combination with a fender, of a portion movably mounted thereon below the fender, buffers adapted to lie flat upon the fender when said portion is depressed, and means carried by said portion automatically operating to turn the buffers into alinement therewith when said portion is elevated.

4. An extensible fender having a portion movably mounted with respect thereto at the front end thereof, a locking mechanism, and means carried by said portion for engaging with said locking mechanism to lock the fender in contracted position.

5. An extensible fender having a portion movably mounted with respect thereto at the front end thereof, a locking mechanism, means carried by said portion for engaging with said locking mechanism to lock the fender in contracted position, and means located at the front end of the fender above said movable portion operable to release the fender.

6. The combination with a fender, of a portion movably mounted beneath the front end of the fender, rearwardly-inclined devices rigidly attached to said portion, and buffers carried by said fender for said devices.

7. The combination with a fender, of a portion movably mounted under the front end thereof, rearwardly-inclined devices rigidly attached to said portion, roller bearings for guiding said devices, and buffers coacting with said devices.

8. The combination with a fender, of a portion movably mounted under the front end thereof, rearwardly-inclined devices rigidly attached to said portion, roller bearings for guiding said devices, and tubular buffers pivotally mounted on the fender coacting with said devices.

9. A fender having tubular buffers pivot-
ally mounted thereon, a portion movably
mounted at the forward end of and below
the fender, and means carried by said portion
5 adapted to swing the buffers on their pivots
into alinement therewith when said portion
is elevated.

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

RAFFAELA D'ORONZIO.

Witnesses:

JOHN LOTITO,

NICHOLAS SELVAGGI.