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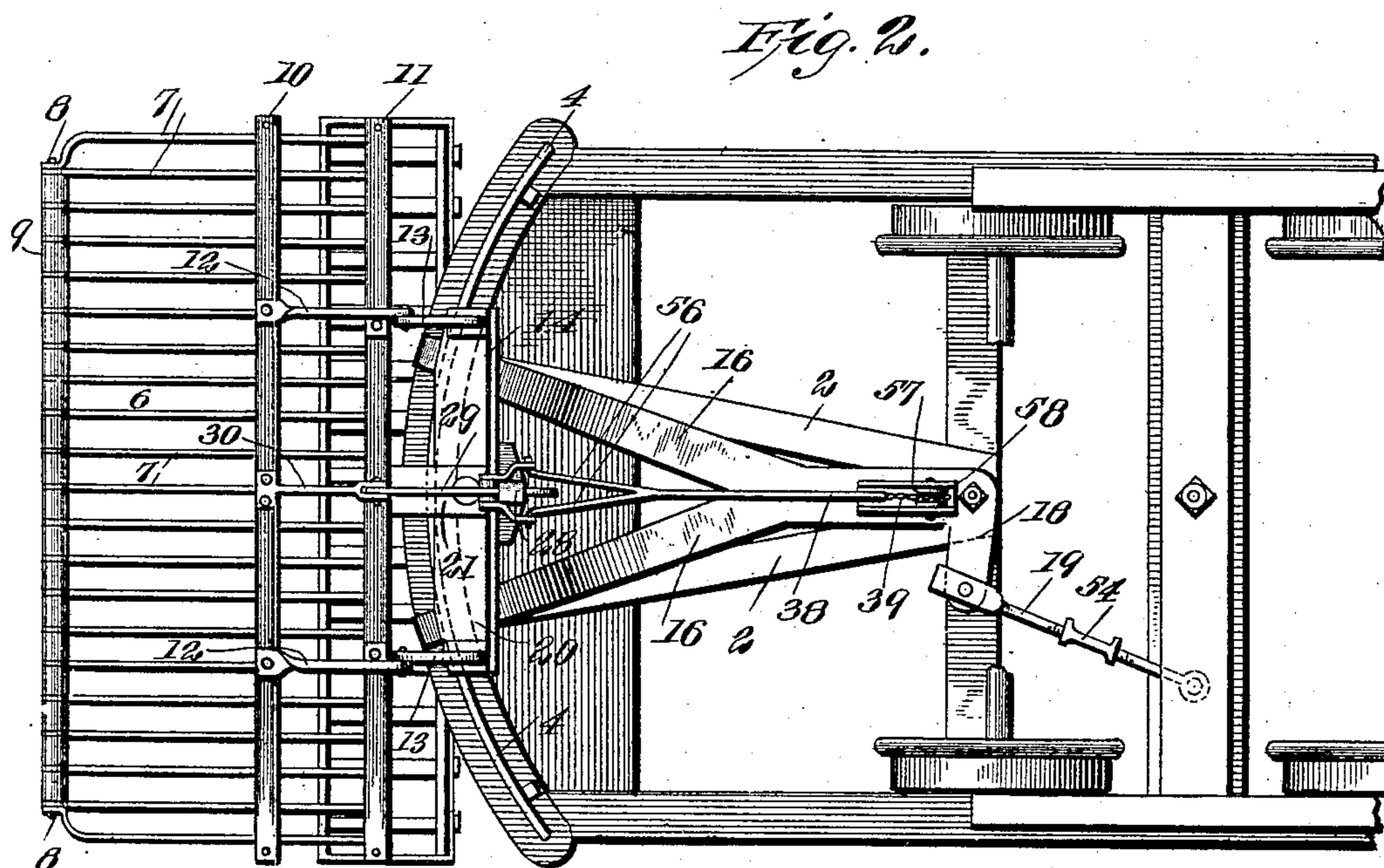
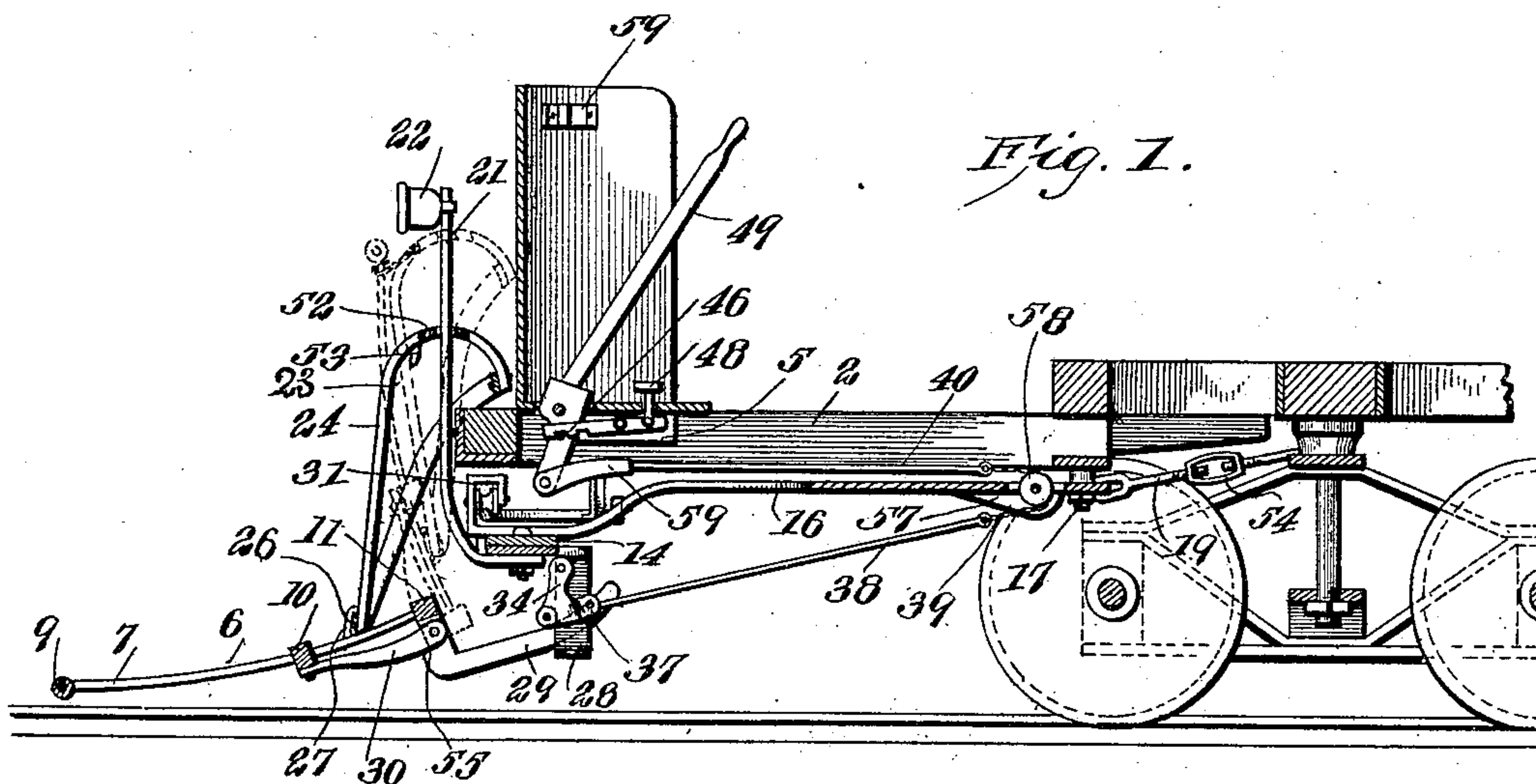
PATENTED OCT. 29, 1907.

J. A. SAGE.

FENDER.

APPLICATION FILED MAR. 12, 1907.

2 SHEETS--SHEET 1.



WITNESSES  
*E. M. Callaghan*  
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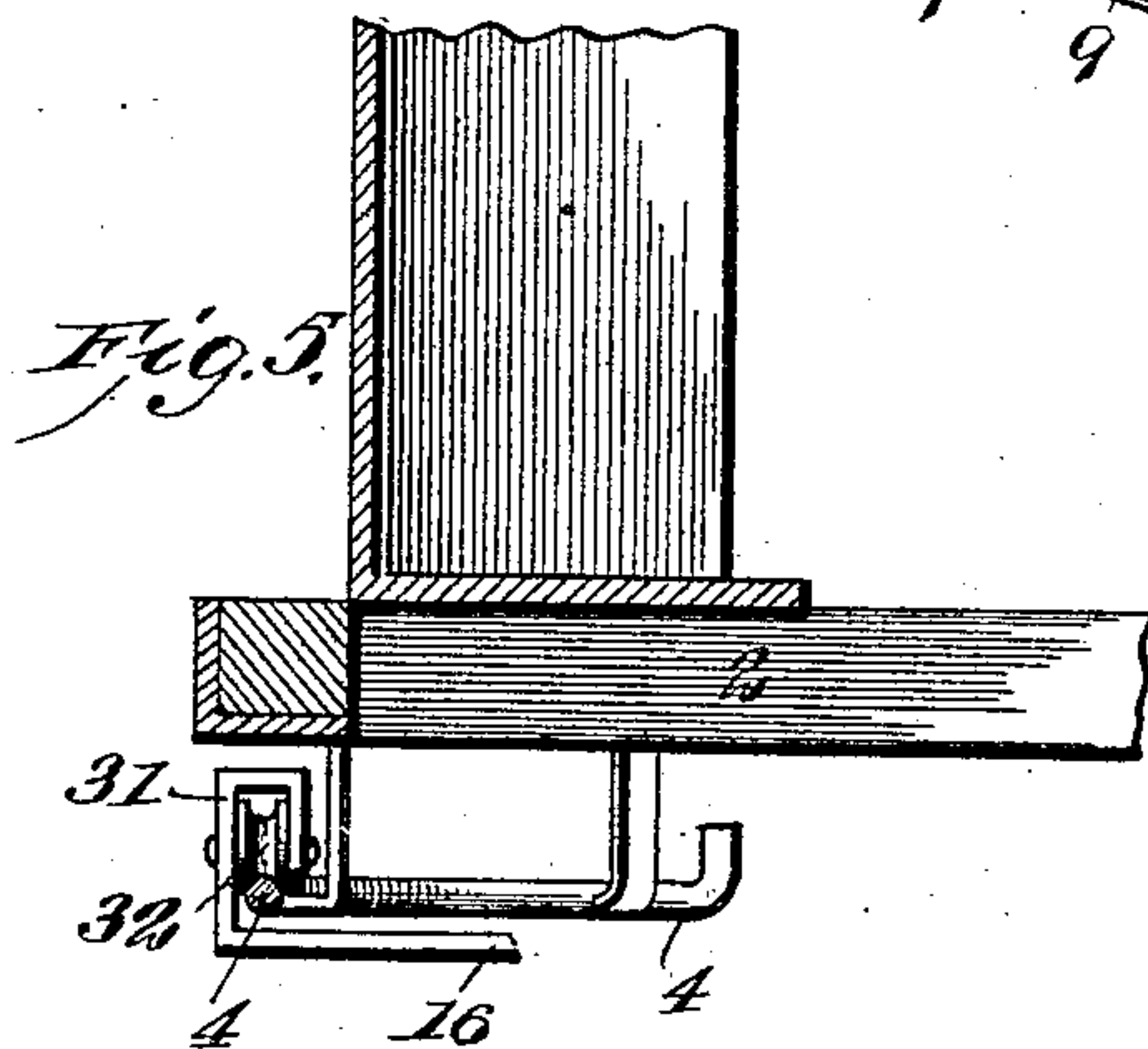
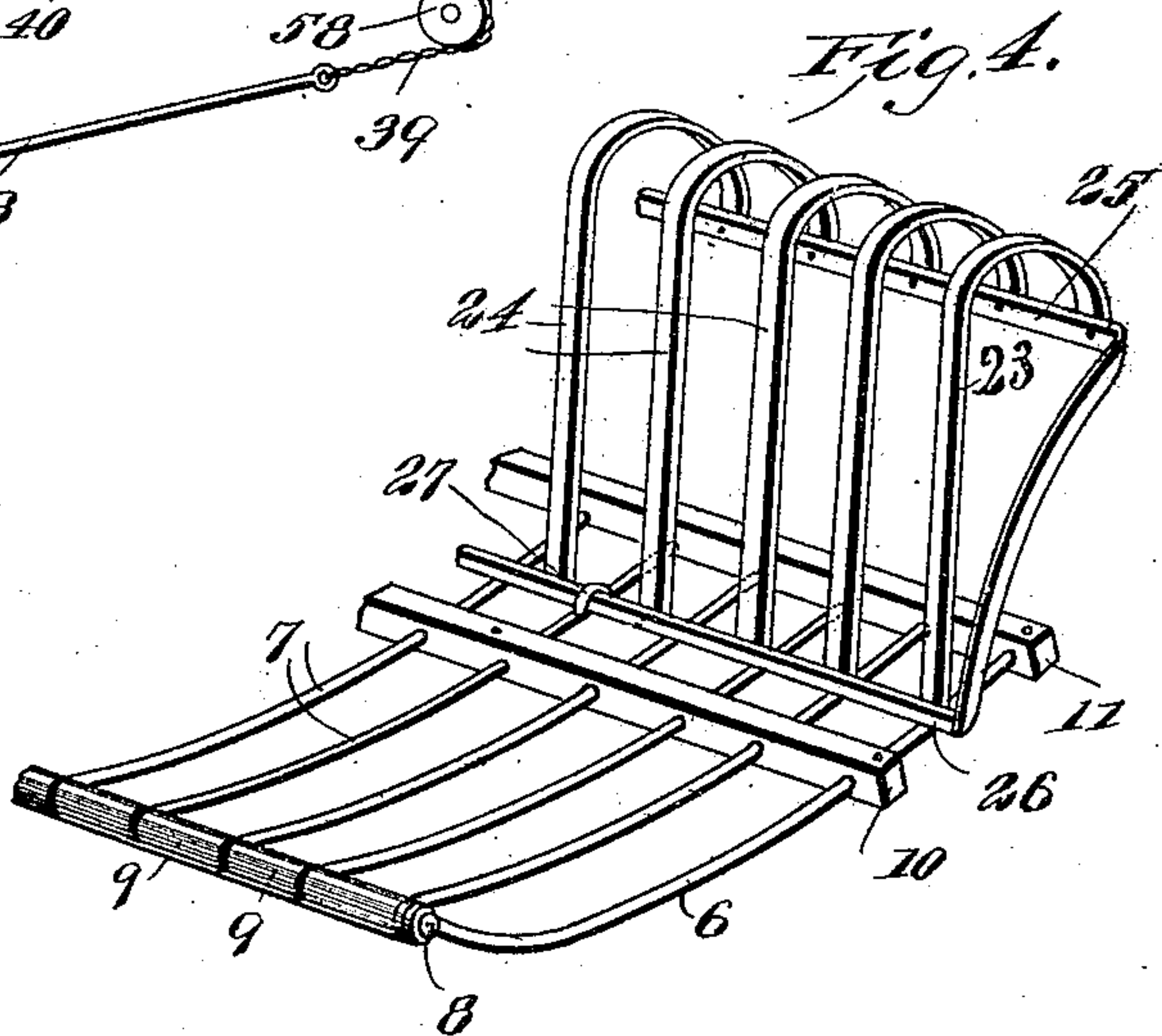
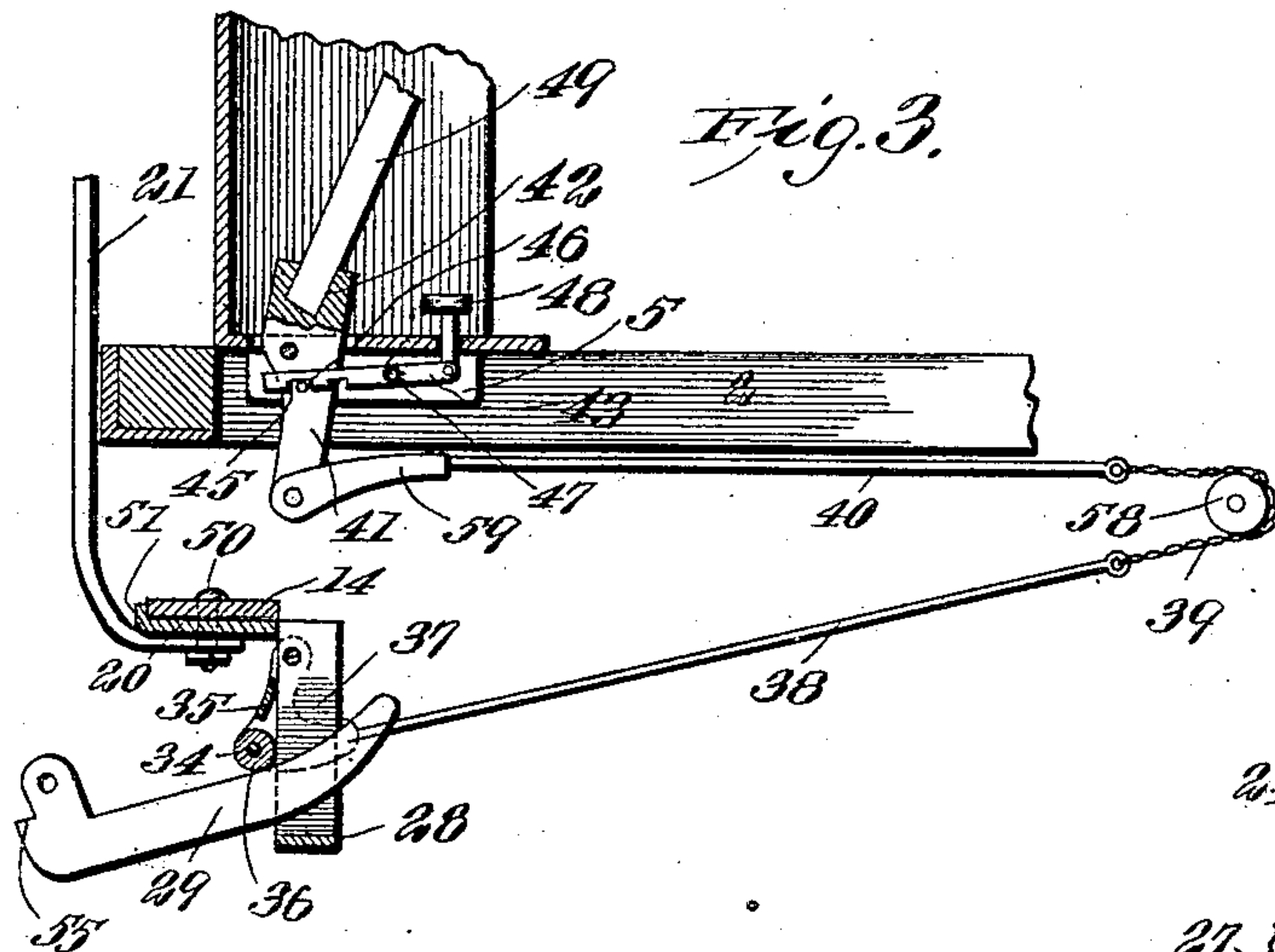
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# UNITED STATES PATENT OFFICE.

JEARUM A. SAGE, OF STRYKER, OHIO.

## FENDER.

No. 869,738.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed March 12, 1907. Serial No. 361,913.

*To all whom it may concern:*

Be it known that I, JEARUM A. SAGE, a citizen of the United States, and a resident of Stryker, in the county of Williams and State of Ohio, have invented certain new and useful Improvements in Fenders, of which the following is a specification.

My invention is an improvement in fenders and consists in certain novel constructions, and combinations of parts hereinafter described and claimed.

10 Referring to the drawings forming a part hereof Figure 1 is a vertical longitudinal section of a part of a car provided with my improvement. Fig. 2 is a bottom plan view. Fig. 3 is an enlarged detail of a part of Fig. 1. Fig. 4 is a partial perspective view of the fender and 15 cushion, and Fig. 5 is a detail sectional view showing the manner of supporting the outer end of the yoke.

In the present embodiment of my invention a yoke 16 is pivoted by its body portion to the under side of a platform 2 of a car as at 17, and the arms of the yoke 20 are turned upwardly at the ends to form overhanging brackets 31, in which are journaled rollers 32 engaging a segmental rail 4 secured to the bottom of the platform at the outer end thereof.

25 A cross-plate 14 is secured to the lower face of the ends of the arms, and a second cross-plate 20 is connected to the center thereof by means of a bolt 50, the said cross-plate 20 being provided with lugs 51 at each end engaging the cross-plate 14 for preventing swinging movement of the cross-plate 20 with respect thereto.

30 The fender 6 comprises a plurality of spaced rods 7, connected at their outer ends by a rod 8 having spacing rollers 9 journaled thereon between the rods 7 and connected at their rear ends by bars 10 and 11, the bars 10 and 11 being spaced apart from each other. Hinge sections 12 are secured to the fender, the other sections 13 35 of the hinges being connected with the ends of the cross-plate 20.

40 A cushion 23 is arranged above and at the rear of the fender, the said cushion comprising a plurality of substantially vertical curved resilient bars 24 connected at their top by a bar 25 and at their bottom by a bar 26. Bearings 27 are secured to the rods 7 of the fender at suitable points, and the bottom connecting bar 26 of the cushion engages the said bearings. A bracket 45 21 is fixed to the center of the cross-plate 20 and projects upwardly therefrom, the said bracket traversing a bearing 52 in the cushion, the upper end of the bracket being adapted to support a head-light 22.

50 It will be obvious from the description that when the fender is turned upward on its hinge connection the cushion will be lifted, being guided in its upward movement by the bracket 21, and when the fender is swung into position against the cushion, it may be retained in such position by a hook 53 connected with the 55 cushion and engaging the rod 8 of the fender.

The yoke 16 is provided near its pivotal connection with a lateral arm 18, connected by a link 19 with a suitable portion of the adjacent truck, a turn-buckle 54 being interposed in the length of the link whereby to adjust the same. It will be evident that when the 60 truck swings with respect to the car as in rounding a curve the yoke will also swing on its pivotal connection by means of the link, thus swinging the fender.

A stirrup 28 depends from the cross-plate 20, and an arm 29 hinged to a bracket 30 on the fender is slidable 65 through the stirrup, the arm 29 being provided with a lug 55 for engaging the bracket 30 whereby to limit the downward movement of the fender with respect to the said arm. Levers 35 are pivoted on each side of the stirrup and the said levers are provided with forward 70 projections 34, a roller 36 being journaled between the projections, the said roller normally resting upon the arm 29.

The levers are also provided with rearward projections 37, and to the rearward projections are connected 75 the forked ends 56 of a link 38, the rear end of the link being connected with a chain 39, which passes upward through an opening 57 in the yoke, a pulley 58 being journaled in the opening, and is connected with the rear end of a second link 40 arranged above the yoke, 80 the front end of the link 40 being forked as at 59, and pivoted to a swinging lever 41 pivoted in a bracket 5 depending from the platform. The upper end of the swinging lever 41 extends above the upper surface of the platform and is provided with a socket 42, for en- 85 gagement by a hand lever 49 whereby to swing the swinging lever.

A catch 43 is pivotally mounted on the bracket 5, the rear end of the catch being provided with a treadle 48 projecting above the platform and the front end 90 with notches 45 adapted to engage a pin 46 in the swinging lever 41 when the said lever is swung forwardly, a spring 47 being provided for normally retaining the catch in its engaging position.

95 It will be understood that when the swinging lever 41 is in its forward position, and a notch of the catch engages with the pin, the roller 36 engages with the upper edge of the arm 29, pressing the said arm downwardly to the lowest part of the stirrup. When the arm is in this position the bracket 30 rests upon the lug 100 55 of the arm, thus retaining the fender out of contact with the track. When, however, it is desired to drop the fender into contact with the track, a pressure upon the treadle 48 will release the pin from the notch, thus permitting the swinging lever 41 to swing rearwardly, 105 and permitting the arm 29 to move upwardly in the stirrup thus dropping the fender into contact with the track. When it is desired to again elevate the fender the hand lever 49 is inserted in the socket and the lever 41 is swung forwardly until a notch engages with the 110



pin. The hand lever may then be removed from the socket, and placed in the support 59 provided on the platform.

It will be understood that the car is provided with a fender at each end in the ordinary manner and that the fender when not in use is swung upward into contact with the cushion and retained in place by the hook; the head-light being mounted on the guide 21 partakes of the swinging movement of the yoke, thus bringing its light onto that portion of the track which is to be immediately traversed by the car.

The yoke is supported in its swinging movement by means of rollers engaging the rail on the front of the platform and the entire fender may be easily and quickly removed for repairs by removing the bolt 50 connecting the cross-plate 20 with the cross-plate 14. The mechanism for dropping the fender into contact with the track is not impeded by the swinging movement of the fender, and the fender may be dropped on a curve as easily and as effectively as on a straight section of track.

By engaging the pin 46 with different notches of the catch 43, the fender may be supported at different heights from the track.

What I claim is—

1. The combination with the car and the trucks thereof, of a yoke pivotally connected to the under side of the car and provided with an opening, a pulley journaled in the opening, a cross-plate connected with the arms of the yoke, a fender having a hinged connection with the cross-plate, a stirrup depending from the cross-plate at the center thereof, an arm extending from the fender and passing through the stirrup, levers pivoted to each side of the stirrup, and each provided with a forward projection, a roller journaled between the projections and resting on the arm, a link connected with the levers and arranged below the yoke, a second link above the yoke, a chain connecting the adjacent ends of the links and passing over the pulley in the opening in the yoke, a swinging lever on the bracket and provided in its upper end with a socket, a spring actuated catch provided with a notch pivoted in the bracket, a pin in connection with the swinging lever for engaging the notch when the lever is swung forwardly, a treadle for operating the catch, a lever for engaging the socket whereby to swing the lever, and a connection between the yoke and the adjacent truck, whereby to impart the swinging motion of the truck to the yoke.

2. The combination with the car and the trucks thereof, of a yoke pivotally connected to the under side of the car, a fender hinged to the arms of the yoke, a stirrup depending from the car, an arm projecting from the fender and passing through the stirrup, a lever pivoted to the stirrup and provided with a roller for engaging the arm whereby to lift the fender out of contact with the track, a swinging lever on the car, a connection between the lever and the lever on the stirrup, a spring actuated catch for engaging the swinging lever whereby to retain the fender out of contact with the track, a treadle for operating the catch to release the swinging lever, means for swinging the swinging lever whereby to lift the fender out of contact with the track, and a connection between the yoke and the adjacent truck whereby to impart the swinging motion of the truck to the fender.

3. The combination with the car and the trucks thereof, of a yoke pivotally connected to the under side of the car, a fender hinged to the arms of the yoke, a stirrup depending from the car, an arm projecting from the fender and passing through the stirrup, a roller engaging the arm for lifting the fender out of contact with the track, a swinging lever for operating the roller, a spring actuated catch for engaging the lever whereby to retain the fender in its elevated position, a treadle for operating the catch to release the swinging lever, means for swinging the lever whereby to return the fender to its elevated position, and

a connection between the yoke and the adjacent truck whereby to impart the swinging movement of the truck thereto.

4. The combination with the car and the trucks thereof, of a yoke pivotally connected to the under side of the car, a fender hinged to the arms of the yoke, a stirrup depending from the car, an arm projecting from the fender and passing through the stirrup, means engaging the arm to retain the fender out of contact with the track, a spring actuated catch for locking the retaining means in operative position, a treadle for releasing the catch, means for returning the retaining means to operative position, and a connection between the yoke and the adjacent truck whereby to impart the swinging motion of the truck to the yoke.

5. The combination with the car and the trucks thereof, of a yoke pivotally connected by its body portion to the under side of the car, a fender hinged to the arms of the yoke, said fender comprising a plurality of spaced rods, bars connecting the rods, a cushion comprising a plurality of curved resilient bars connected at each end by cross-bars one of said cross-bars being engaged by bearings fixed to rods of the fender, a guide in connection with the yoke for the cushion and having a sliding connection therewith, a hook on the cushion for retaining the fender in contact therewith, and a connection between the yoke and the adjacent truck whereby to impart the swinging movement of the truck to the yoke.

6. The combination with the car, of a fender hinged to the end thereof, a substantially vertical resilient cushion having its lower end hinged to the fender and arranged at the rear thereof, a guide for the cushion connected with the fender and with which the cushion has a sliding connection, and a hook on the cushion for engaging the fender whereby to retain it in contact therewith.

7. The combination with the car and the trucks thereof, of a yoke mounted for swinging movement beneath the car, a fender hinged to the arms of the yoke, a cushion at the rear of the fender and having a hinged connection therewith, a guide for the cushion connected with the yoke, means for normally retaining the fender out of contact with the track, means on the platform of the car for releasing the retaining means, and a connection between the yoke and the adjacent truck for swinging the fender in unison with the truck.

8. The combination with the car and the trucks thereof, of a yoke mounted for swinging movement beneath the car, a fender hinged to the arms of the yoke, a cushion at the rear of the fender, means for retaining the fender normally out of contact with the track, means on the platform of the car for releasing the retaining means, and a connection between the yoke and the adjacent truck for swinging the fender in unison with said truck.

9. The combination with the car and the trucks thereof, of a yoke mounted for swinging movement beneath the car, a fender hinged to the arms of the yoke, a vertically movable cushion having a hinged connection with the fender, a guide for the cushion connected with the yoke, and means on the cushion for holding the fender when it is swung upwardly thereagainst.

10. The combination with the car and the trucks thereof, of a yoke mounted for swinging movement beneath the car, a fender hinged to the arms of the yoke, and a connection between the yoke and the adjacent truck for swinging the fender in unison with the swinging of the truck.

11. The combination with the car of a fender hinged thereto, a vertically movable cushion having a hinged connection with the fender and arranged near the rear thereof, a guide for the cushion, and means on the cushion for holding the fender when it is swung upward thereagainst.

12. The combination with the car and the trucks thereof, of a yoke having its body portion pivotally connected with the under side of the car, brackets provided with overhanging rollers at the ends of the arms of the yoke, a segmental rail on the platform with which the rollers coact, a lateral arm on the yoke body, an adjustable connection between the arm and the adjacent truck, and a fender hinged to the arms of the yoke.

13. The combination with the car and the trucks there-



of, of a yoke pivotally connected by its body portion with the car, a fender hinged to the arms of the yoke, a segmental rail on the platform, rollers connected with the yoke arms for engaging the rail, a lateral arm on the yoke body and  
5 an adjustable connection between the arm and the adjacent truck.

10 14. The combination with the car, of a fender hinged to the end thereof, a stirrup depending from the car, an arm projecting from the fender and passing through the stirrup, means engaging the arm to retain the fender out of contact with the track, a spring actuated catch for locking the retaining means in operative position, a treadle

for releasing the catch, and means for returning the retaining means to operative position.

15 15. The combination with the car of a fender, a connection between the adjacent truck and the fender whereby to cause said fender to swing in unison with the truck, means for normally retaining the fender out of contact with the track, and means on the car for releasing said retaining means.

JEARUM A. SAGE.

Witnesses:

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MARGARET FARBER.