

M. HAUSLE.

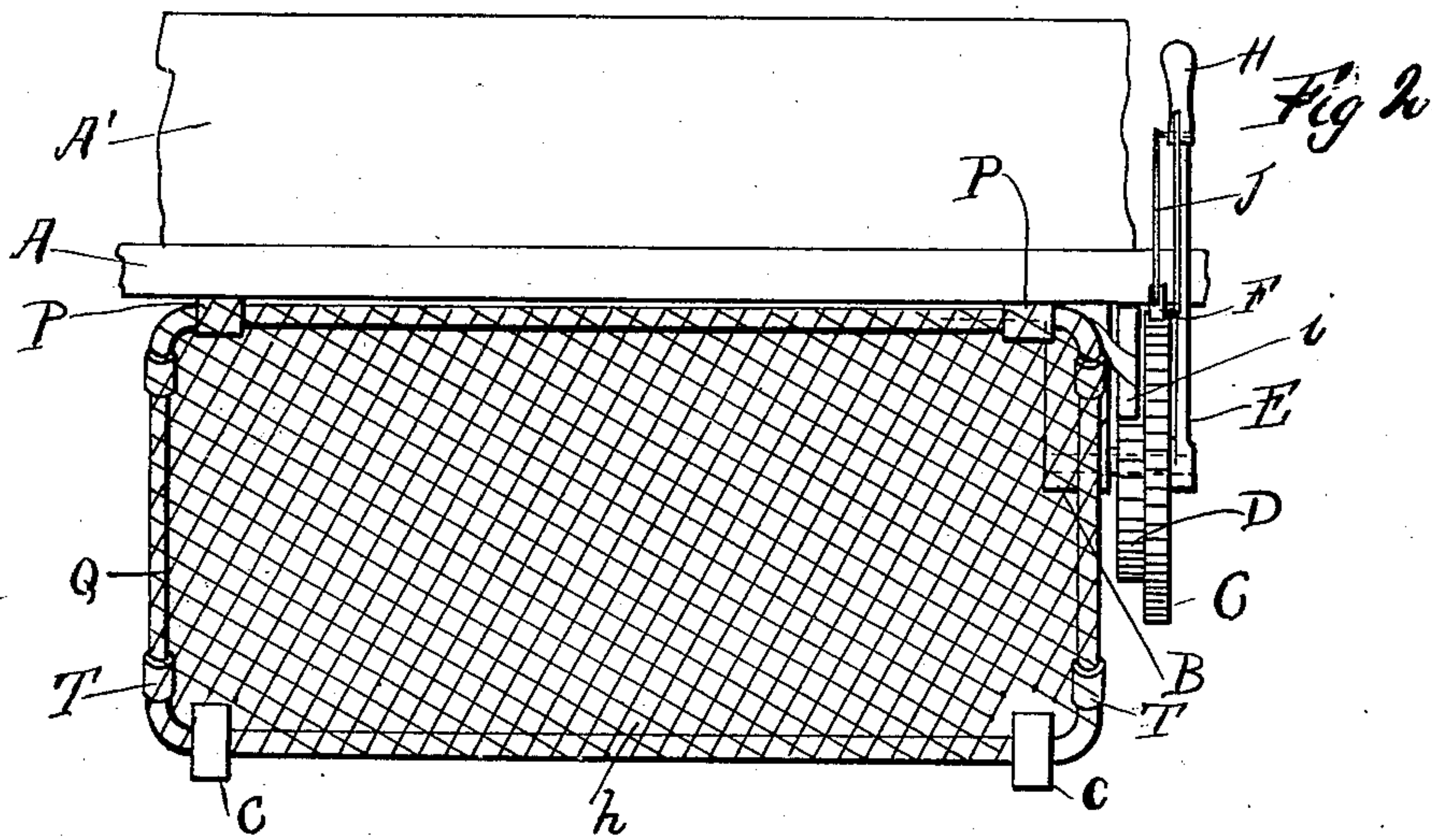
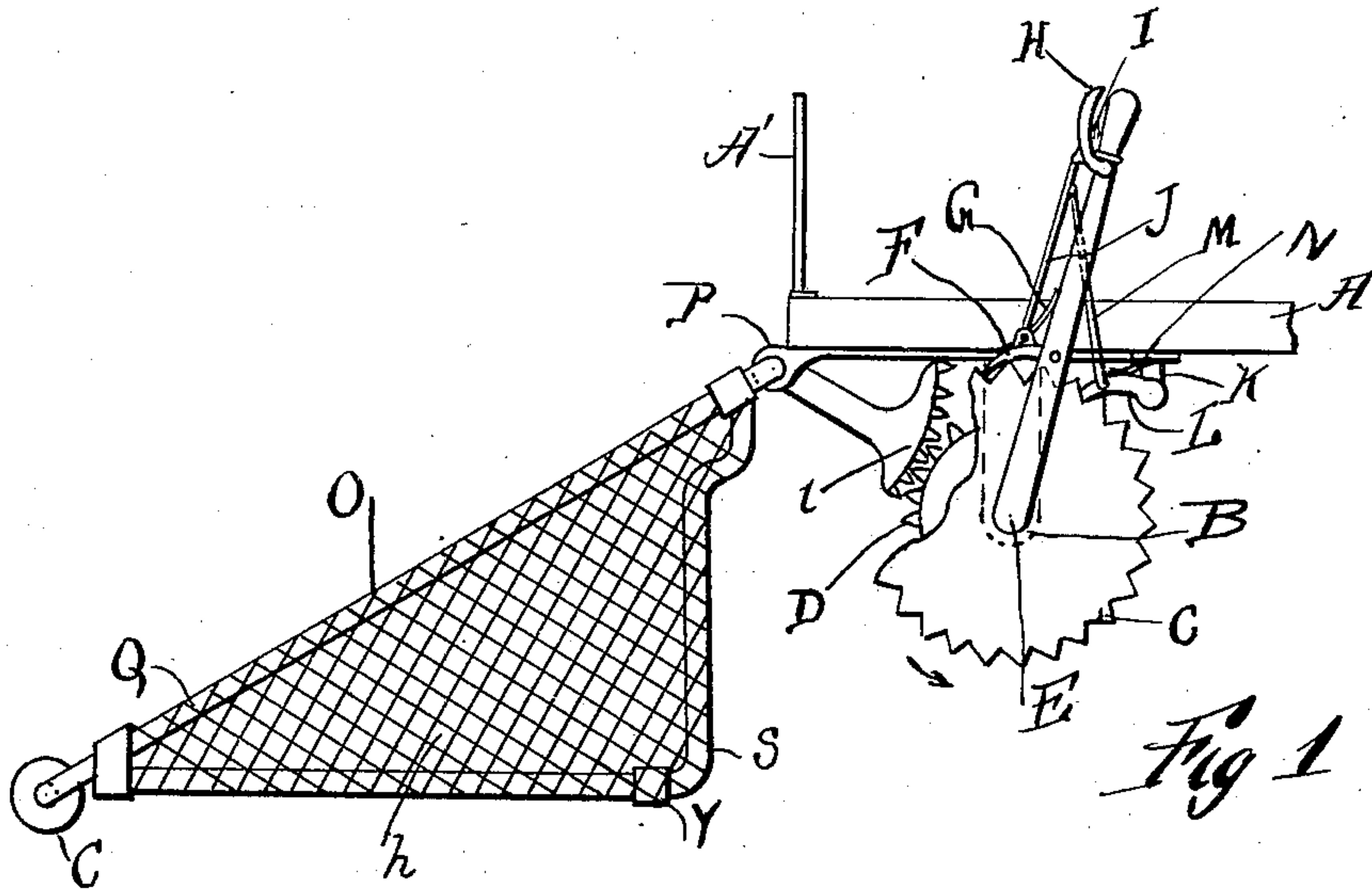
FENDER.

APPLICATION FILED MAY 26, 1908.

917,599.

Patented Apr. 6, 1909.

2 SHEETS—SHEET 1.



WITNESSES

Francis W. Cock  
S. M. Gallagher

INVENTOR

Martin Hausle

BY

W. P. Williamson

ATTORNEY

APPLICATION FILED MAY 26, 1908.

Patented Apr. 6, 1909.  
2 SHEETS—SHEET 2.

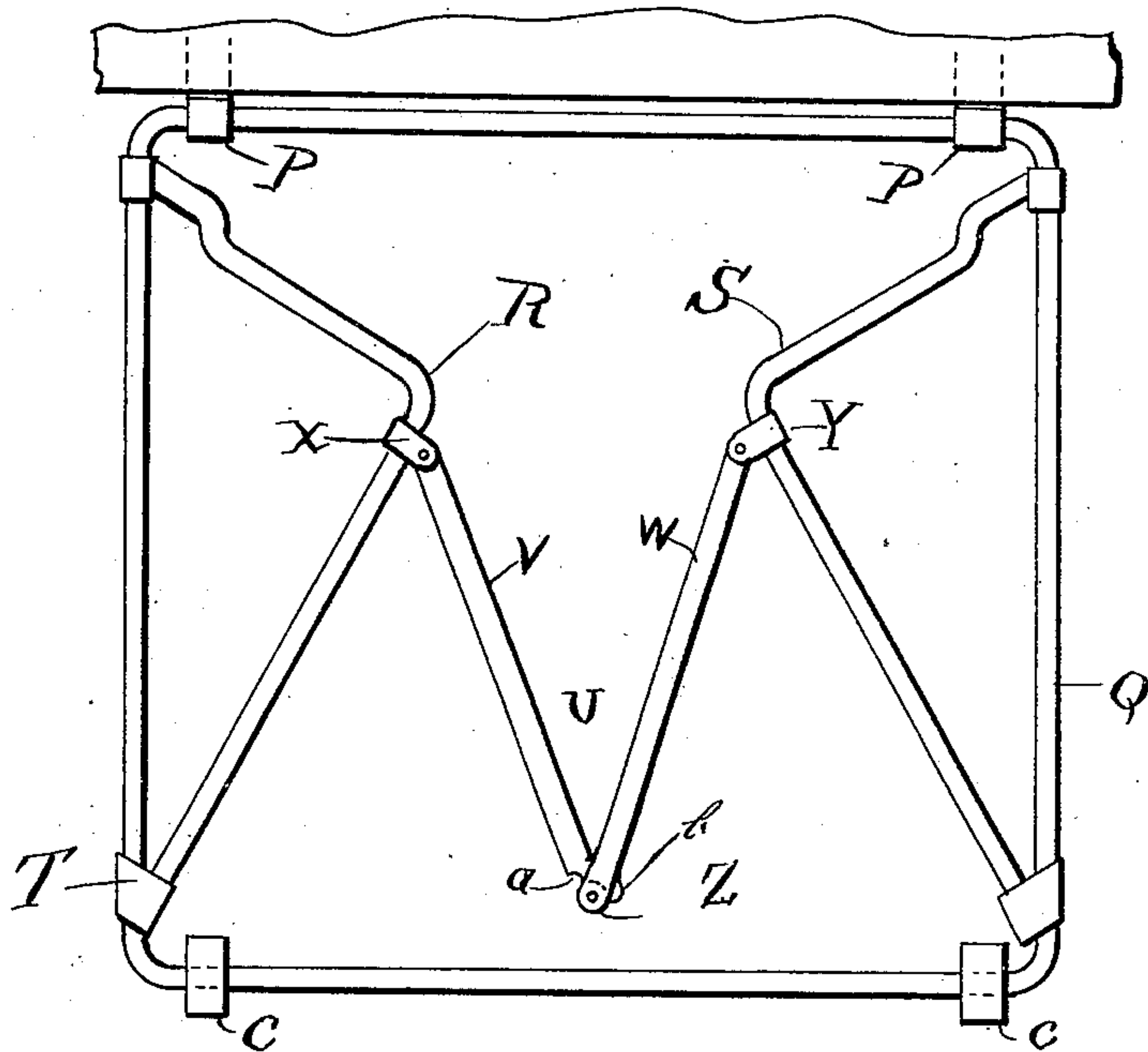
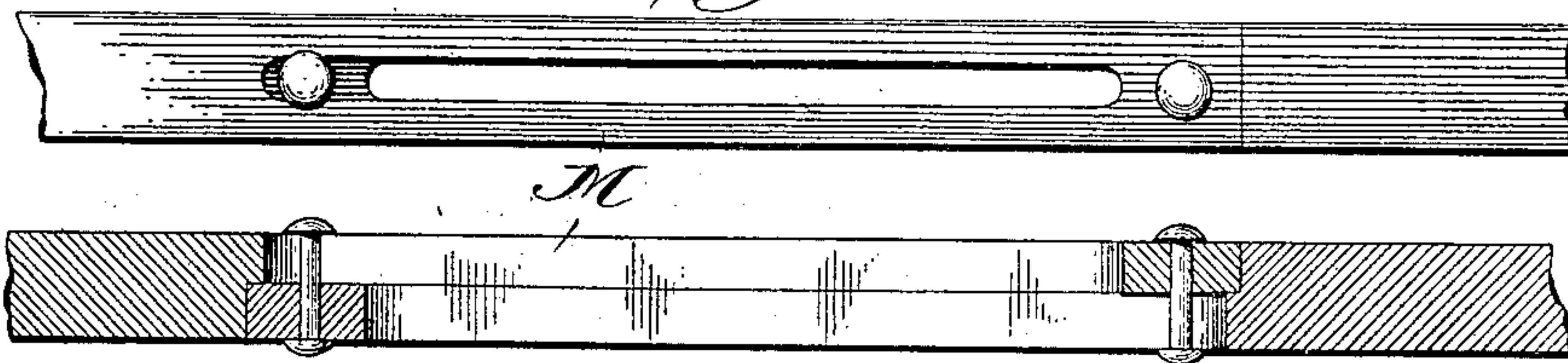


Fig. 3.

*Fig. 4.*



WITNESSES  
Francis W. Pocock  
S. M. Gallagher

INVENTOR  
*Martin Hausle*  
BY

W. P. Williamson

**ATTORNEY**



# UNITED STATES PATENT OFFICE.

MARTIN HAUSLE, OF PHILADELPHIA, PENNSYLVANIA.

## FENDER.

No. 917,599.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed May 26, 1908. Serial No. 435,094.

*To all whom it may concern:*

Be it known that I, MARTIN HAUSLE, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Fenders, of which the following is a specification.

My invention relates to a new and useful improvement in fenders, and has for its object to provide an exceedingly simple and effective device of this character by means of which the fender may be carried a suitable distance upon the surface of the street or tracks, but which may be readily and quickly dropped until it comes almost in contact with the surface of the street.

Another object of my invention is to provide a fender which may be folded or closed up against the dash board of a car so that it will take but very little space when not in use.

A still further object of my invention is to provide means for turning the fender up until it is a suitable distance above the road bed.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation of my improved fender, showing the actuating mechanism, a portion of which is broken away secured to the front portion of the trolley car.

Fig. 2 is a front elevation of a fender, and, Fig. 3 is a view showing the fender folded. Fig. 4, is a side view in elevation of a two-piece rod which connects one of the dogs with the trigger of the lever.

In carrying out my invention as here embodied, A represents the fixed body of the car having an upright portion or dash board A', at the end of the ordinary construction. I attach suitable brackets B on the under face of the body of the car A, for carrying the ratchet wheel C and the gear wheel D. These wheels are formed from a single piece of metal or there may be two separate wheels securely and permanently fastened together. Pivoted to the lower end of the bracket B is the lever E, to which is secured the dog F,

having the spring G resting against it, so as to constantly keep it in engagement with the teeth upon the ratchet wheel C. Pivoted to the upper end of the lever E is the trigger H, having a spring I, interposed between it and the handle of the lever E, so as to virtually hold it away from the handle of the lever E. Secured to the trigger H is one end of the rod J, the opposite end of this rod being fastened to the dog F.

K indicates a depending bracket, to which is pivoted the dog L, which is adapted to engage with the teeth of the ratchet wheel C, for holding said ratchet wheel in any desired position, and to this dog is secured one end of the rod M, the opposite end of which is fastened to the rod J, in proximity to the trigger H. The rod M is formed of two parts slidably fastened together. Secured to the depending bracket K, and resting against the upper surface of the dog L, is the spring N, which constantly presses the dog L downward or into engagement with the teeth on the ratchet wheel C.

O indicates a fender which is secured to the car by means of the brackets P. The fender O is composed of the frame Q having the triangular shaped arms R and S, movably secured to the sides thereof, by means of the fastening members T.

U indicates a brace composed of the two arms V and W. One end of the arm V is attached to the side arm R by the bracket X, and one end of the arm W is attached to the side arm S by the bracket Y. The other two ends of the arms V and W are pivoted together, as indicated at Z. On the arm V in proximity to the point Z, is formed the notch a and on the arm W, in proximity to the point Z, is formed the projection b adapted to engage with the notch a, when the brace U is opened or one arm is brought into a straight line with the other, thus limiting the movement of the brace U.

On the front portion of the frame Q, are fastened the small wheels c, which are adapted to rest upon the surface of the rails, when the fender is dropped down. The netting h extends upward and inward, from the front portion of the frame Q to the top thereof and from the sides of the frame Q, downward and to the rearward to the triangular shaped arms R and S.

Secured to the rear portion of the frame Q, in proximity to one of these sides, is the sector gear i, which engages with the ratchet



wheel D, for the purpose hereinafter described.

To manipulate my fender the lever E is moved backward which will draw the dog F 5 around a certain distance on the ratchet wheel C engaging with some of the teeth, at the same time the ends of the rod M will move toward one another inasmuch as said rod is formed of two parts slidably secured 10 together thus allowing the dog N to remain in engagement with the teeth of the ratchet wheel, then by drawing the lever E forward the ratchet wheel C and the gear wheel D will turn in the direction of the arrow ad- 15 jacent thereto, this will cause the sector gear I to take a downward motion which will raise the front end of the fender upward. When any object is in front of the car which it will be impossible to prevent said car from 20 hitting, the motorman by pressing the trigger H against the action of the spring I will raise the dogs F and L simultaneously through the medium of the rods I and M and this will allow the fender to drop downward 25 until the wheels c come in contact with the surface of the rails, thus bringing the front end of the fender in proximity to the road bed.

To close or fold the fender, the brace U is 30 moved toward the front end of the fender, when the side arms R and S may be moved upward from the position shown in Fig. 1 to the position shown in Fig. 3; the fender may then be turned upward against the dash 35 board A', and held there by a chain, guard or hooks.

Of course I do not wish to be limited to the exact details of construction here shown, as these may be varied within certain limits 40 without departing from the spirit of my invention.

Having thus fully described my invention what I claim as new and useful is—

1. In combination with a car, suitable 45 brackets suspended beneath the body of the car in proximity to its front end, a ratchet wheel and a gear wheel securely fastened together so that they may work in unison, a lever pivoted to the bracket, a dog pivoted 50 to said lever adapted to engage with the teeth of the ratchet wheel, a spring for hold-

ing said dog in engagement with said ratchet wheel, a trigger pivoted to the lever in proximity to its upper end, a spring for normally holding said trigger away from the 55 handle of the lever, a rod connecting the dog and trigger, a depending bracket, a dog pivoted thereto and adapted to engage with the teeth on the ratchet wheel, a spring for normally holding said dog in engagement 60 with the ratchet wheel, a two-piece connecting rod, said pieces slidably secured together, one end of said rod secured to the dog, the opposite end attached to the first named rod, a fender frame, means for mov- 65 ably securing said fender frame to the front of the car, angular shaped side arms movably secured to the sides of said fender frame, a brace composed of two arms movably fastened to said side arms, wheels attached to 70 the front portion of the fender frame, and a sector gear securely fastened to the top of the fender frame in proximity to one of its sides adapted to engage with the teeth on the gear wheel, as shown and described. 75

2. In combination with a car, a ratchet wheel, a gear wheel, means for securing said wheels beneath the body of the car, a lever, a dog pivoted to said lever, means for keep- 80 ing said dog in engagement with the teeth of the ratchet wheel, a second dog, means for securing it to the car, means for keeping said dog in engagement with the teeth on the ratchet wheel, a trigger pivoted to the lever in proximity to its upper end, means for con- 85 necting said trigger with the dogs so that they may be lifted from engagement with the teeth in unison, a fender frame so constructed as to be readily folded or closed, wheels secured to the front portion of the 90 fender frame which will rest on the surface of the rails when the fender is dropped down, and a sector gear secured to the fender and engaging with the teeth on the gear wheel, substantially as and for the purpose set forth. 95

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

MARTIN HAUSLE.

Witnesses:

EDW. W. AUSTIN,  
S. M. GALLAGHER.