

No. 627,713.

Patented June 27, 1899.

C. B. WOOD.

CAR FENDER.

(Application filed July 18, 1898.)

(No Model.)

2 Sheets—Sheet 1.

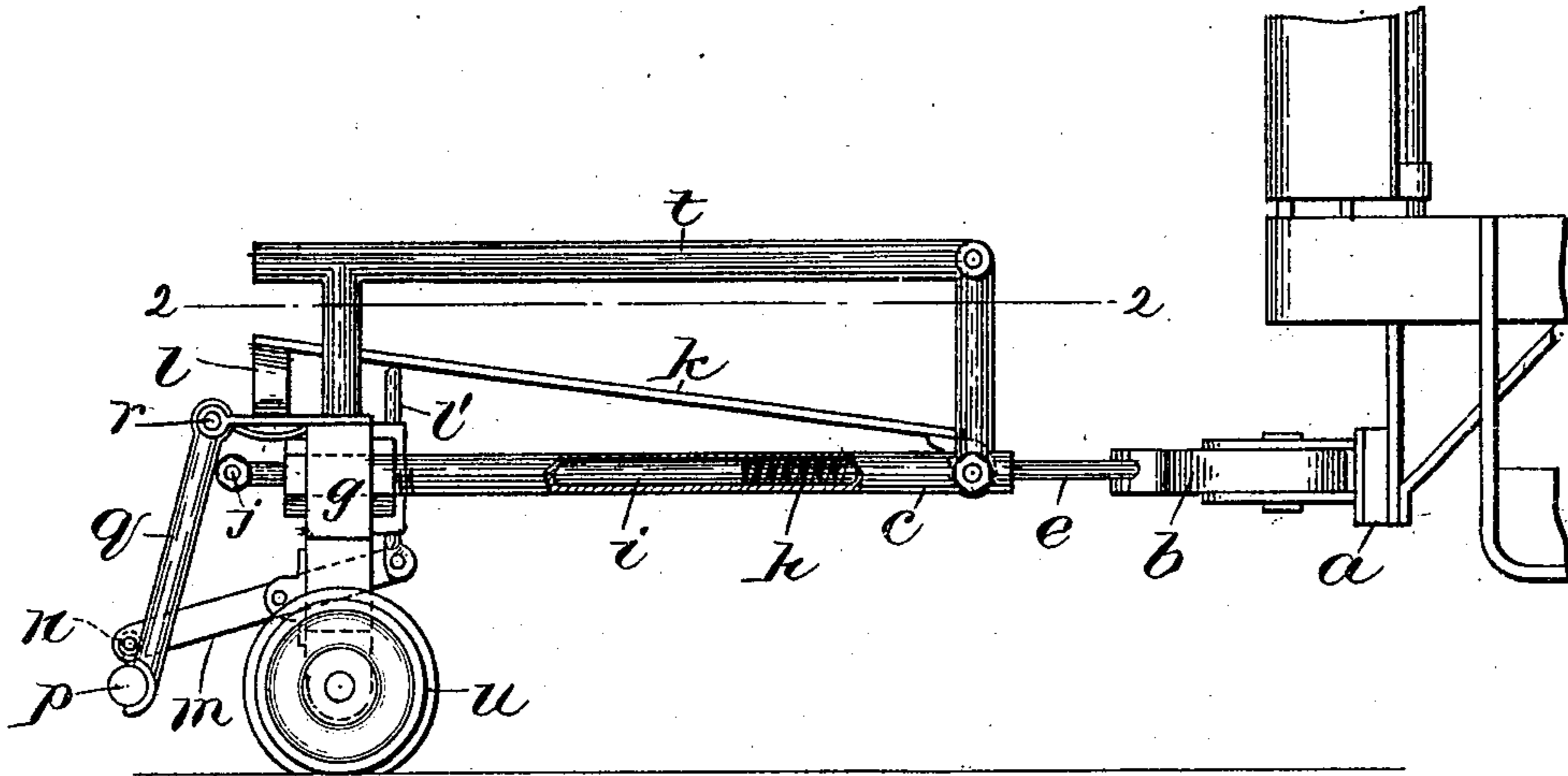


Fig. 1.

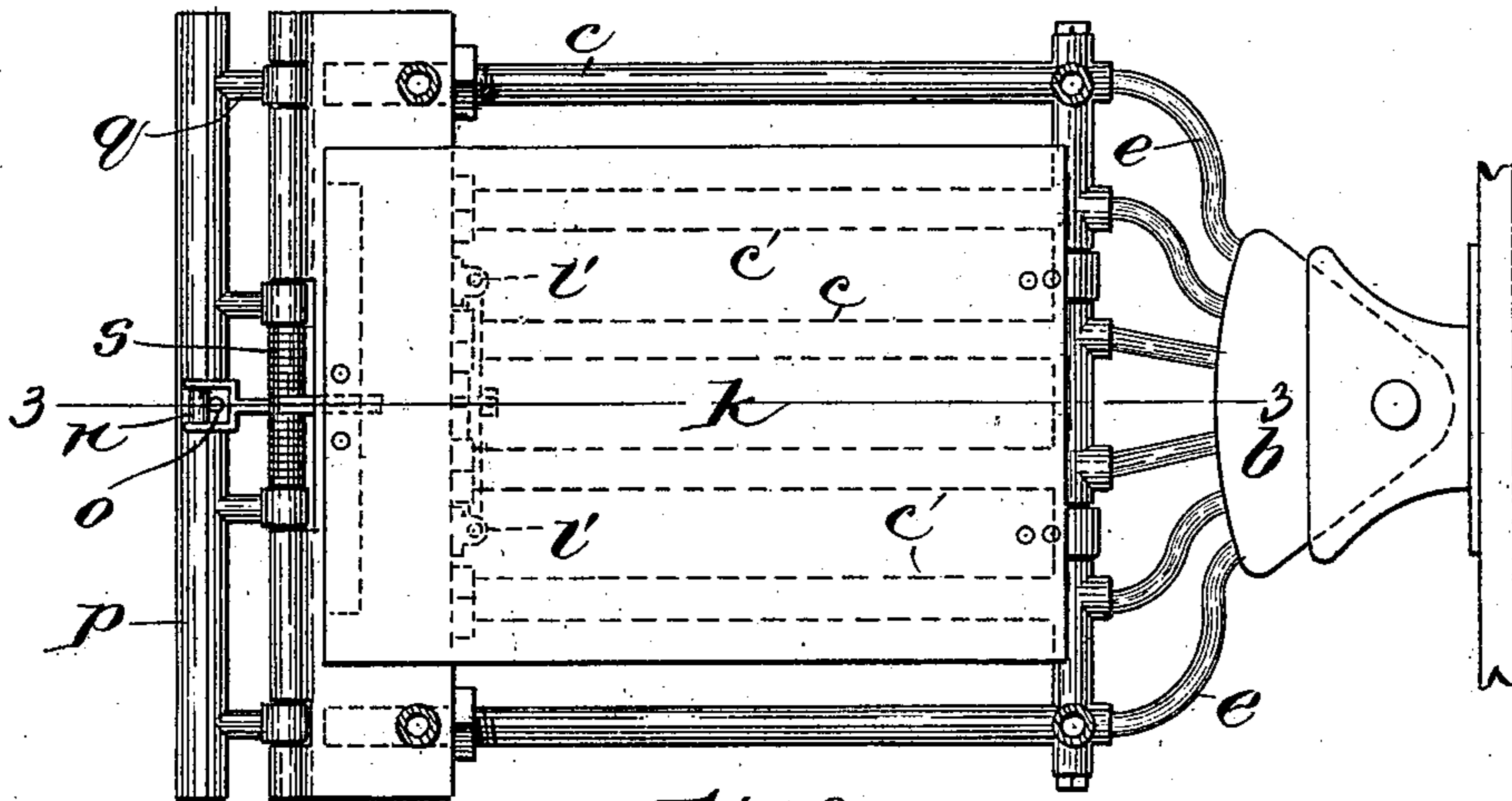


Fig. 2.

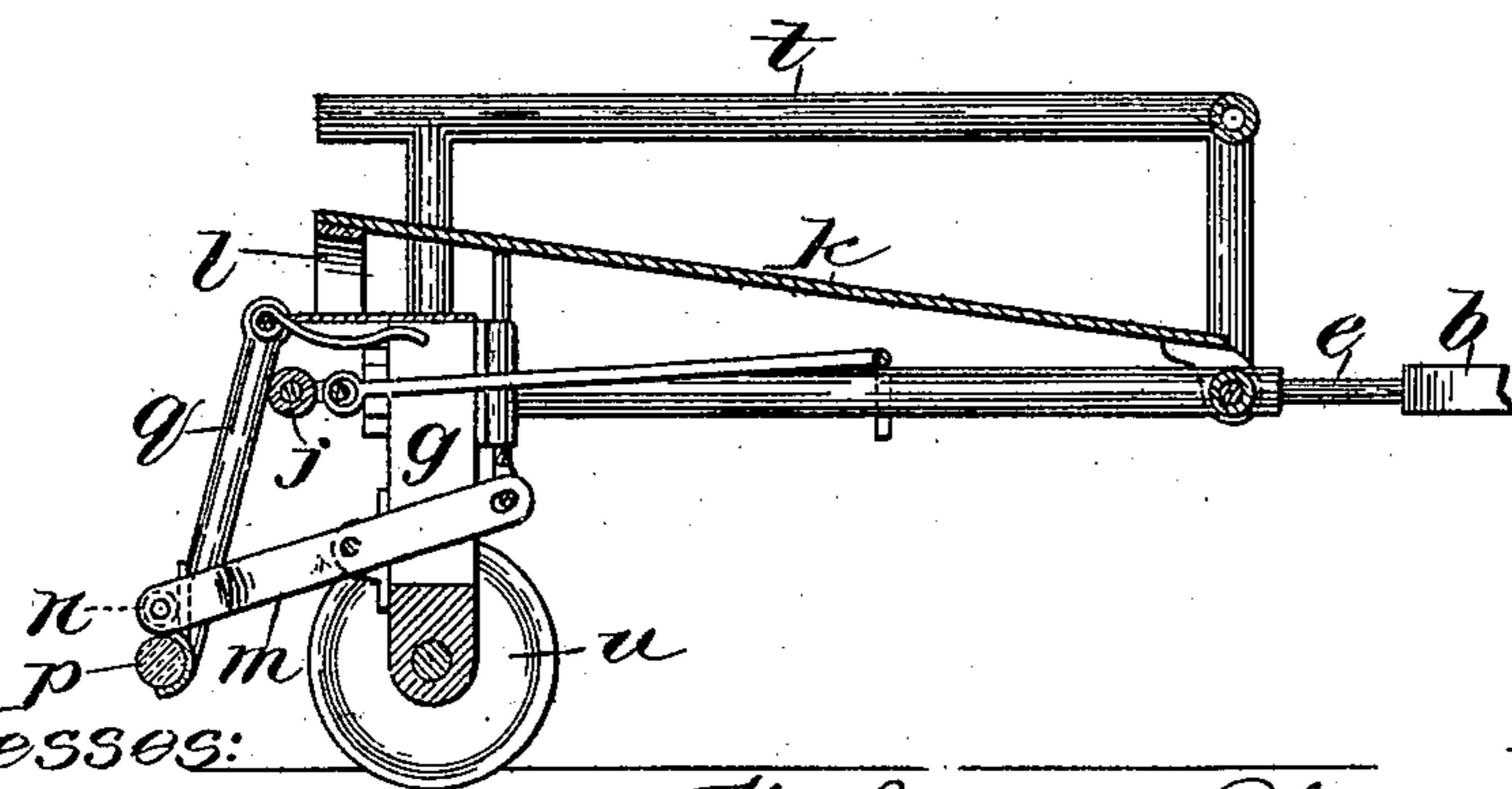


Fig. 3.

Witnesses:

H. B. Davis.

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Inventor:

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2 Sheets—Sheet 2.

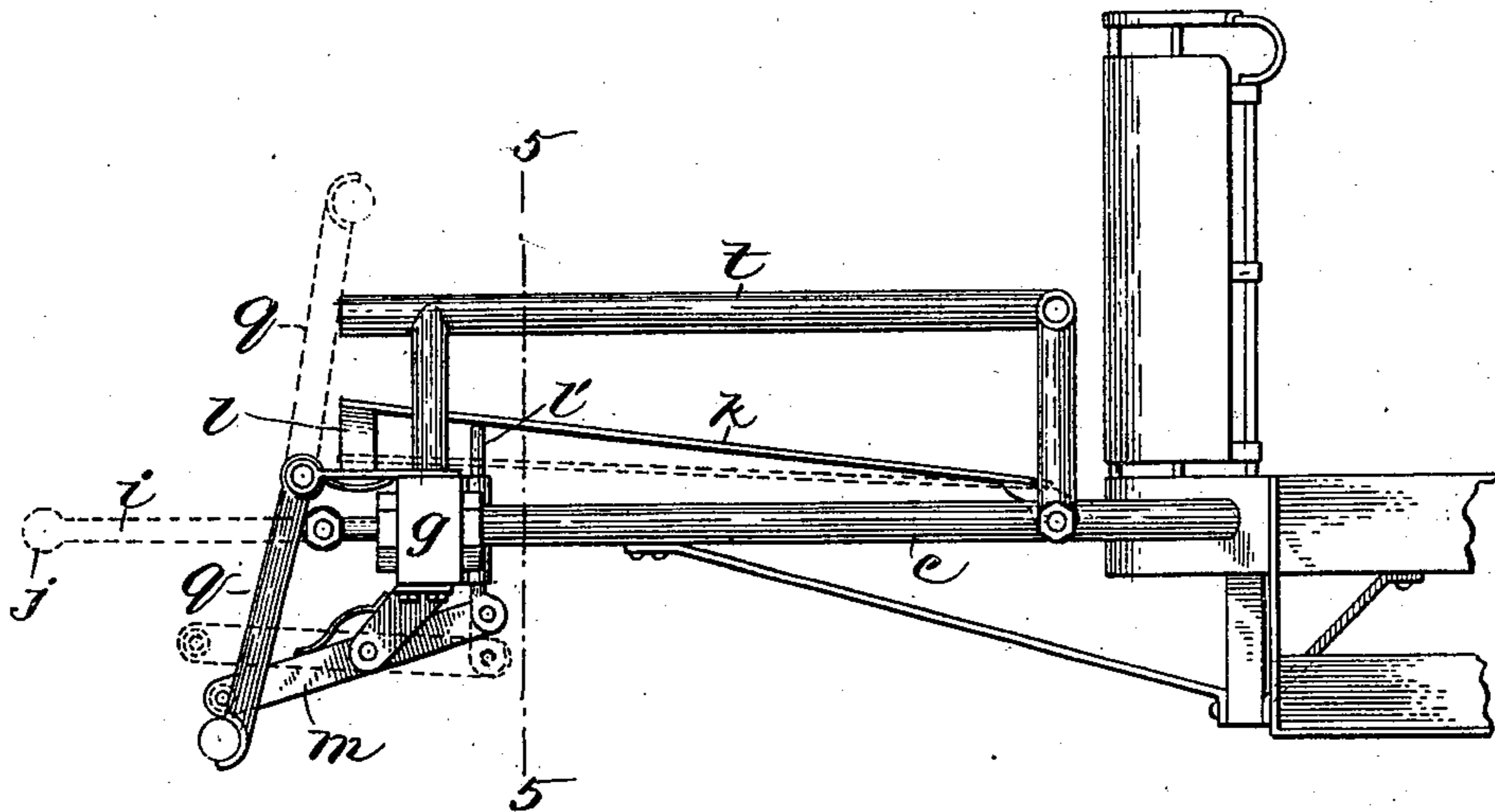


Fig. 4.

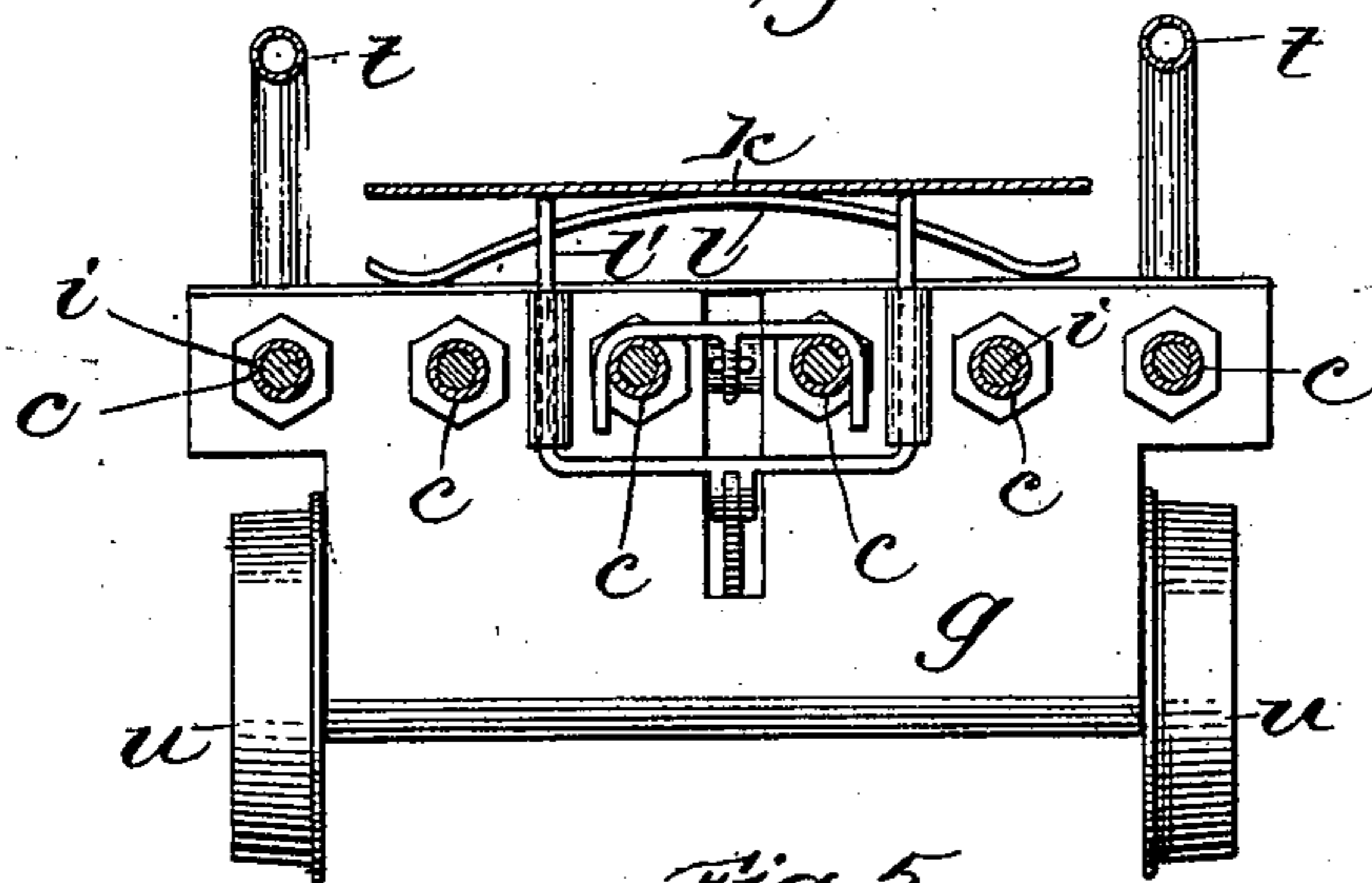


Fig. 5.

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Inventor:

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UNITED STATES PATENT OFFICE.

CHARLES B. WOOD, OF FOXBOROUGH, MASSACHUSETTS.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 627,713, dated June 27, 1899.

Application filed July 18, 1898. Serial No. 686,261. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. WOOD, of Foxborough, in the county of Norfolk and State of Massachusetts, have invented certain
5 new and useful Improvements in Car-Fenders, of which the following is a description sufficiently full, clear, and exact to enable those skilled in the art to which it appertains or with which it is most nearly connected to
10 make and use the same.

This invention relates to car-fenders generally, and more particularly to fenders adapted to be attached to and used in connection with electric cars.

15 It is the purpose of the fender to provide a means whereby when it strikes a person (if it should) it will trip him, throw him upon a spring-supported platform, netting, or other means, throw up his feet from the ground, and thrust out a foot-and-leg support under
20 his feet to prevent him not only from being run upon by the car and its wheels, but to, in effect, pick him up off the ground as well.

For a clear understanding of my invention
25 reference is to be had to the annexed drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

30 Of the drawings, Figure 1 is a side elevation of my improved fender attached to the front end of a car, a portion of the improvement being shown in section. Fig. 2 is a sectional plan view of the invention as shown in Fig. 1, the section being taken on the line 2 2 of
35 Fig. 1. Fig. 3 is a vertical longitudinal sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a side elevation of a modified form of the invention. Fig. 5 is a transverse vertical sectional view taken on the line 5 5 of
40 Fig. 4.

In the drawings, *a* designates the front end of a railway-car, such as an electric car, provided with a buffer or similar device *b*, to
45 which the rear end of my improved fender is pivoted.

The body part of my fender is composed of a series of horizontally-arranged tubes *c*, connected at their rear ends to a cross tube or
50 rod *d*, which is in turn connected by suitable connecting rods or tubes *e* with the part *f*, pivoted to the brake-bar or other suitable means

connected with the truck or body of the car below the buffer. The tubes *c* at their forward ends extend through a bolster or bar *g*. 55

Within the side tubes, or it may be all of the tubes, for that matter, there are arranged springs *h*, which bear at their inner ends against the bottom of the tubes *c* and at their forward ends against the rods *i*, inserted in
60 the tubes, which rods are at their outer ends connected with a cross bar or rod *j*. The arrangement is such that when the rods *i* are free the springs *h* will press them outward beyond the bolster or bar *g*; but they may be
65 latched in any other rearward position, as represented in Figs. 1, 2, 3, and 4, as will be presently described.

Above the tubes or bars *c* there is arranged a platform *k*, which rests upon springs *l*. Instead of the platform being a flat piece of
70 metal, as shown, it may be composed of any other substance—as, for instance, netting—or anything else that will render it capable when a person is thrown thereon of depressing the rod *l'*, upon which the platform normally rests, which rod will depress the inner
75 end of a lever *m* and raise the outer end of said lever, upon which outer end there is connected a catch device *n*, which engages a
80 hook or pin *o* on a buffing rod or bar *p*, connected with the lower end of a frame *q*, pivoted at its outer end on a rod *r* and operated upon by a spring *s* to normally throw the
85 buffing-bar *p* or free end of the frame *q* upward.

The buffer bar or rod *p* is made of rubber, or it may be a rubber tube inflated with air, so that when it strikes a person or object it may yield in such way as not to injure a person, as it would if it were made hard or rigid. 90

The catch *n* is made as a roller having a pin as a journal. This construction provides an antifriction-bearing between it and the catch-pin *o*, so that there will be easy action
95 between these parts and so that the frame *q* will be easily released when it encounters an object in order that it may be thrown upward.

The operation of the parts thus far described is such that if a person or object
100 should be thrown upon the platform *k* it will depress the rod or rods *l'* and release the frame *q* and throw it upward. At the same time that the frame *q* is released and thrown up-

ward, as indicated by dotted lines in Fig. 4, the rods *i*, which were held back by the depressed frame *q* against the stress of the springs *h*, as before indicated, will be thrown outward, as indicated also by dotted lines in Fig. 4. Now to "set" the device the rods *i* will be pressed back to their full-line position, as represented in the drawings, and the catch *n* will be caught over the pin *o* on the buffing-bar *p* of the frame *q*, and thus the rods *i* will be held back and the bar *p* be depressed. Should the bar *p* of the fender-frame *q* strike an object, such as a person, on the track, the person would be tripped so as to fall upon the platform *k*, depressing the rod *l'*, operating the lever *m* to release the catch *n*, raise it out from engagement with the pin *o*, and so releasing the buffer-frame *q* that the spring *s* will be thrown upward, tripping the person and raising his feet on the buffing-bar, when the rods *i* or their front connecting-bar will be thrust upward, as indicated by dotted lines in Fig. 4, and form a support for the person's feet, so that he cannot again fall upon the ground.

If desired, side bars or tubes *t* may be arranged at the sides of the platform *k* to prevent a person tripped from rolling off the platform or, if he should roll off, from falling upon the ground near the track.

The front end of my improved fender may be mounted upon wheels *u* to run upon a track, or it may be connected rigidly with the front end of a car, as shown in Figs. 4 and 5, so as to operate free of supporting-wheels.

When the fender is mounted upon wheels, as shown in Figs. 1, 2, and 3, it will "take the curve" of a track as soon as it reaches it and not project a long way in front of the car over the track as it would when affixed to the front end of the car, as shown in Figs. 4 and 5, and not take the curve until the forward truck of the car did so.

The prime object of the invention is to provide a fender which will not only trip the person on the track so that he may fall upon a safe-keeping fender, but which will at the same time thrust out a support for his feet, so that he may not again fall upon the ground.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

1. A car-fender embodying in its construction a depressible platform, a tripping-frame and a forwardly-movable frame to be thrust under a part of a person or object tripped, combined with means operatively connected with the depressible platform and the forwardly-movable frame to release the latter when the former is depressed.

2. A car-fender adapted to be attached to the front end of a car, a depressible platform, a frame adapted to be extended forward by springs but to be locked in rearward position, a tripping-frame adapted to be raised by spring action but to be locked in downward position, and operative means between the platform and frames to release them to be operated upon by their springs.

3. In a car-fender a depressible spring-raised platform, a pivoted tripping-rod having its outer edge or end adapted to fly upward, latching means, and means between the latch and platform whereby the depression of the latter will release the former.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of June, A. D. 1898.

CHARLES B. WOOD.

Witnesses:

ARTHUR W. CROSSLEY,
ARTHUR F. RANDALL.