

No. 647,079.

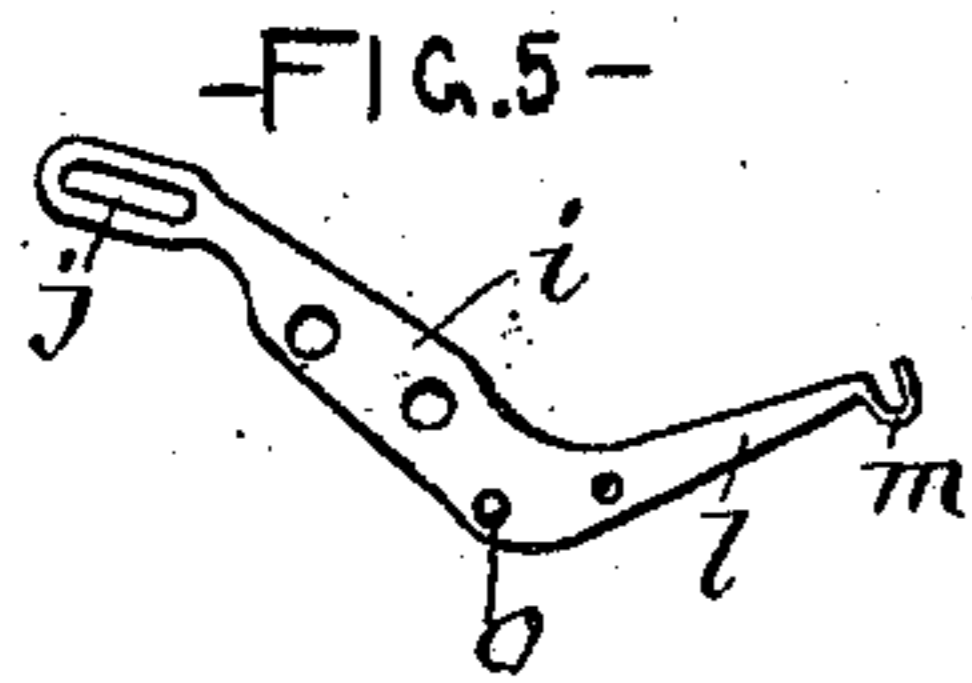
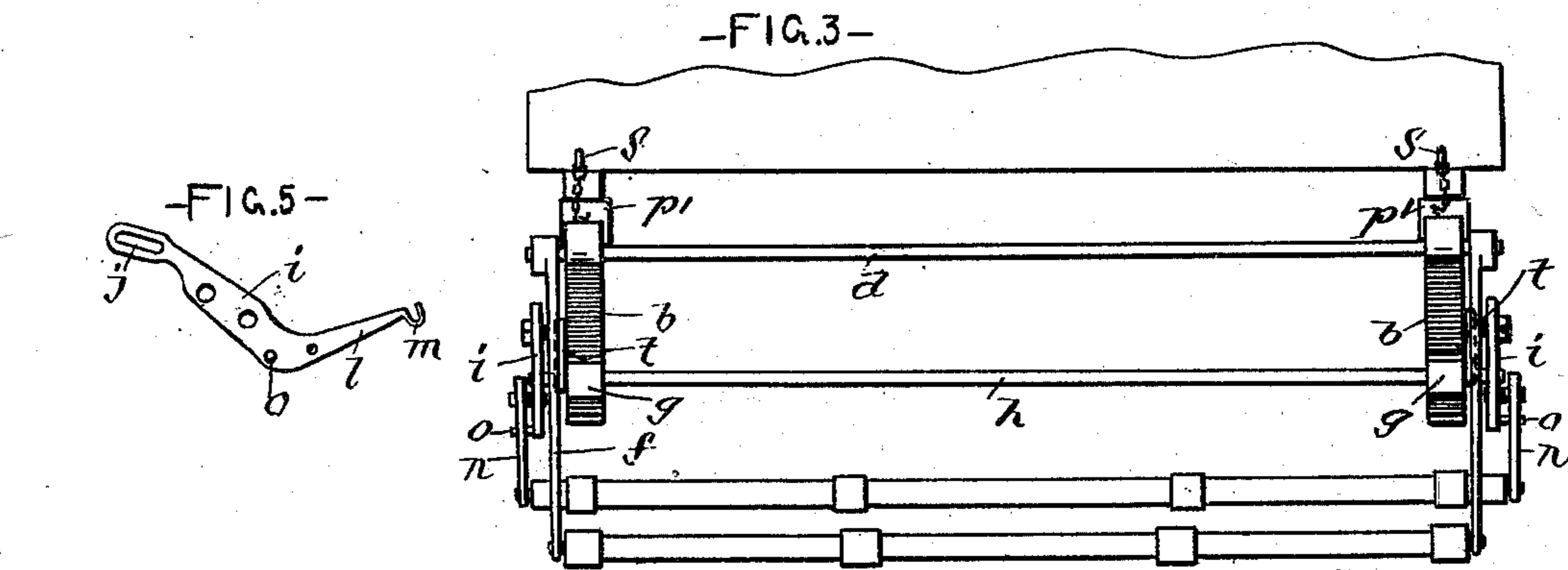
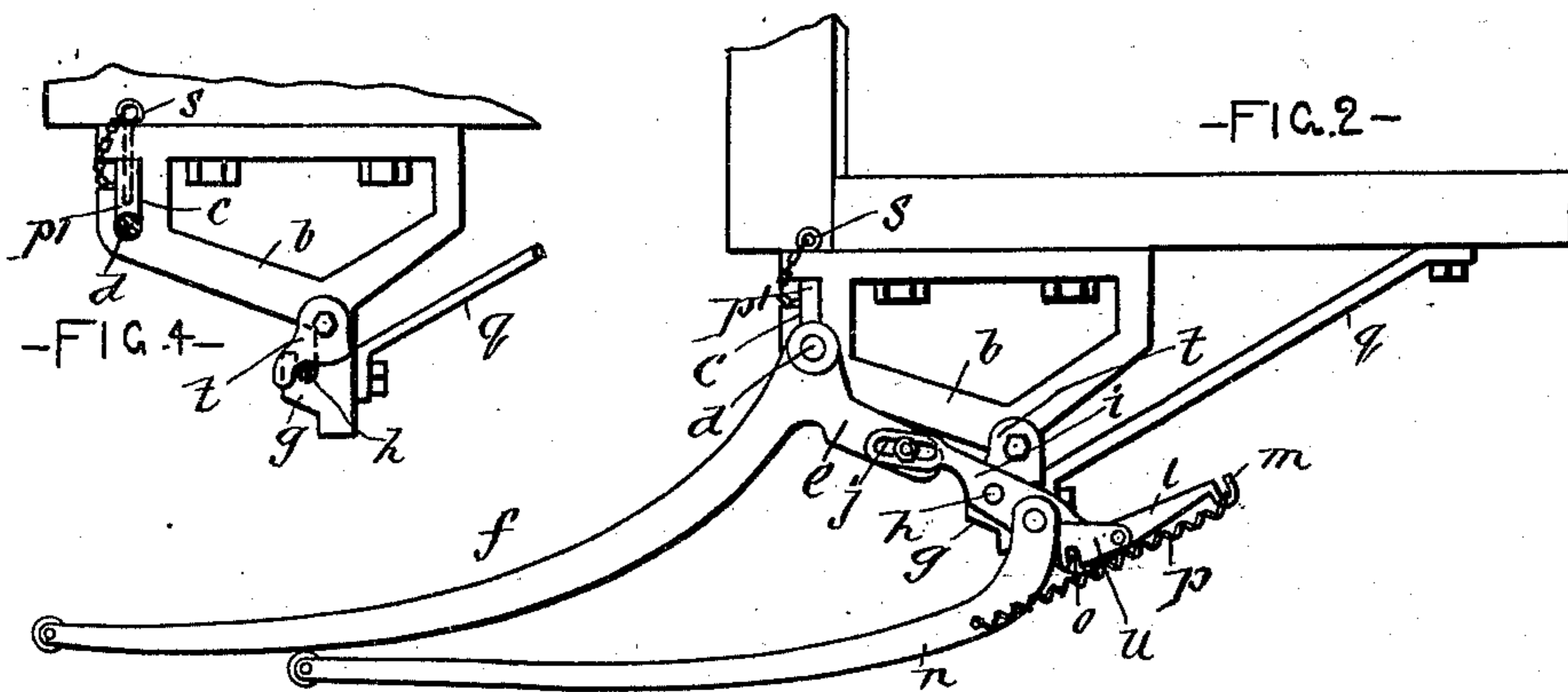
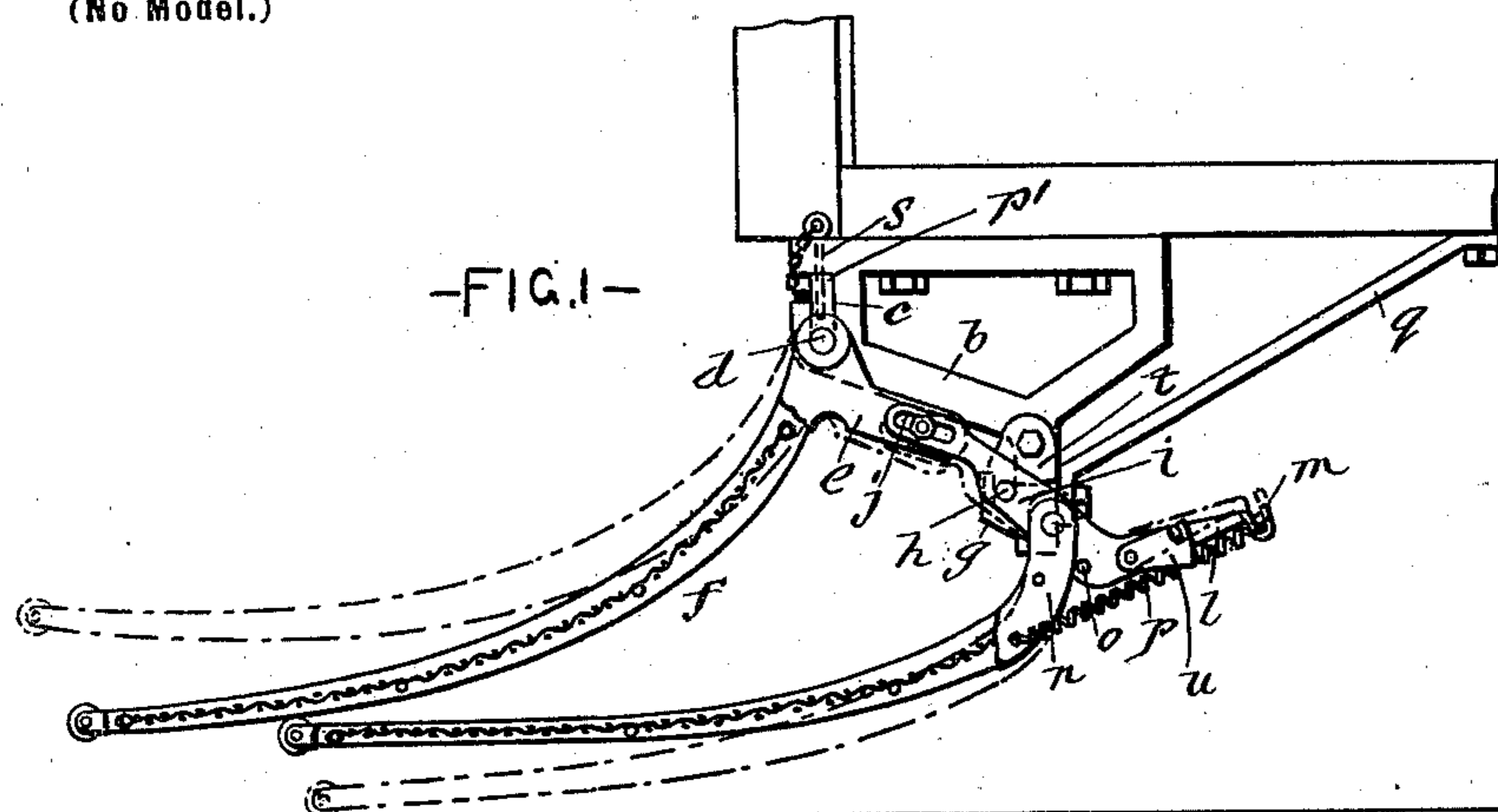
Patented Apr. 10, 1900.

J. CURRIE.

CAR FENDER.

(Application filed July 15, 1899.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN CURRIE, OF MONTREAL, CANADA.

## CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 647,079, dated April 10, 1900.

Application filed July 15, 1899. Serial No. 724,013. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN CURRIE, merchant, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Car-Fenders; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is to provide a fender a portion whereof will automatically assume a position to pick up any body or object that may be in the way of a car when the tendency of the main portion of the fender will be to ride over the object or body and to enable said fender to be readily held at different heights relatively to the road-bed.

The invention may be said, briefly, to consist of a main fender and an auxiliary fender and means for pivotally connecting said fenders together, means for pivotally connecting said fenders to the car-body, and means for adjusting said fenders to different heights relatively to the road-bed. For a full comprehension, however, of the invention reference must be had to the accompanying drawings, forming a part of this specification, in which like symbols indicate the same parts, and wherein—

Figure 1 is a side elevation of my improved fender. Fig. 2 is a similar view with the parts in different positions. Fig. 3 is a front view thereof when in the position shown in full lines in Fig. 1 and with the netting removed; and Figs. 4 and 5 are detail views of a part of the carrier-frame and the lever-bar, respectively, of the fender.

The carrier-frame of my improved fender consists of a pair of triangular sections *b b*, extending beneath and having one side bolted to the under side of the front of the car-body. The fronts of these triangular sections are formed with transverse bayonet-slots *c* to receive and support a transverse rod *d*, upon the ends of which are rigidly secured the side frames of the main fender *f*. These side frames are of bell-crank form and are secured at their angles to the ends of said transverse rod *d*, the forwardly-extending arms of the frames carrying the netting and the rearwardly-extending arms *e* being slotted. The lower angles of these triangular frames are formed with depending hooks *g*, which

receive and support a second transverse rod *h*, to each end of which a lever-arm *i* is rigidly connected. The forward ends of these lever-arms are slotted, as at *j*, and pivotally connected therethrough to the slotted arms *e* of the said side frames, while the rear ends of these lever-arms are offset, as at *l*, and hooked, as at *m*, and have fulcrumed thereto midway between said offset ends and the point at which they are connected to the second transverse rod the upwardly-curved rear end of an auxiliary fender *n*. This auxiliary fender is supported in its proper position relatively to its road-bed by a pair of pins *o*, carried rigidly by the lever-arms in a position to at times bear thereupon, while it is held in such position by a retractile coiled spring *p*, connected at one end to said auxiliary fender and at its other end to the rear hooked ends *m* of the said lever-arms.

The rigidity of the triangular frame-pieces *b* is augmented by suitable braces *q*, extending from the rear side thereof rearwardly and connected to the under side of the car, while the main and auxiliary fenders are held against displacement in the bayonet-slots *c* and hooks *g*, respectively, by a pair of blocks *p'*, slid sidewise into the bayonet-slots and held against lateral displacement therein by a pair of pins *s* and by a pair of hooks *t*, pivoted to the triangular frame-pieces near the hooks *g* thereof and adapted to be swung over and rest upon and retain the rod *h* against vertical displacement.

In order to provide means for raising the fender a greater height from the road, I mount a pair of hooks *u* upon the lever-arms in such close proximity to the pins *o* as to enable them when swung over to take thereupon and be forced between the pins *o* and the curved rear portion of the auxiliary fender *n* at a point below its pivot-point, thereby raising said auxiliary fender and through it and the lever-arm *i* the main fender.

The operation of my improved fender is as follows: The normal condition of the fender is as shown in Figs. 1 and 2, and from these views it is obvious that a person struck by the car cannot possibly fall between the fender and the bottom of the car. In the majority of cases persons struck by a car are thrown before it, the fender riding over them, and

they are mutilated by the wheels. The action of the parts of my improved fender in automatically assuming the position shown in dotted lines in Fig. 1 completely obviates this danger in this manner: Upon the outer end of the main fender portion being raised the operative connection therebetween and the auxiliary fender portion, through the slotted arms *e* and levers *i*, will move the retaining-pin *o* rearward, thus allowing the auxiliary fender to lower into close proximity to the ground, thus effectively preventing the smallest object getting beneath the car.

It is obvious that a person picked up by the auxiliary fender portion will be held thereon by the weight of the main fender portion.

The forward end of each fender portion is provided with a tubular roller extending the full width thereof.

What I claim is as follows:

1. A car-fender comprising a carrier-frame, a main fender and an auxiliary fender, the rear end of said main fender being pivotally connected to said carrier-frame; a pair of rearwardly-projecting slotted arms formed upon the rear end of said main fender; a pair of lever-arms fulcrumed to said carrier-frame, one end of each of said lever-arms being slotted and pivotally connected therethrough to the slotted arms of the main lever; the auxiliary fender being pivotally connected to said lever-arms; and a rigid stop carried by each of said lever-arms to support said auxiliary fender, substantially as described.

2. A car-fender comprising a carrier-frame, a main fender and an auxiliary fender, the rear end of said main fender being pivotally connected to said carrier-frame; a pair of rearwardly-projecting slotted arms formed upon the rear end of said main fender; a pair of offset lever-arms fulcrumed to said carrier-frame, one end of each of said lever-arms being slotted and pivotally connected therethrough to the slotted arms of the main fender; a pair of expansile coiled springs connected between the other end of each of said lever-arms and the auxiliary fender, the auxiliary fender being pivotally connected to said lever-arms; and a rigid stop carried by each of said lever-arms to support said auxiliary fender substantially as described.

3. A car-fender comprising a carrier-frame, consisting of a pair of triangular sections secured beneath the end of the car-body, a main fender and an auxiliary fender, the rear end of said main fender being pivotally connected to the forward angles of said carrier-frame; a pair of rearwardly-projecting slotted arms formed upon the rear end of said main fender; a pair of lever-arms fulcrumed to the lower angles of said carrier-frame, one end of each of said lever-arms being slotted and pivotally connected therethrough to the slotted arms of the main lever; the auxiliary fender

being pivotally connected to said lever-arms; and a rigid stop carried by each of said lever-arms to support said auxiliary fender, substantially as described.

4. A car-fender comprising a carrier-frame consisting of a pair of triangular sections secured beneath the end of the car-body, a main fender and an auxiliary fender, the rear end of said main fender being pivotally connected to the forward angles of said carrier-frame; a pair of rearwardly-projecting slotted arms formed upon the rear end of said main fender; a pair of offset arms fulcrumed to the lower angles of said carrier-frame, one end of each of said lever-arms being slotted and pivotally connected therethrough to the slotted arms of the main fender and the other end of each of said lever-arms being in the form of a hook; a pair of expansile coiled springs connected between said hooks and auxiliary fender, the auxiliary fender being pivotally connected to said lever-arms; and a rigid stop carried by each of said lever-arms to support said auxiliary fender, substantially as described.

5. A car-fender comprising a carrier-frame, a main fender and an auxiliary fender, the rear end of said main fender being pivotally connected to said carrier-frame; a pair of rearwardly-projecting slotted arms formed upon the rear end of said fender; a pair of lever-arms fulcrumed to said carrier-frame, one end of each of said lever-arms being slotted and pivotally connected therethrough to the slotted arms of the main lever; the auxiliary fender being pivotally connected to said lever-arms; and a rigid stop carried by each of said lever-arms to support said auxiliary fender, and means for adjusting said main and auxiliary fenders to different positions relatively to the road-bed substantially as described.

6. A car-fender comprising a carrier-frame, a main fender and an auxiliary fender, the rear end of said main fender being pivotally connected to said carrier-frame; a pair of rearwardly-projecting slotted arms formed upon the rear end of said main fender; a pair of lever-arms fulcrumed to said carrier-frame, one end of each of said lever-arms being slotted and pivotally connected therethrough to the slotted arms of the main lever; the auxiliary fender being pivotally connected to said lever-arms; and a rigid stop carried by each of said lever-arms to support said auxiliary fender, and a pair of hooks pivotally connected to said lever-arms in positions to take over said stops substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN CURRIE.

Witnesses:

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ARTHUR T. BAKER.