

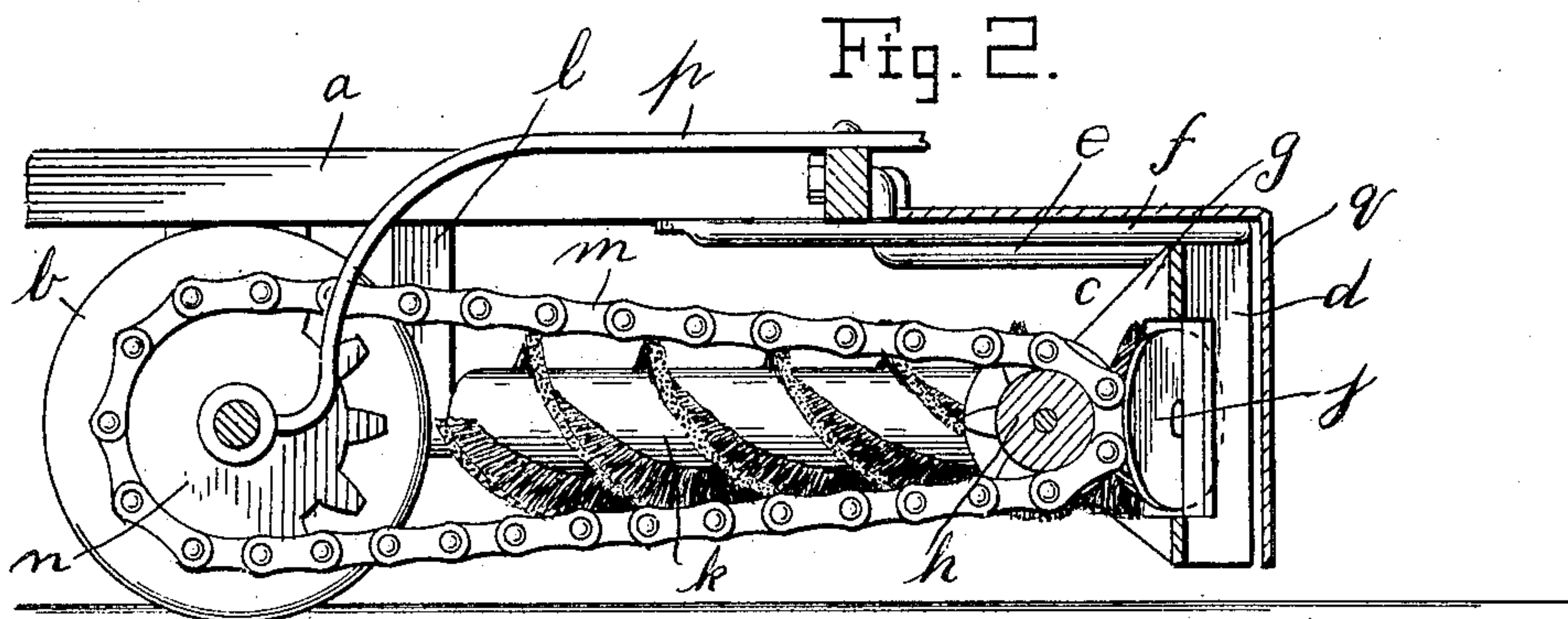
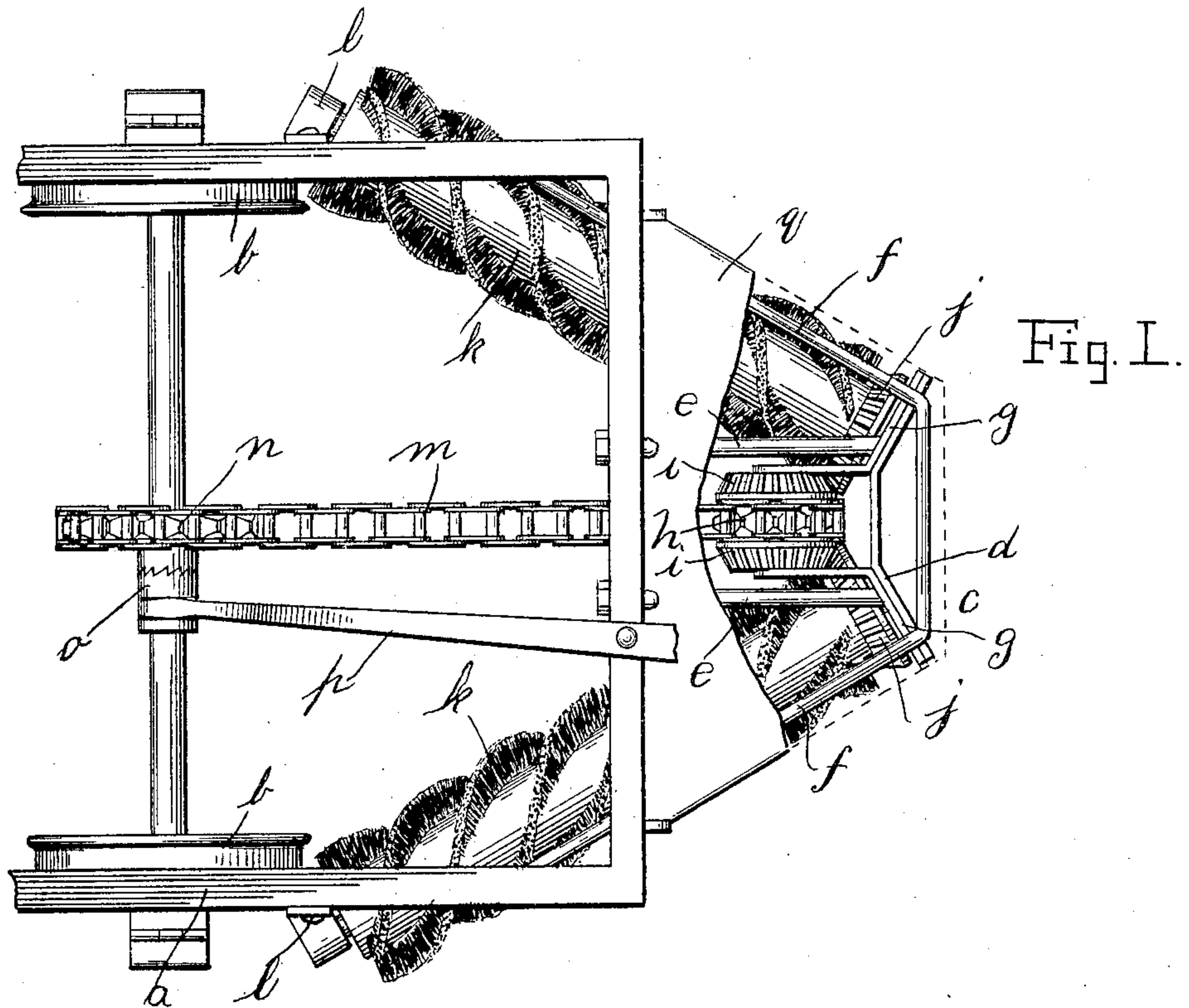
No. 827,602.

PATENTED JULY 31, 1906.

J. V. BATTRAM.  
CAR FENDER.

APPLICATION FILED DEC. 18, 1905.

2 SHEETS—SHEET 1.



Witnesses  
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2 SHEETS—SHEET 2.

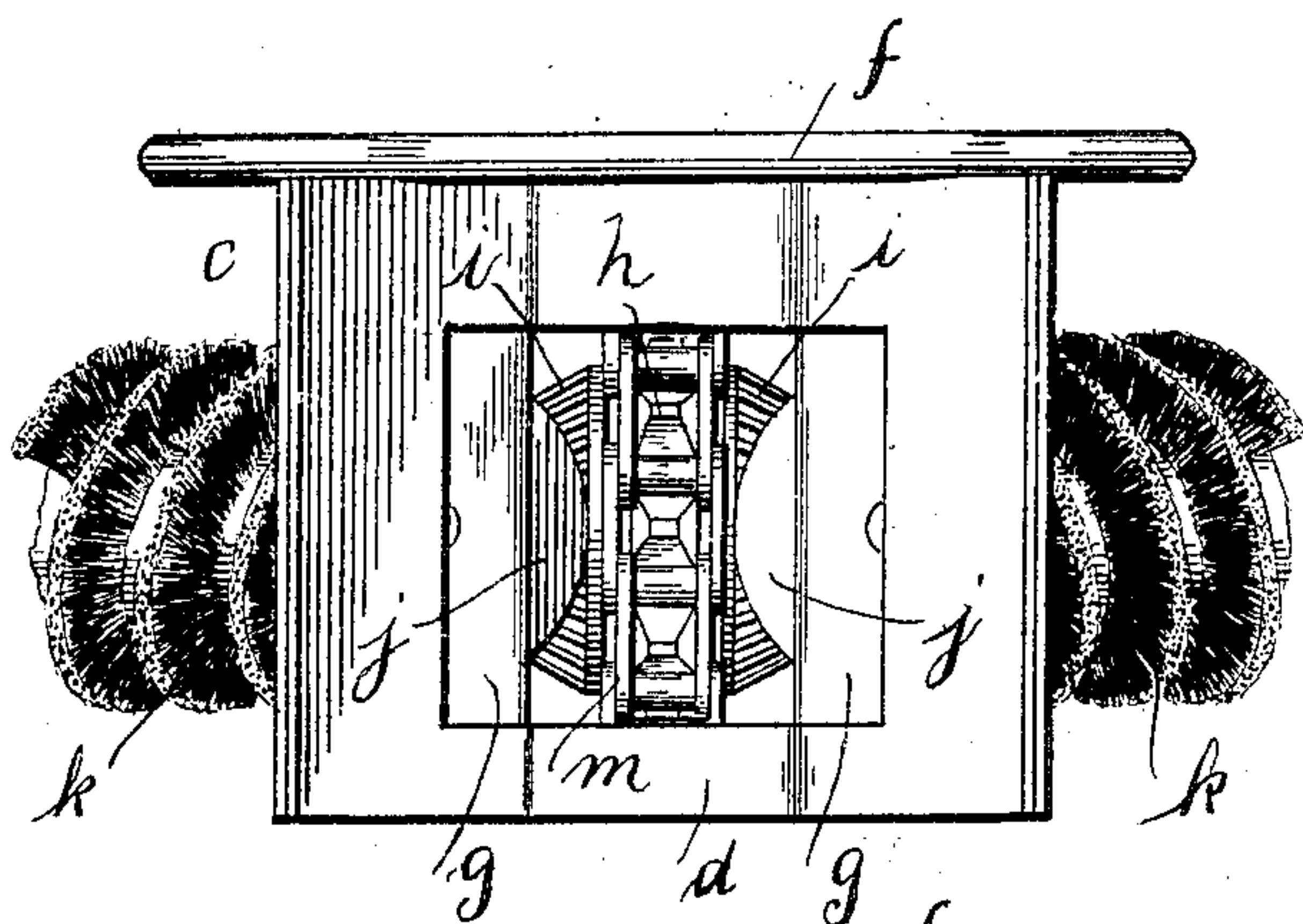


Fig. 3.

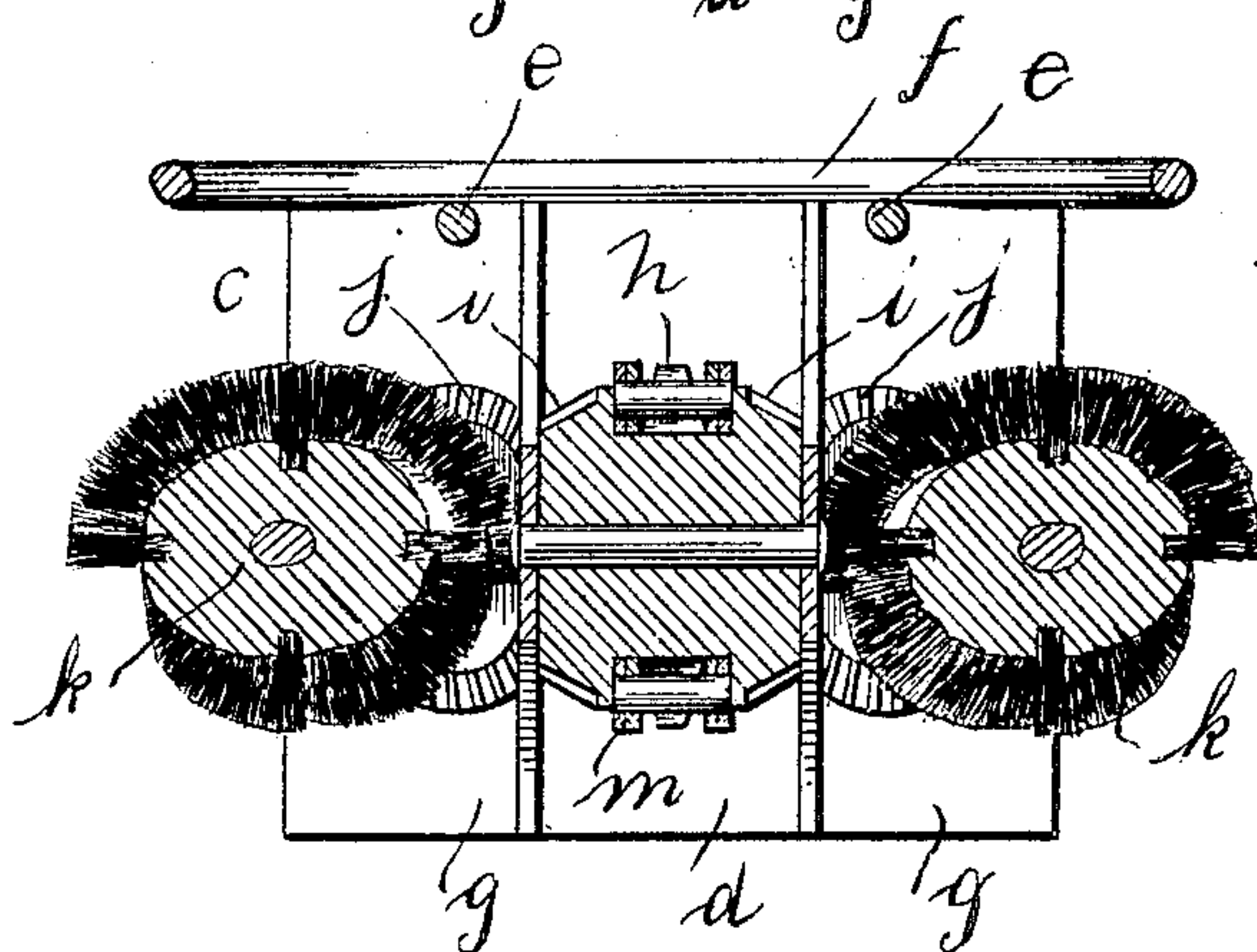


Fig. 4.

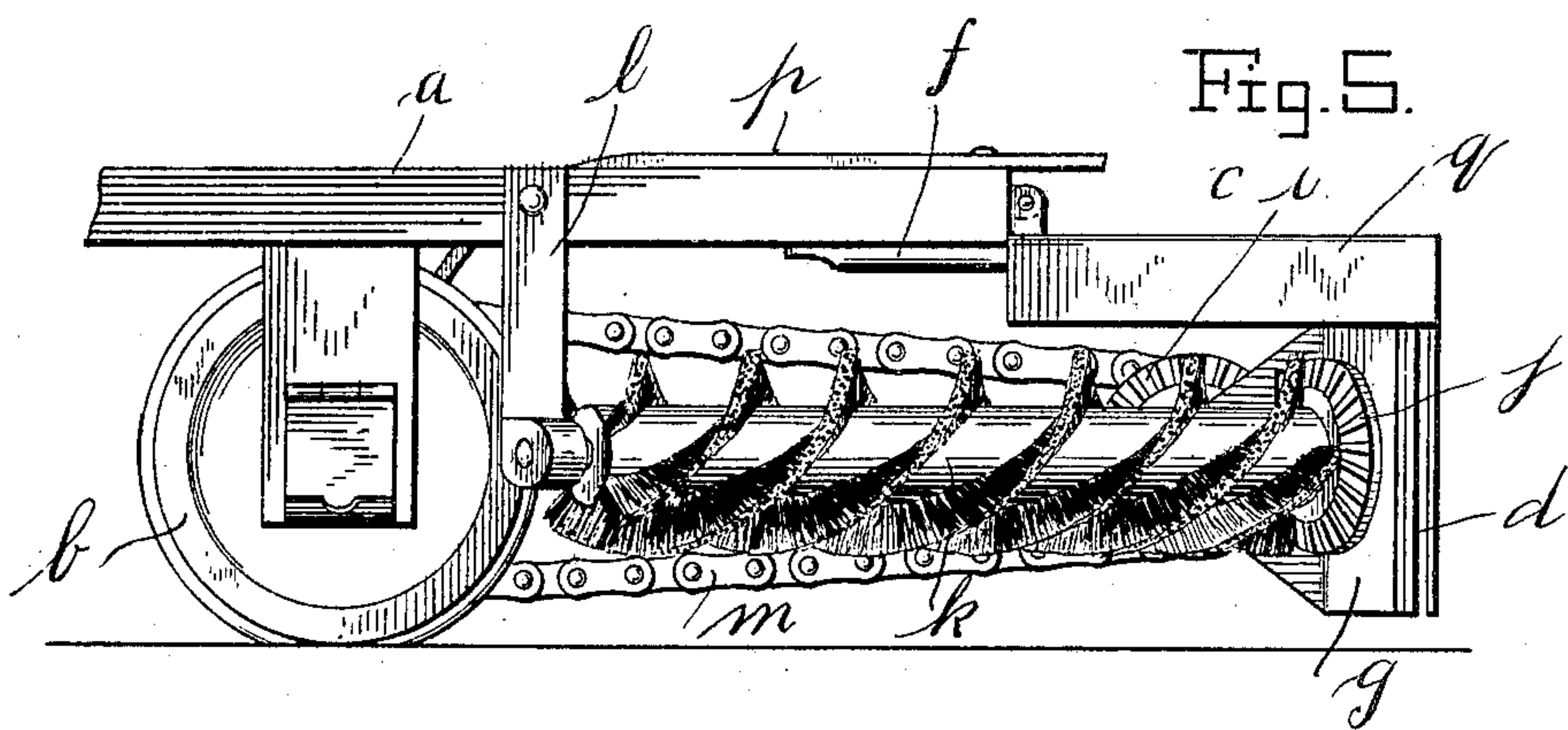


Fig. 5.

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# UNITED STATES PATENT OFFICE.

JOHN V. BATTRAM, OF WALKERVILLE, CANADA.

## CAR-FENDER.

No. 827,602.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed December 18, 1905. Serial No. 292,399.

*To all whom it may concern:*

Be it known that I, JOHN V. BATTRAM, a subject of the King of Great Britain, residing at Walkerville, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Car-Fenders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to fenders or guards for street or railway cars, its object being to construct a device of that nature for effectually preventing any person or animal from being caught beneath the car if struck thereby.

The essential feature of the invention comprises a substantial frame connected with the forward truck and consisting of a head from which there extends obliquely on each side a rotating brush.

The drawings hereto annexed form a part of this specification and are to be referred to as such.

Of the said drawings, Figure 1 is a plan view of my improved car-fender connected to the forward portion of a car-truck; a part of the cover of the fender being broken away. Fig. 2 is a longitudinal central sectional side elevation of the same, the head-gear being represented in elevation. Fig. 3 is a front view of the head. Fig. 4 is a transverse section through the axis of the head-gear. Fig. 5 is a side view of the invention complete.

The same letters of reference designate the same parts or features, as the case may be, wherever they occur.

In the drawings, *a* designates the forward portion of a car-truck frame carrying the front wheels *b*, a framework *c* being connected with and built forwardly from said frame in any desired way. Supported within the framework by means of braces *e* and truss-rods *f* is a head *d*, having a pair of oppositely-disposed rearwardly-extending brackets *g*, in which is journaled the shaft *h'*, on which the head-gear is mounted. The head-gear is here shown as composed of a central sprocket spur-gear *h*, compounded on each side with toothed gears *i i*, each of which latter engage and drive a toothed wheel *j* of similar character suitably connected with the forward ends of the rotary brushes *k k*, which extend outward and rearward to the forward wheels of the truck, where they are suitably jour-

naled in boxes supported by the hangers *l*, depending from a suitable part of the frame.

As a means for driving the head-gear I have here shown a sprocket-chain *m*, which runs over a sprocket-wheel *n* on the axle of the front wheels of the car and around the sprocket-wheel *h* of the head-gear.

*o* designates a clutch for connecting the wheel *n* with the front axle so as to render the said gear operative or inoperative, as the circumstances may demand, and *p* designates a lever connected with the clutch to operate it. The said lever will be extended up in any suitable way to a convenient point where it may be reached by the motorman.

The brushes are here shown as of spiral form on their supports; but they may be solid if circumstances call for it, and while the head is shown as open in front it may be inclosed by a solid or open-work front or cover, the cover *q* shown being of simple light sheet metal to keep out dust and dirt.

I may use other than a single sprocket-chain to drive the brushes from the front axle; but such changes as I should employ in substituting other means would come within the scope of a skilled mechanic's ability.

What is claimed is—

In a car-fender, the combination with the car-truck frame including the front axle and wheels, of a supplemental frame secured to the front end of said car-truck frame; a head supported within said supplemental frame and provided with a pair of rearwardly-extending brackets; a shaft journaled in said brackets; a head-gear mounted on said shaft, said head-gear consisting of a sprocket-wheel compounded with a spur-gear on each side; brushes extending from the head to the front car-wheels; hangers depending from the frame for supporting the rear ends of said brushes; gears secured to the forward ends of the brushes in mesh with the side gears on said head-gear; a sprocket-wheel secured to said front axle; a sprocket-chain connecting said sprocket-wheel with the sprocket-wheel of the head-gear for driving the latter; and a dust-cover hinged to said car-truck frame for protecting and covering the head-gear and associated parts.

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

JOHN V. BATTRAM,

Witnesses:

CECIL H. ROBINSON,  
NEIL DEWAR.