

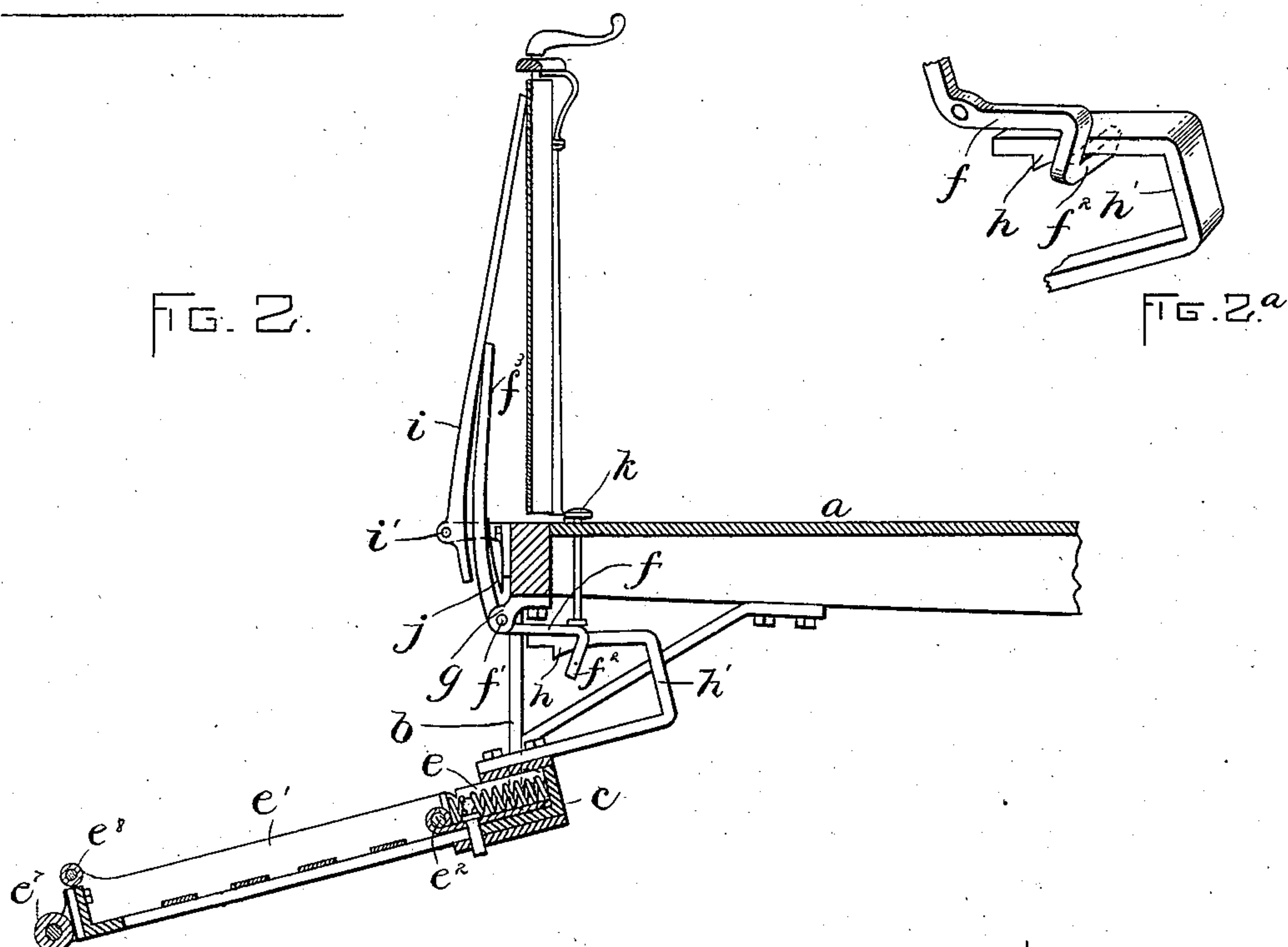
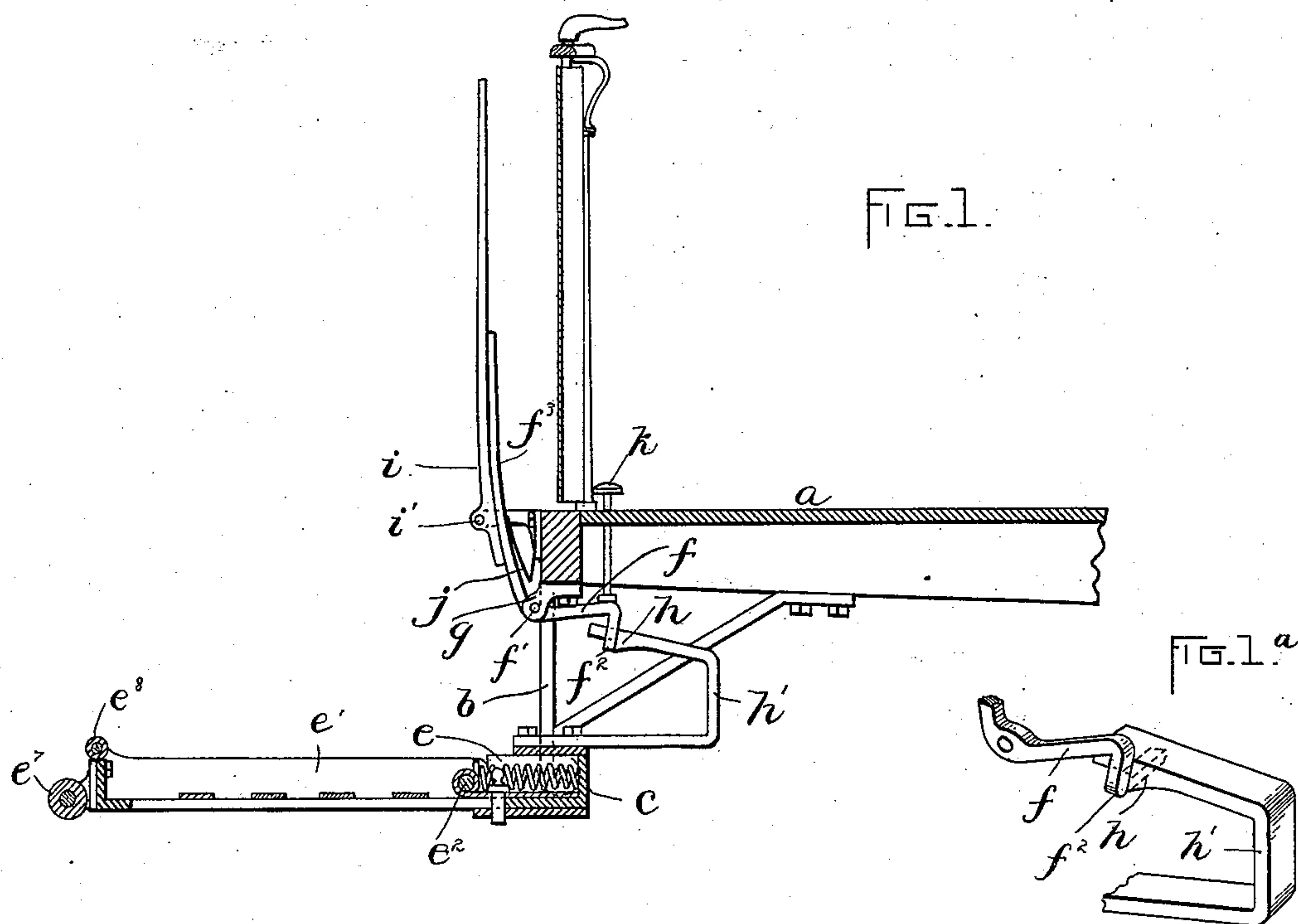
(No Model.)

2 Sheets—Sheet 1.

S. A. POLITZKY.  
CAR FENDER.

No. 557,226.

Patented Mar. 31, 1896.



WITNESSES:

A. D. Harrison.  
E. B. Batchelder.

INVENTOR:

S. A. Politzky  
by *Wm. Brown* Attorney  
*Atty.*

(No Model.)

S. A. POLITZKY.  
CAR FENDER.

2 Sheets—Sheet 2.

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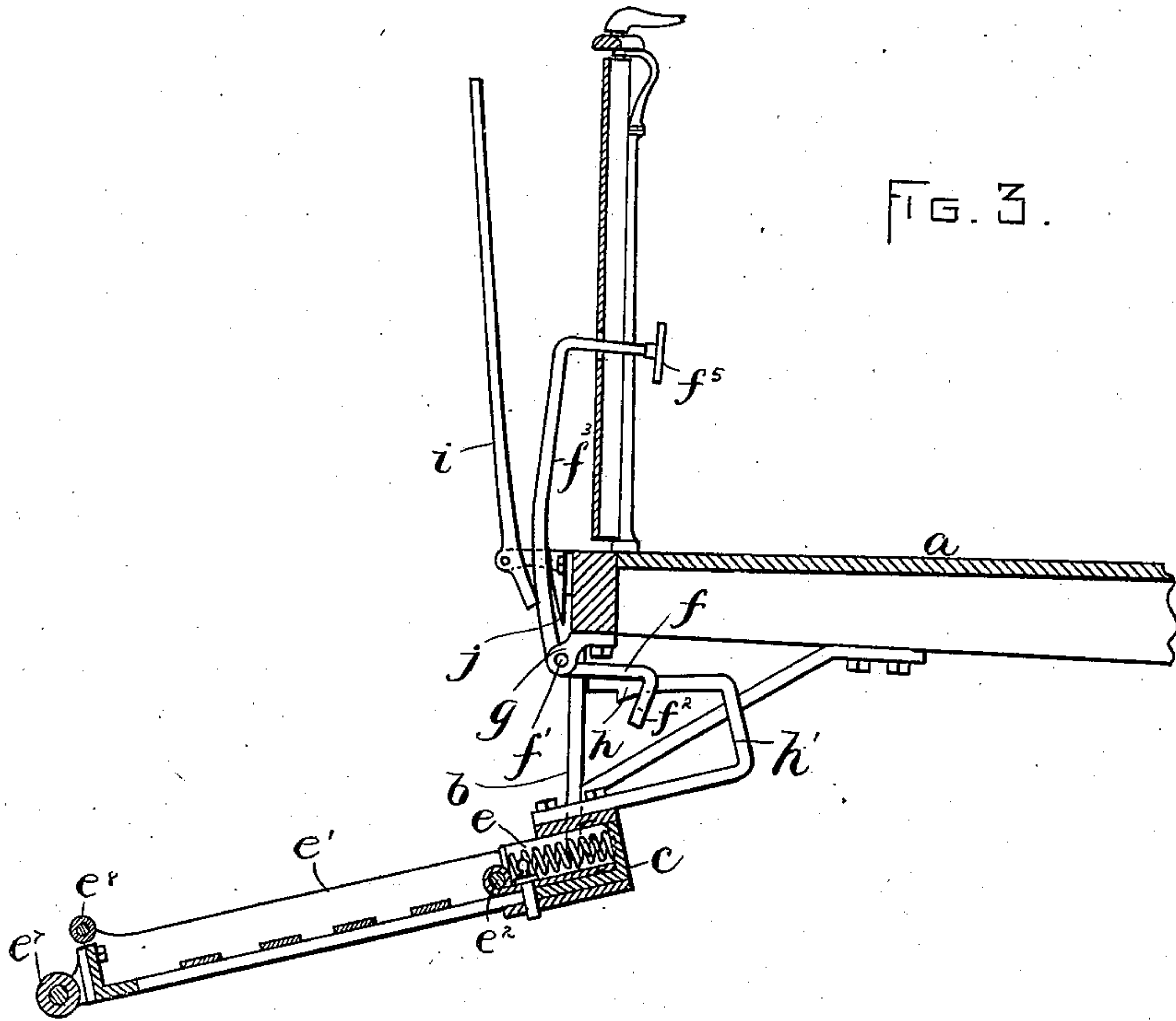


FIG. 3.

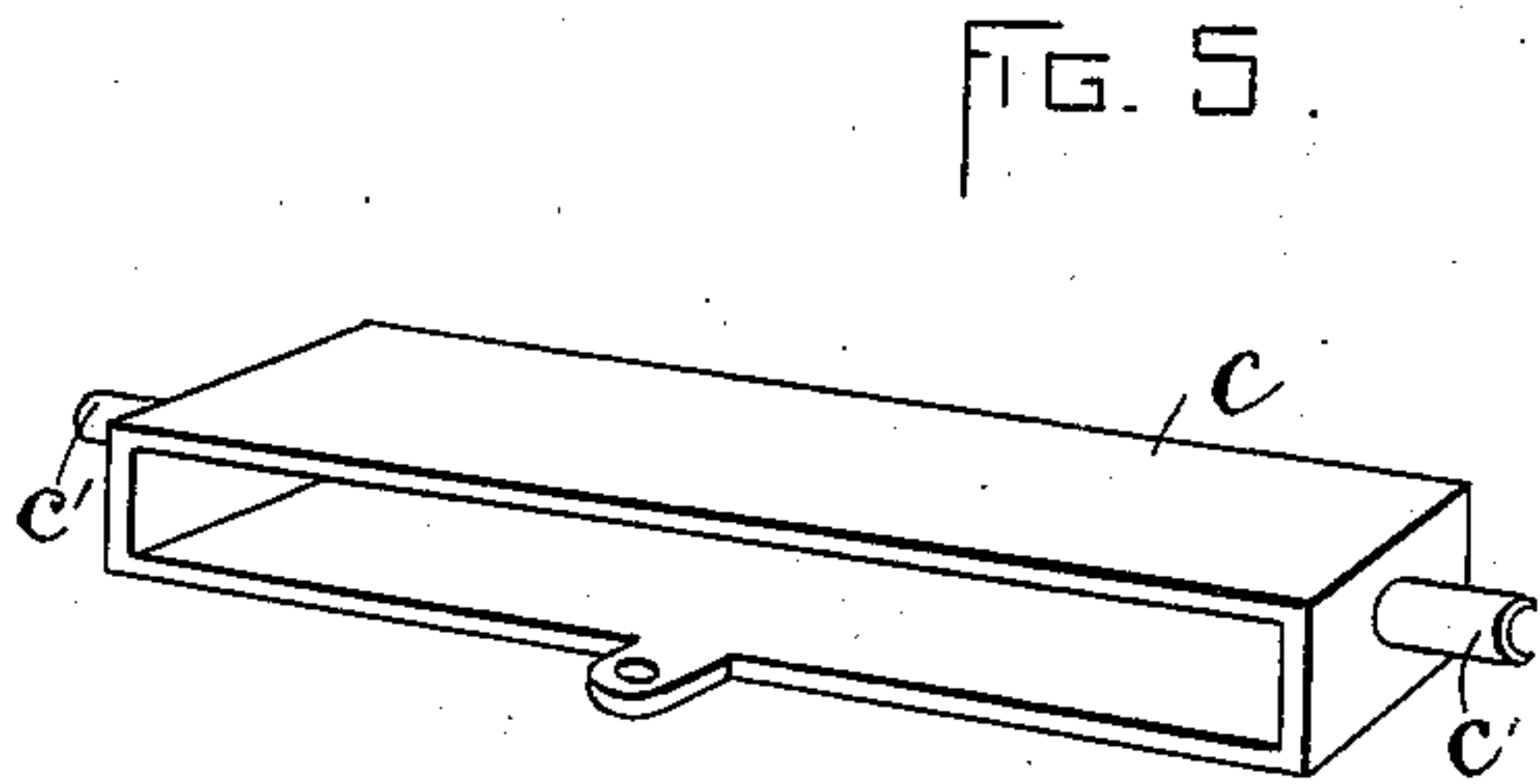


FIG. 5.

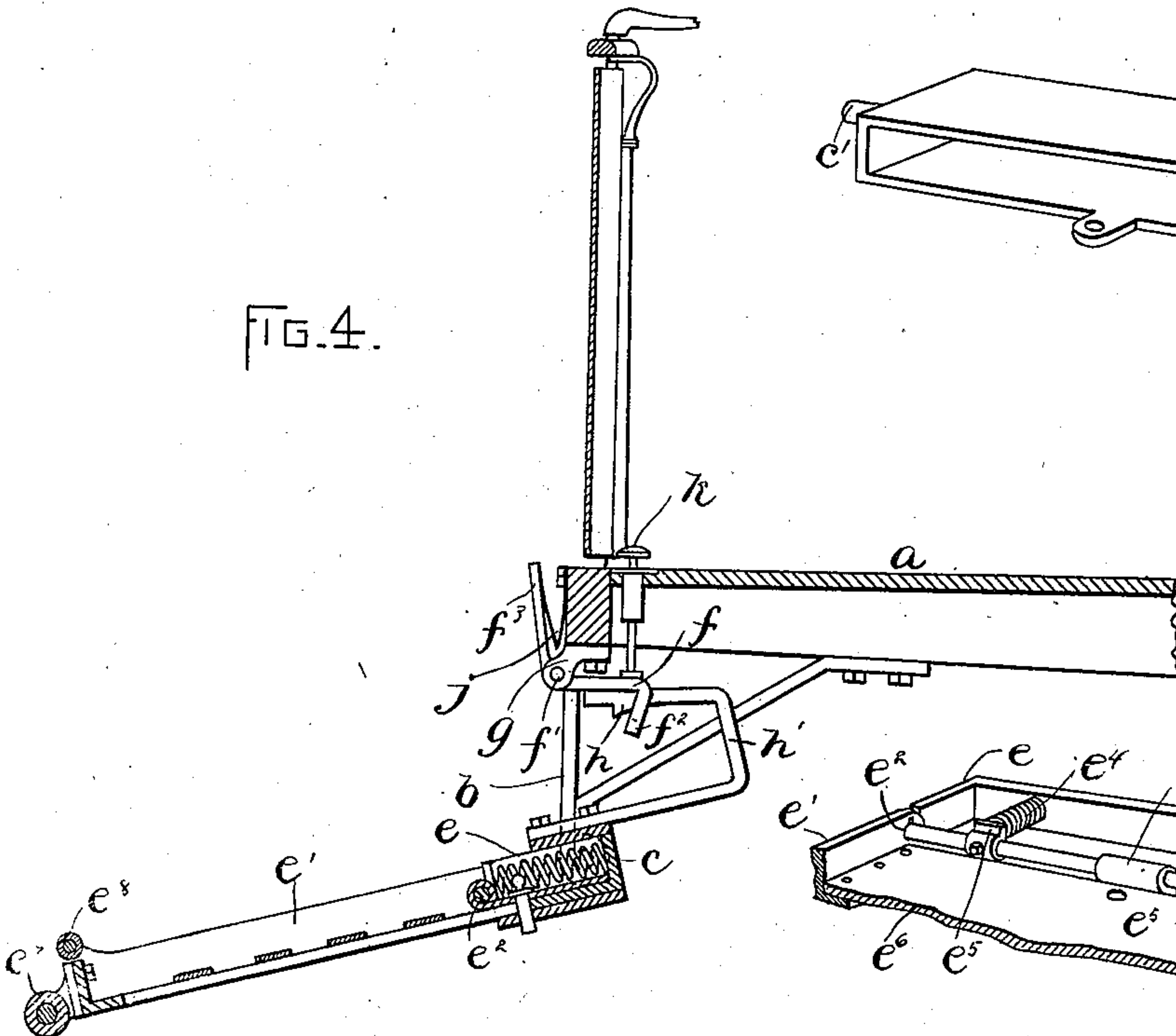


FIG. 4.

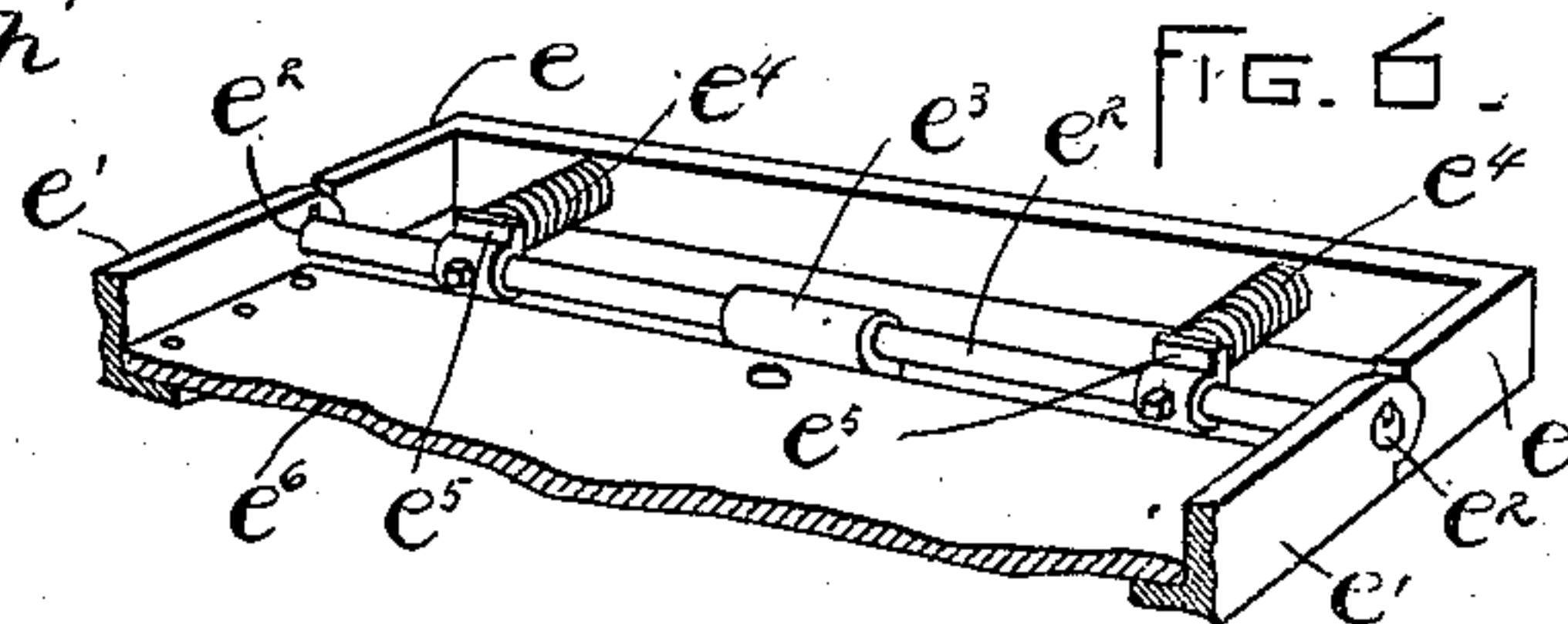


FIG. 6.

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# UNITED STATES PATENT OFFICE.

SIMON A. POLITSKY, OF BOSTON, MASSACHUSETTS.

## CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 557,226, dated March 31, 1896.

Application filed August 2, 1895. Serial No. 558,011. (No model.)

*To all whom it may concern:*

Be it known that I, SIMON A. POLITSKY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

This invention relates to that class of car-fenders which project in advance of the car below the platform and are controlled by mechanism on the platform operated by an attendant.

The invention has for its object to provide certain improvements in fenders of this class whereby the fender, while normally held in position to encounter and safely land a person in a standing position, may be quickly adjusted to position to catch a person lying upon the track.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a longitudinal section of a portion of the platform of a street-car and a fender embodying my invention applied thereto, the fender being in its raised position. Figs. 1<sup>a</sup> and 2<sup>a</sup> represent perspective views of the fender-locking devices. Fig. 2 represents a view similar to Fig. 1, showing the fender depressed. Fig. 3 represents a view similar to Fig. 2, showing the fender depressed by a different movement of the operating-lever shown in Figs. 1 and 2. Fig. 4 represents a view similar to Figs. 2 and 3, showing a pedal for releasing the fender and permitting its downward movement. Figs. 5 and 6 represent perspective views of parts of the fender or guard.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents the platform of a street-car, and *b b* brackets affixed to and projecting downwardly from the platform.

*c* represents a casing or holder which is provided at its ends with trunnions *c' c'* journaled in bearings at the lower ends of the brackets *b*. With the holder *c* is engaged the fender, which is composed of two sections or parts *e e'*, pivoted or jointed together at *e<sup>2</sup>*, so that the forward part *e<sup>4</sup>* can swing vertically. The part *e* of the fender is formed to be inserted in the holder *c*, the part *e'* projecting forward from the holder, the joint or hinge *e<sup>2</sup>* being located

in advance of the holder. In Fig. 6 the part *e* is shown as provided with a socket *e<sup>3</sup>*, which receives the pivot-rod *e<sup>2</sup>*, the ends of said rod being engaged with the side pieces of the part *e'* of the fender. Springs *e<sup>4</sup>* are shown as interposed between the rear wall of the part *e* and ears or supports *e<sup>5</sup>* affixed to the pivot-rod *e<sup>2</sup>*, said springs exerting a downward pressure on the forward part *e'* of the fender. The said forward part *e'* is preferably a box-like structure having a grated bottom which may be composed of flexible metal strips. To the forward end of the portion *e'* is applied a roller *e<sup>7</sup>* arranged to bear upon the ground when the fender is depressed. Above the roller *e<sup>7</sup>* is a rubber guard or buffer *e<sup>8</sup>* extending across the front of the fender to cushion the blow of the fender against a person encountered by it.

*f* represents an arm which is pivoted at *f'* to an ear *g* affixed to the platform, the rear portion of said arm being bent downwardly and laterally to form a dog *f<sup>2</sup>*, Figs. 1<sup>a</sup> and 2<sup>a</sup>, extending crosswise of the platform and standing in the path of a shoulder *h* formed on an arm *h'*, which is affixed to the casing or holder *c*.

When the fender is in the position shown in Figs. 1 and 1<sup>a</sup>, the dog *f<sup>2</sup>* engages the shoulder *h* and holds the fender in said position through the arm *h'*. When the arm *f* is depressed, as shown in Figs. 2 and 2<sup>a</sup>, the dog *f<sup>2</sup>* falls below and releases the shoulder *h*, thus permitting the fender to swing downwardly.

The arm *f* may be depressed by any suitable means, and is preferably returned to its operative position by a spring, so that it is normally in position to engage the shoulder *h*.

In Figs. 1, 2, and 3 I show a lever *f<sup>3</sup>* affixed to the arm *f* and projecting upwardly therefrom in front of the fender, said lever bearing against the inner side of another lever *i*, which is pivoted at *i'* to a bracket on the platform and projects below said pivot, so that it may be said to have an arm above the pivot and another arm below it. When the longer arm of the lever *i* is moved inwardly toward the dasher of the car, as shown in Fig. 2, it presses the arm *f<sup>3</sup>* inwardly and thus depresses the arm *f* and dog *f<sup>2</sup>*. When the longer arm of the lever *i* is moved outwardly



from the dasher, as shown in Fig. 3, its shorter arm presses the arm  $f^3$  inwardly, with the same result.  $j$  is the spring which normally holds the arm  $f$  and dog  $f^2$  in operative position, said spring being interposed between the platform and the lever  $f^3$ . I also show a pedal  $k$  movable vertically in the platform, its lower end being arranged to bear upon the arm  $f$ , so that when the pedal is depressed by the foot of the motorman the dog  $f^2$  will be also depressed and the fender will therefore be released.

It will be seen that whenever the fender is released, as above described, it will swing downwardly in its bearings, so that its forward end or the shoulder  $e^7$  thereon will bear upon the pavement, the jointed connection between the two sections of the fender enabling its forward portion to rise and fall, and thus accommodate itself to irregularities of the pavement, the spring  $e^4$  constantly pressing the fender downwardly against the pavement.

The fender may be raised by hand to re-engage the shoulder  $h$  with the dog  $f^2$  and restore the fender to the position shown in Fig. 1.

It is obvious that the pedal  $k$  and lever  $i$  may be used conjointly if desired, and that when this is the case the motorman has a choice of three movements by which to release the fender, namely: first, an outward movement of the lever  $i$ ; secondly, an inward movement of the said lever, and, thirdly, a movement of the pedal  $k$ .

The fender constructed as above described is set forth in another application for Letters Patent of the United States filed by me May 20, 1895, Serial No. 549,873.

The two-armed lever  $i$  may be dispensed with, as shown in Fig. 4, the pedal  $k$  being relied upon to displace the dog.

In Fig. 3 I show the lever  $f^3$  extended inwardly through the dasher and provided with a head  $f^5$  arranged to be pressed by the knee of the motorman.

I claim—

1. The combination with a car, of a fender having trunnions journaled in bearings affixed to the car and provided with an upwardly-projecting shouldered arm, a dog mounted on the platform and arranged to normally engage said arm and thereby hold the fender in a raised position, a lever rigidly connected with said dog and projecting upwardly in front of the platform, and a two-armed lever pivoted to the platform and bearing against the first-mentioned lever, said two-armed lever being adapted to displace the dog by a movement in either direction, as set forth.

2. The combination with a car, of a fender having trunnions journaled in bearings affixed to the car and provided with an upwardly-projecting shouldered arm, a dog mounted on the platform and arranged to normally engage said arm and thereby hold the fender in a raised position, a lever rigidly connected with said dog and projecting upwardly in front of the platform, a two-armed lever pivoted to the platform and bearing against the first-mentioned lever, said two-armed lever being adapted to displace the dog by a movement in either direction, and a pedal movable in the platform and arranged to depress the dog.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 25th day of July, A. D. 1895.

SIMON A. POLITSKY.

Witnesses:

A. D. HARRISON,  
E. BATCHELDER.