

(No Model.)

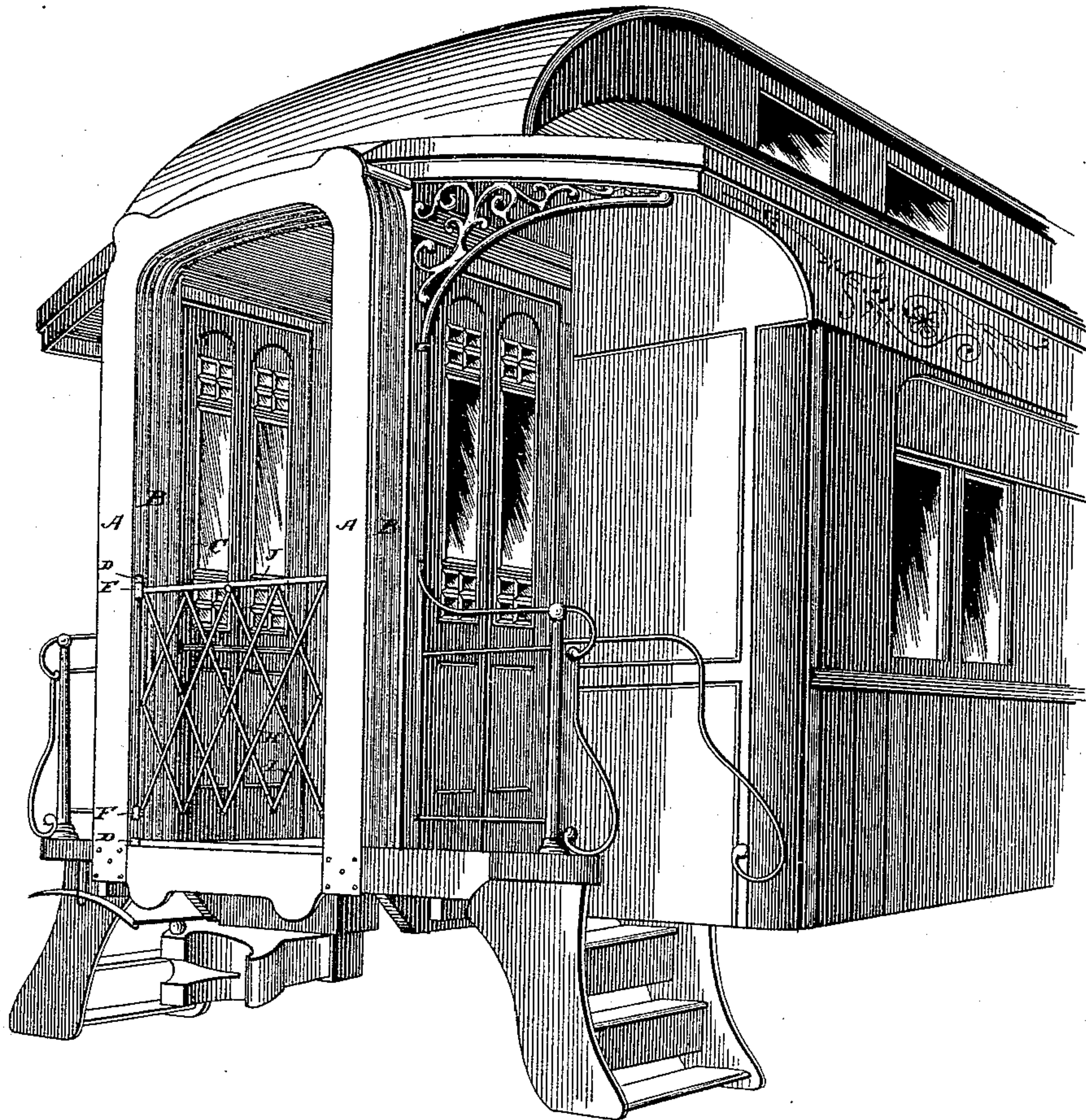
3 Sheets—Sheet 1.

G. C. BUSHMAN.
GATE FOR CAR PLATFORMS.

No. 447,102.

Patented Feb. 24, 1891.

Fig. 1.



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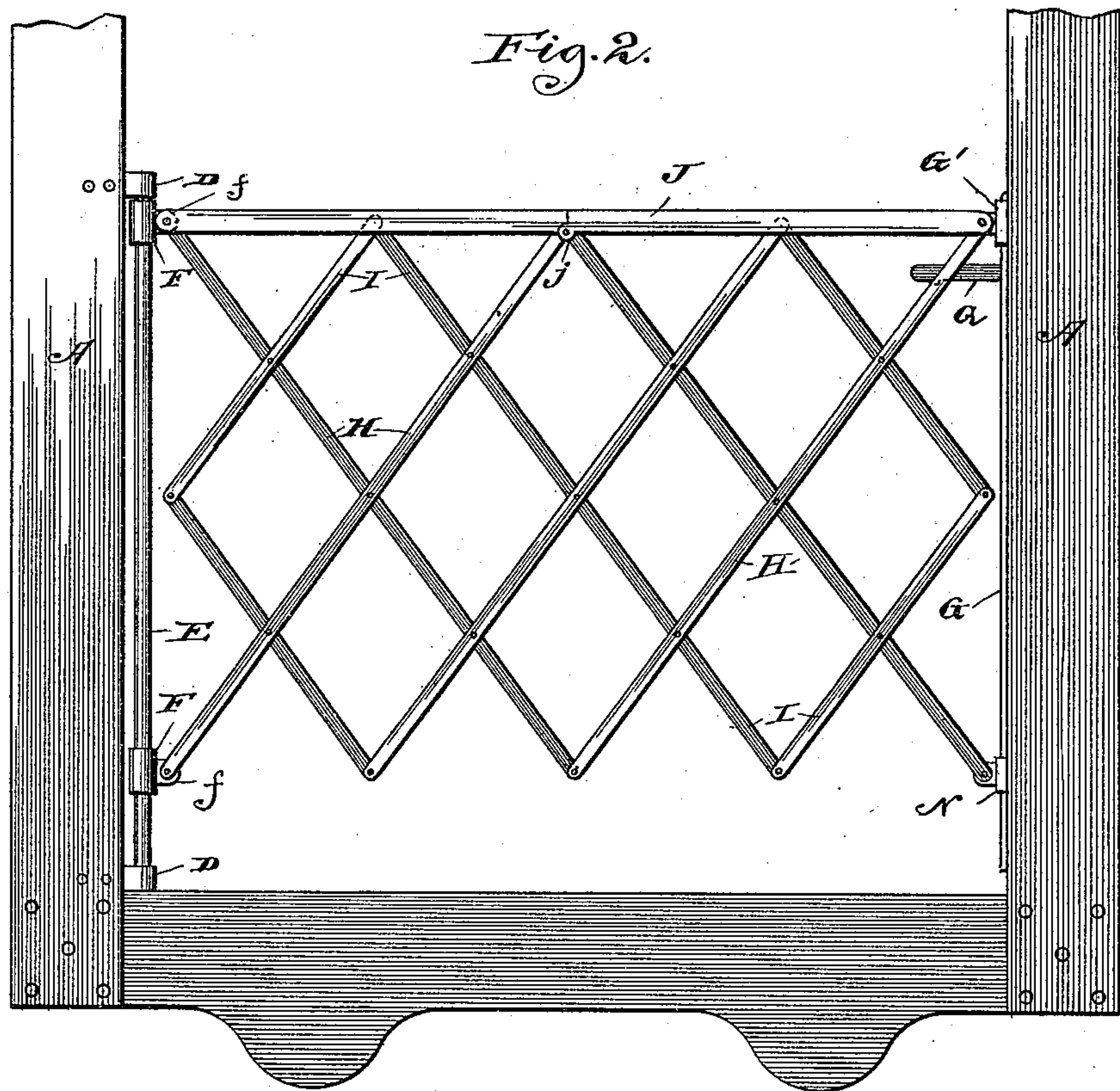
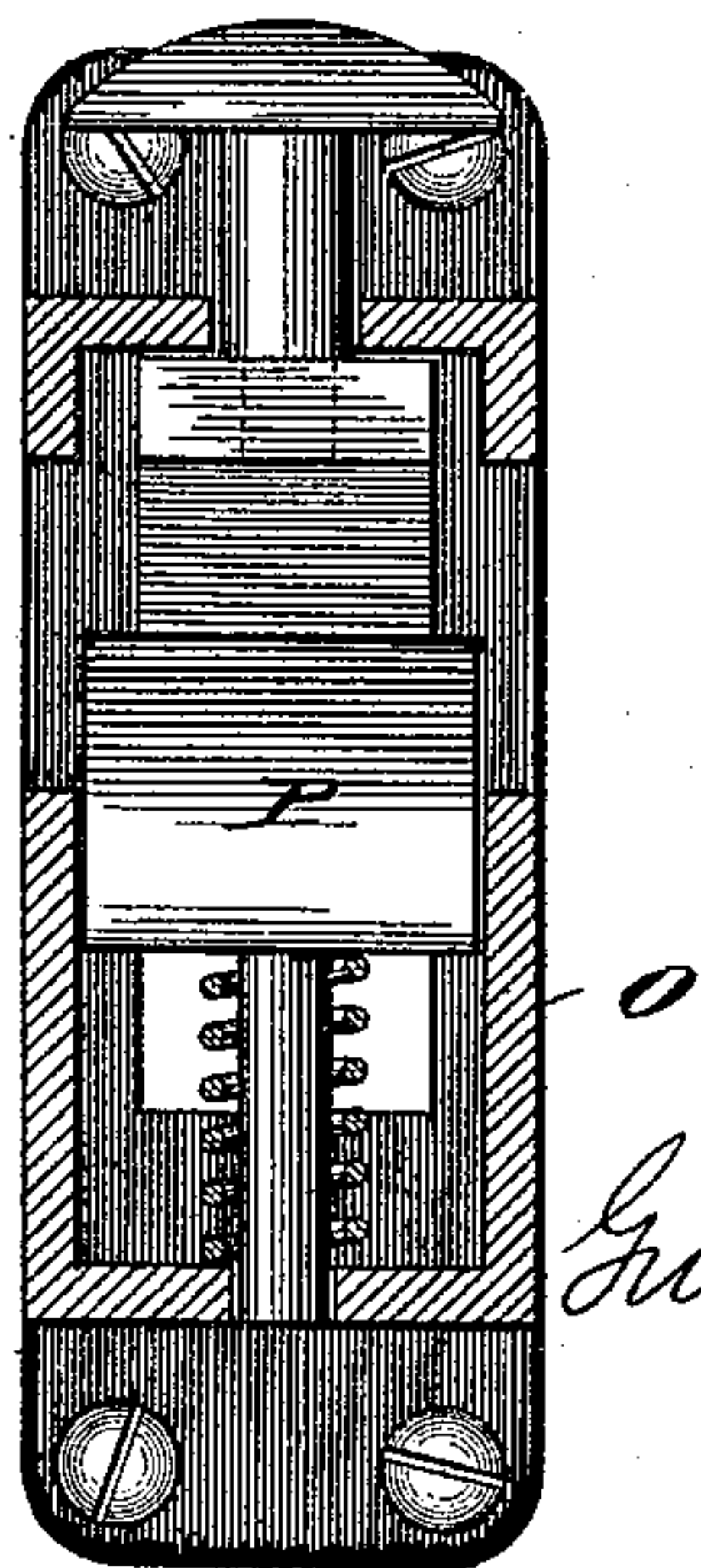
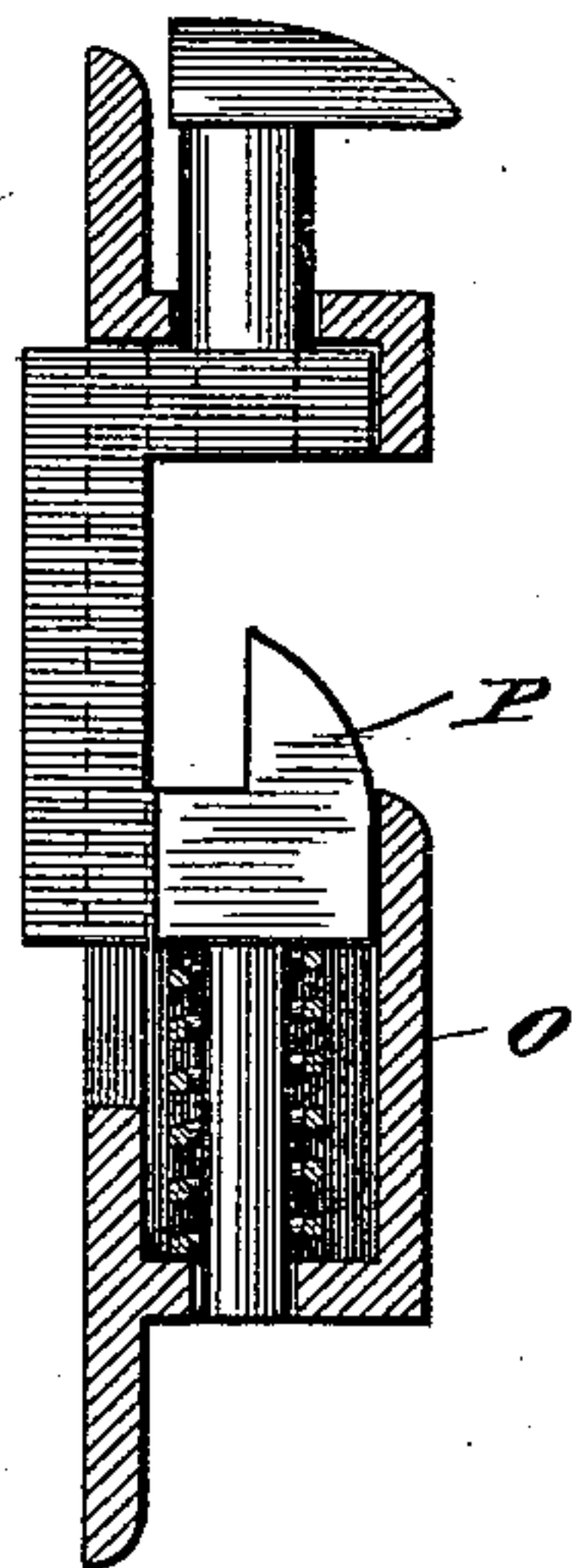


Fig. 6.

Fig. 5.



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Fig. 4.

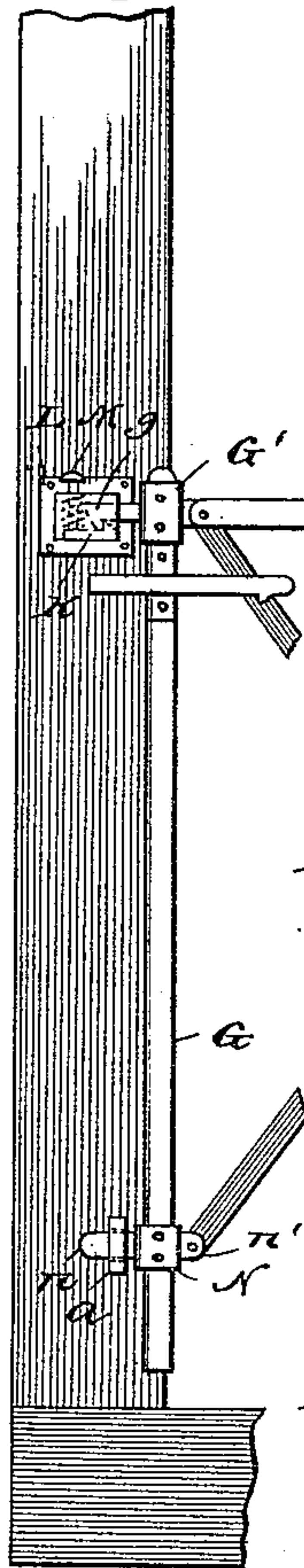


Fig. 5.

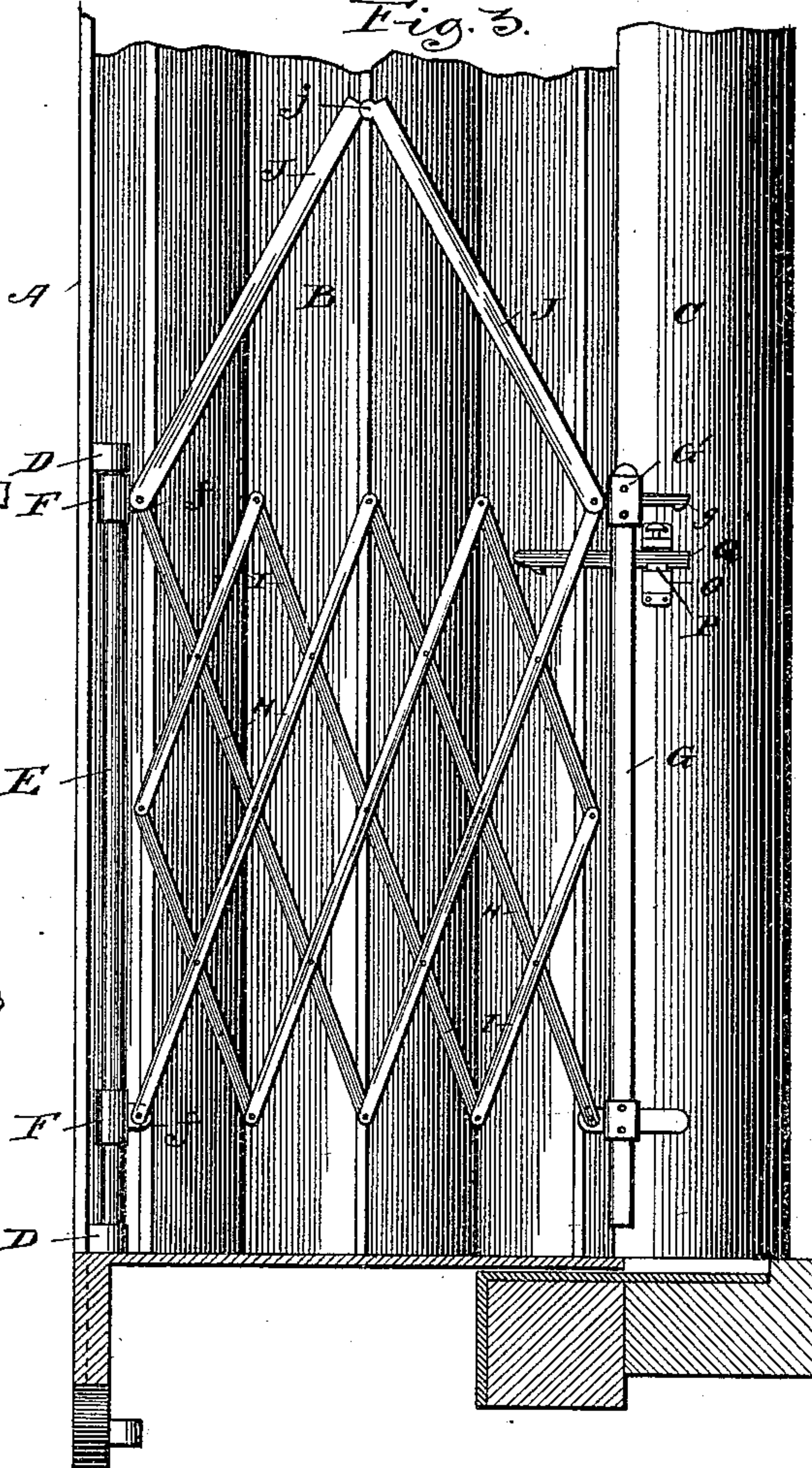


Fig. 9.



Fig. 10.



Fig. 11.

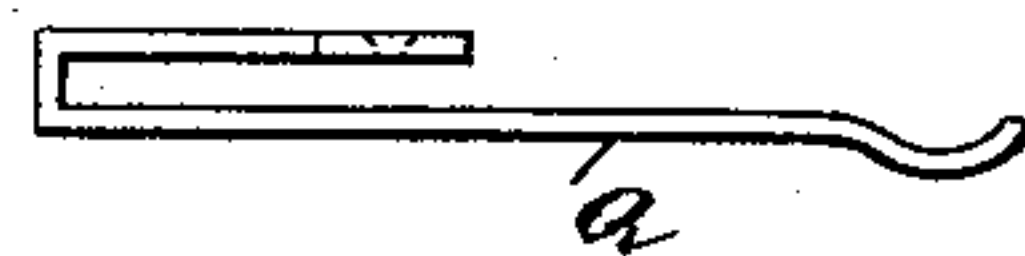


Fig. 12.

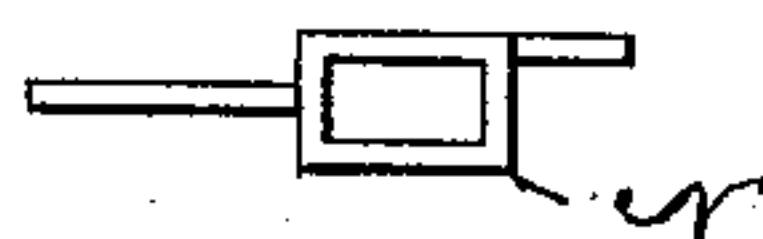


Fig. 7.

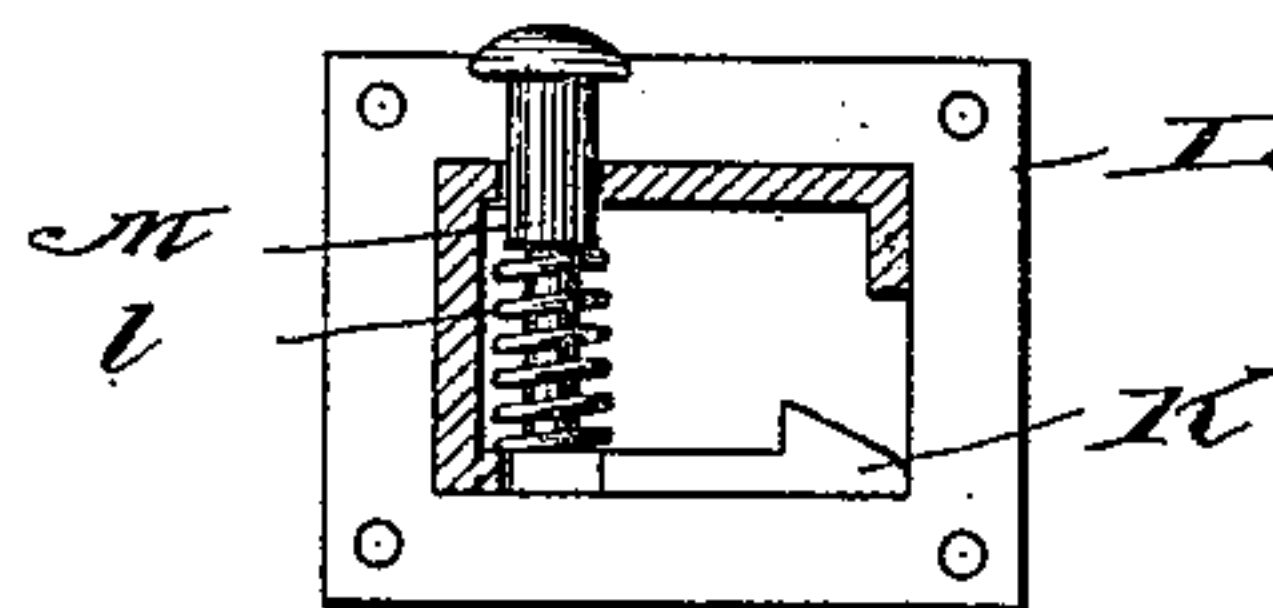
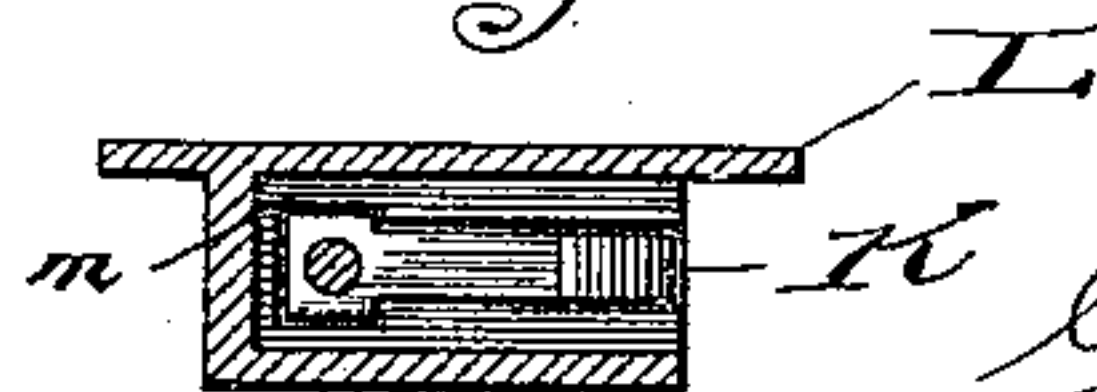


Fig. 8.



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UNITED STATES PATENT OFFICE.

GUSTAV C. BUSHMAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE PULLMAN'S PALACE CAR COMPANY, OF SAME PLACE.

GATE FOR CAR-PLATFORMS.

SPECIFICATION forming part of Letters Patent No. 447,102, dated February 24, 1891.

Application filed February 21, 1890. Serial No. 341,291. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV C. BUSHMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Gates for Car-Platforms, of which the following is a specification.

The object of this invention is to provide an efficient guard for use on the rear ends of the rear coaches of railway-trains, which shall be adapted to be extended across between the outer guard-rails of cars which are not provided with vestibule-extensions, and between the frame-plates of such cars as are provided with such extensions, in order to obstruct the openings and prevent passengers walking or falling through such openings. Such gates or guards have been used heretofore; but as usually constructed they are not permanently connected to the car ends, and therefore the train may sometimes go out without such appliances, or when the train is broken up into sections there may not be enough of such gates carried with the equipment to supply the rear car of each section.

In carrying out my invention I provide each car with at least one gate, which is permanently hinged at the side of the opening between the outer guard-rail at the car end, or when the car is equipped with a vestibule-extension I prefer to hinge the gate on the frame-plate thereof and provide locking devices on the posts of the vestibule nearest the frame-plate. When the cars are not provided with vestibule-extensions, the gate may be pivoted to the post of one of the outer guard-rails adjacent to the opening. The gate itself I prefer to construct in such form that in addition to its capacity of being swung across the opening to obstruct the same, when desired, or inwardly to leave the passage clear, it is also capable of being collapsed laterally, so as to occupy a small space—for example, a space equal in width to the bellows-fold side portions of the ordinary vestibule construction. To attain these ends I employ, by preference, a vertical post, which is mounted at one side of the opening, and a parallel bar, to which the fastening devices for the opposite side of the gate are secured,

and between these two I secure bars which are pivotally connected to the upright bars and also to each other in such manner that they may be extended to bar the opening or collapsed so as to occupy small space when not in use.

In the accompanying drawings, Figure 1 is a perspective view of an end of a passenger-car provided with a vestibule-extension to which my improvement is applied. Fig. 2 is an elevation of the lower part of the frame-plate with the gate applied thereto and extended across the opening between the upright parts of said plate. Fig. 3 is an elevation of the interior of the lower part of one side of a vestibule-extension, showing the gate folded in the position it occupies when not in use. Fig. 4 is an elevation of the side bar of the gate to which the locking appliances are secured. Figs. 5 and 6 are details of a locking device which is applied to the door-post and intended to secure the gate when not in use. Figs. 7 and 8 are similar views of a locking-catch secured to the frame-plate and intended to hold the gate when it is extended across the passage. Fig. 9 is a cross-section through the top rail for the gate. Fig. 10 is a top view of a hinge-plate having a locking projection thereon, and also a lug to which one corner of the gate-bar structure is hinged. Fig. 11 is a top view of a locking-lever which is to be secured to the frame-plate; and Fig. 12 is a top view of a hinge-plate for the lower end of the side bar and having a lug to which the gate-bars are hinged and a lug for locking the same to the frame-plate.

In the drawings, A represents the frame-plate of the vestibule-extension; B, the bellows-fold portion of the side wall; and C, the door-post.

To one member of the frame-plate is secured the hinge members D, and journaled in said members is the gate-post E, bearing thereon the sleeves F, having lugs f.

G is a post carried parallel to the post E, and between these posts is secured the gate-bars H I. Two of these sets of bars will be secured at one of their ends to the posts E and G, respectively, and the other bars of each set will be pivotally connected to each

other and to the bars secured with the posts, so that they may be collapsed or folded up, as shown in Fig. 3, or extended, as shown in Figs. 1 and 2.

5 J is a top rail which is pivotally connected at its respective ends to the posts E and G and having near its middle at *j* a rule-joint. The form of this rail in cross-section is shown in Fig. 9, and it is adapted to receive between
10 its parallel members the upper ends of the gate-bars, as shown by the dotted lines in Fig. 2, whereby when the gate is extended the necessary rigidity is imparted to the bars, and also whereby the rails are prevented from
15 collapsing. This rail also protects the bars from strain should a weight be thrown upon their upper ends.

At the upper end of the post G, I provide a locking-plate G', having the latch *g*, which is
20 adapted to be engaged by the spring-latch K, secured in a plate L, which may be riveted to the face of the frame-plate. The stud M is secured to the base of the latch, and a retracting-spring *l* has one end secured to the stud
25 and the other bearing on a projection *m* of the plate L. When the gate is extended across the passage, the latch *g* will engage the spring-catch K and thereby lock the gate in its extended position until it is released by
30 depressing the stud. I also provide on the frame-plate a keeper *a*, as shown in Fig. 4, which is adapted to receive a projection *n* on the hinged plate N, which is secured at the

lower end of post G, and which has a lug *n'* to which the gate-bar is pivoted. On the 35 door-post C, I have secured a plate O, having a spring-seated locking-bolt P, which is adapted to engage the latch Q, (shown in Fig. 11,) and which latch is secured to the post G.

The construction of these locking devices 40 or catches may of course be changed.

I claim—

1. A gate for railway-car platforms, comprising, in combination, a hinge-post at one side of the opening to be guarded, a swing- 45 ing post parallel thereto, diagonal gate-bars pivotally connected to said posts, and a sectional top rail whose sections have their inner ends hinged together and their outer ends pivotally connected to the posts, substantially 50 as described.

2. A gate for railway-car platforms, comprising, in combination, a hinge-post mounted at one side of the opening to be guarded, a 55 swinging post parallel thereto, diagonal gate-bars pivotally connected to said posts, and a sectional top rail whose sections have their inner ends hinged together and their outer ends pivotally connected to the posts, said rail-sections being U-shaped in cross-section, 60 whereby to embrace the upper ends of the gate-bars, substantially as described.

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