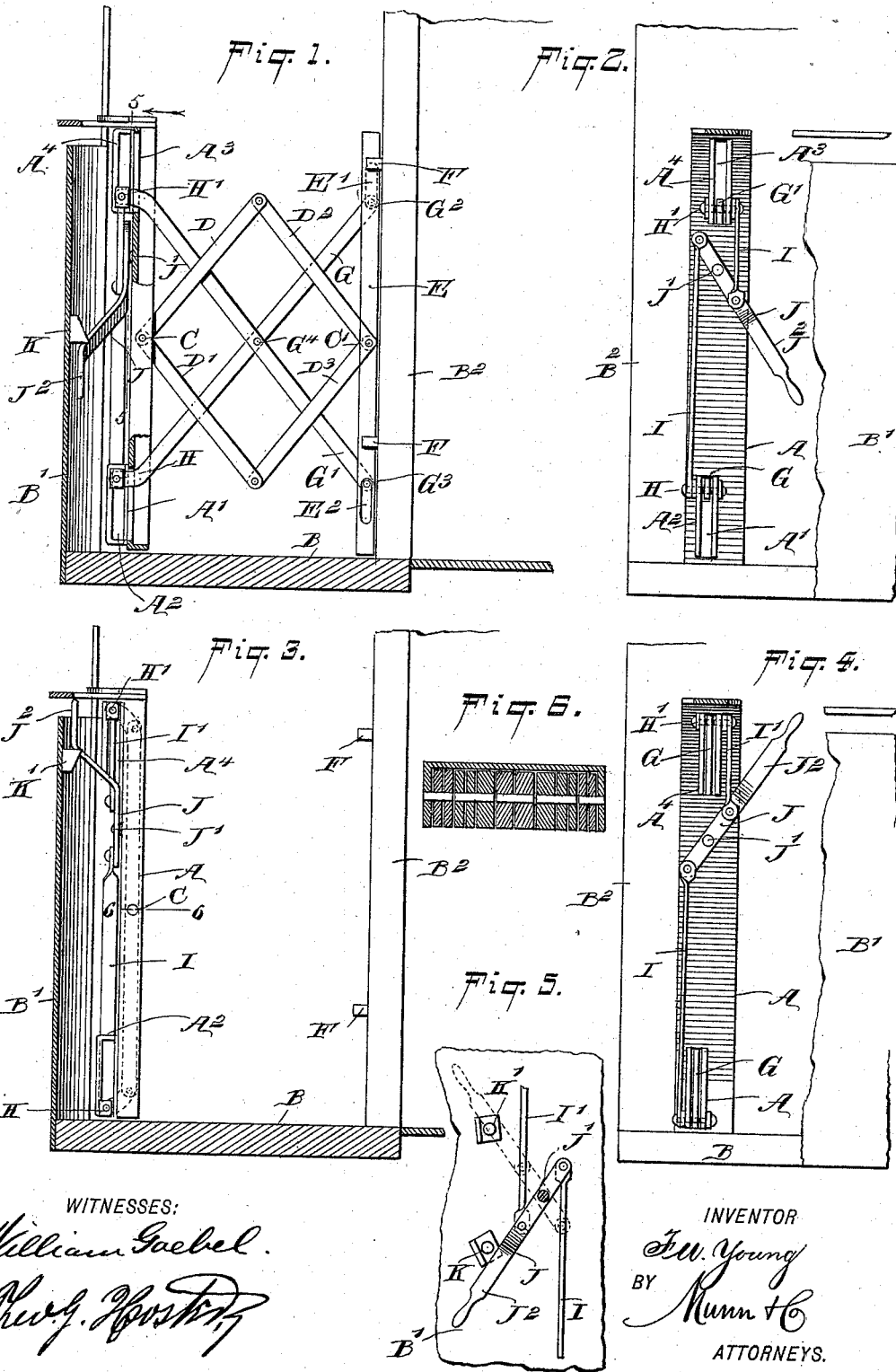


(No Model.)

F. W. YOUNG.  
SAFETY GATE.

No. 526,211.

Patented Sept. 18, 1894.



# UNITED STATES PATENT OFFICE.

FREDERICK W. YOUNG, OF BLOOMFIELD, NEW JERSEY.

## SAFETY-GATE.

SPECIFICATION forming part of Letters Patent No. 526,211, dated September 18, 1894.

Application filed May 24, 1894. Serial No. 512,312. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK W. YOUNG, of Bloomfield, in the county of Essex and State of New Jersey, have invented a new and Improved Safety-Gate, of which the following is a full, clear, and exact description:

The object of the invention is to provide a new and improved safety gate for the platforms of street cars, railroad cars, and other vehicles and places, which is comparatively simple and durable in construction, conveniently manipulated, and properly locked in either an open or a closed position.

The invention consists in certain parts and details, and combinations of the same, as will be hereinafter fully described and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement in a closed position and with parts in section. Fig. 2 is a transverse section of the same. Fig. 3 is a sectional side elevation of the improvement in an open position, and with parts in section. Fig. 4 is a transverse section of the same. Fig. 5 is a similar view of part of the improvement, on the line 5—5 of Fig. 1; and Fig. 6 is an enlarged sectional plan view of part of the improvement, on the line 6—6 of Fig. 3.

The improved safety gate is provided with a casing A, preferably made U-shape in cross section, and adapted to receive in its open end the gate proper, so as to completely conceal the latter when in an open position. This casing or post A, is secured at its lower end on the platform B of the car on which the device is applied, the upper end of the said post being secured on the dash-board B', as plainly illustrated in the drawings.

On the sides of the casing A, and near the middle of the same, are pivoted at C, two members D D' of a set of lazy-tongs having its other set of members D<sup>2</sup> D<sup>3</sup>, pivotally connected with the members D D', and with the pivot C' on a post E, forming part of the free end of the gate, as plainly shown in the drawings. This post E is preferably made of two bars united at top and bottom, and is adapted

to engage keepers F held on the end B<sup>2</sup> of the car, opposite the casing A, so that when the gate is in an open position, it completely closes the side of the platform, as illustrated in Fig. 1.

In the upper end of the post E is arranged a vertically disposed slot E', and a similar slot E<sup>2</sup> is arranged in the lower end of the post, the said slots receiving the transversely-extending pins G<sup>2</sup> and G<sup>3</sup> of a pair of lazy-tongs G and G' respectively, pivotally connected with each other at or near their middle, at G<sup>4</sup>, in such a manner that when the gate is open, as illustrated in Fig. 1, the set of lazy-tongs G G' crosses the members D D', D<sup>2</sup> D<sup>3</sup> of the other sets of lazy-tongs. The members of the set of lazy-tongs G G' are separate and independent of the two sets of lazy-tongs having the sets of members D D', D<sup>2</sup> D<sup>3</sup>, so that the gate can be conveniently closed with all the members of the lazy-tongs folding in the casing A within the width of the sets of bars as shown in Fig. 6. This would be impossible if the bars of both sets of lazy-tongs were pivotally connected.

The inner ends of the lazy-tongs G G' extend through vertical slots A' A<sup>3</sup>, respectively, in the lower and upper ends of the casing A, the said lazy-tongs being pivotally connected by pivots H and H' respectively, with links I and I', respectively, pivotally connected with the lever J, at opposite sides of the fulcrum J' of the latter arranged on the back of the casing A. The pivots H and H' are fitted to slide vertically in guideways A<sup>2</sup> and A<sup>4</sup>, arranged or formed on the back of the casing A, so that when the lever J receives a swinging motion, by the operator manipulating the handle end J<sup>2</sup> thereof, then the pivots H and H' are caused to slide toward or from each other, according to the direction in which the lever J is moved, thereby causing an opening and closing of the set of lazy-tongs G G', and an inward and outward sliding of the post E to open or close the sets of lazy-tongs composed of the members D D', D<sup>2</sup> D<sup>3</sup>. Thus it will be seen that the set of lazy-tongs G G' are the actuating members for opening and closing the gate, it being understood that when the operator swings the handle end J<sup>2</sup> of the lever J downward, the gate is closed,

as shown in Figs. 1 and 2, and when the said lever is swung upward the gate is opened, as illustrated in Figs. 3 and 4.

In order to lock the lever J in either its lowermost or uppermost position, I provide bevel catches K and K' secured on the inner face of the dash board B', and adapted to be engaged by the upper and lower edges of the handle end of the said lever, as will be readily understood by reference to Figs. 1, 3 and 5.

The casing A is of such a width as to accommodate all the members composing the gate proper, so that when the latter is folded, the members are completely within the said casing or post, so that no part of the gate proper projects when the gate-way is open. It will further be seen that the gate can be very cheaply manufactured, and easily manipulated for opening and closing the same and locking it in either of two positions.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the inner and outer vertical members of the gate and a set of lazy tongs pivotally connecting said members, with a pair of crossed pivoted levers or tongs separate and independent of said set of lazy-tongs and at one side thereof, the outer ends of the said crossed levers having a sliding connection with the outer vertical member of the gate and the inner ends being similarly connected with the said inner member, a lever

connected with the inner ends of said crossed levers or tongs to move them toward and from each other, and means for locking the lever.

2. The combination of the inner and outer vertical members of the gate and a set of lazy tongs pivotally connecting said vertical members, with a pair of cross levers or tongs separate and independent of the first set of lazy tongs and at one side thereof, the opposite ends of the said crossed levers or tongs having a sliding connection with the respective vertical members, an operating lever and links connecting the said lever with the inner sliding ends of said crossed levers or tongs, substantially as described.

3. A safety gate for cars, comprising a casing formed on its back with guideways, a lever pivoted on the said casing, links pivotally connected with the said lever at opposite sides of its fulcrum, pivots connected with the said links and fitted to slide in the said guideways, a set of lazy-tongs pivotally connected with the said pivots, a post having slots engaged by pins on the free ends of the said lazy-tongs, and a second set of crossed pivoted levers or tongs independent of the first set and pivotally connecting the said post with the said casing, substantially as shown and described.

FREDERICK W. YOUNG.

Witnesses:

THEO. G. HOSTER,  
C. SEDGWICK.