(No Model.)

# J. MEGINS.

## GUARD RAIL FOR BERTHS.

No. 598,735. Patented Feb. 8, 1898.

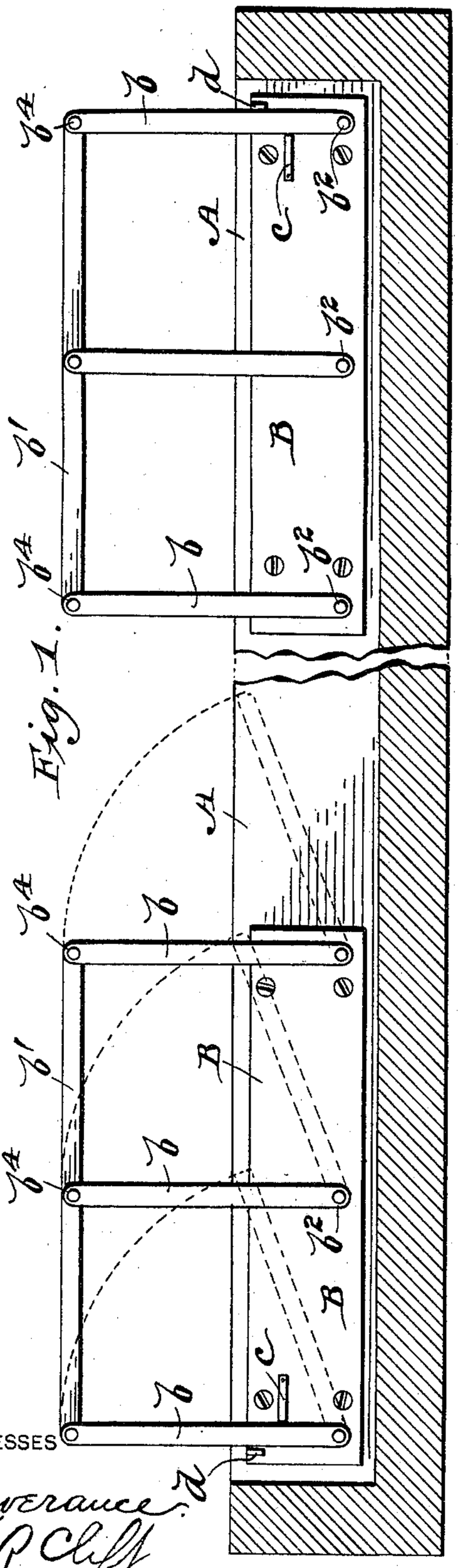


Fig. 1.

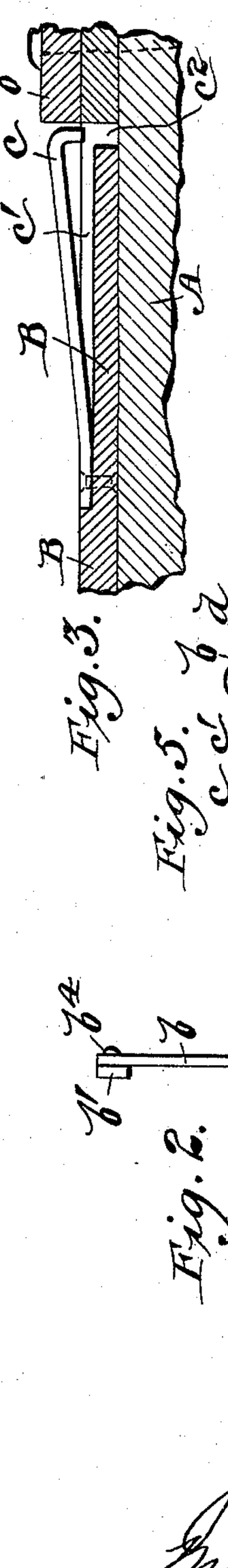


Fig. 3.

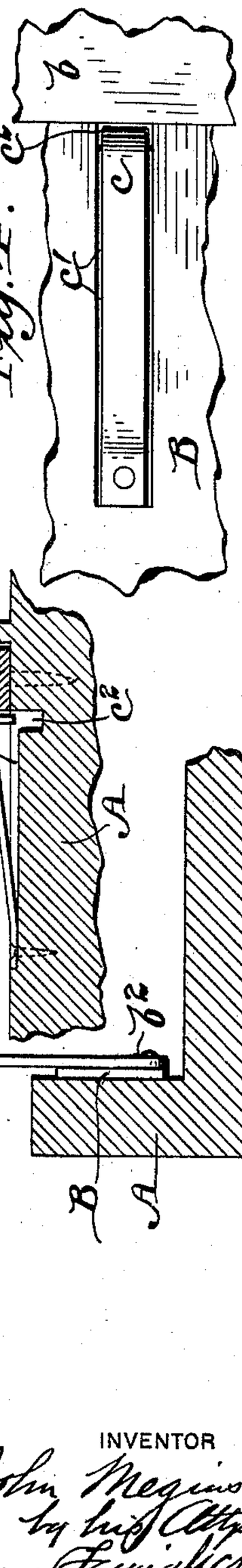


Fig. 4.




Fig. 5.

Fig. 2.

INVENTOR

John Megins
by his Attys
Mason Fenwick & Lawrence

# UNITED STATES PATENT OFFICE.

JOHN MEGINS, OF DULUTH, MINNESOTA.

## GUARD-RAIL FOR BERTHS.

SPECIFICATION forming part of Letters Patent No. 598,735, dated February 8, 1898.

Application filed November 3, 1897. Serial No. 657,260. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN MEGINS, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Guard-Rails for Berths; 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.

My invention relates to that class of guard-rails which are particularly designed for the upper berths of sleeping-cars, which has for its object the provision of a rail which will permit of the passenger entering through an interval in the rail into the berth, and which will furnish substantial security against his falling out from said berth during sleep and which may be folded or collapsed when not in use to permit of the berth being raised and locked against the wall of the car in the usual manner. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view of the interior face of the aisle side of the upper berth, said side being broken away in the middle and said figure showing in solid lines the said improved rail in its operative position and in broken lines the said rail in its folded position and the arc traveled by the upper edge of said rail in moving from its operative to its folded position. Fig. 2 is a transverse section through a portion of said upper berth, showing the end of said rail and rail-plate. Fig. 3 is an enlarged horizontal sectional view through a portion of the aisle side of said berth and through a portion of said rail and rail-plate, showing the spring-catch of said rail in detail. Fig. 4 is a side elevation of the top of a portion of said spring-plate and rail and spring-catch, and Fig. 5 is a horizontal sectional view showing a slightly-modified construction.

In the drawings, A represents the side of the upper berth, on the interior face of which are secured in any suitable manner the rail-plates B B, an interval being preferably left between said plates to permit of the entrance of the passenger into the berth when the rail is in its raised or operative position. *b b b* represent upright bars of any desired or suitable number, which are pivoted at their lower ends preferably to said rail-plates at points $b^2$ $b^2$ $b^2$ and are pivoted at their upper ends to a longitudinal bar *b'* at points $b^4$ $b^4$ $b^4$. A spring-catch *c* is secured at one end to the rail-plate within a shallow longitudinal groove *c'*, so that the free end of said catch in operative position will bear against the edge of one of said upright bars *b* and keep said bar in its raised position and prevent the same from folding toward said catch. The normal position of said spring is outward. The free end of said catch is bent horizontally toward said rail-plate, wherein is constructed a small recess $c^2$, corresponding in depth and diameter to the bent portion of said catch which registers with the same, the construction being such that when said spring is depressed it will be flush with said rail-plate and the upright bar *b* may then fold over it, and when said bar *b* is raised into a vertical position the free end of said spring-catch will fly out from said recess and engage or bear against the edge of said bar. The rail is prevented from folding in the opposite direction by a permanent stop *d* on the face of said rail-plate. The sections of said rail on either side of the central interval are similarly constructed, except that they are arranged as right-and-left members and so that they will fold toward each other.

In preparing the berth the porter, after making the bed, will raise the sections of rails, the catches springing out automatically to hold the sections up after they are fully raised, and the passenger enters the berth through the central interval of said rail; or the passenger may, if he prefers, first enter the berth and then he or the porter may raise the rail. It will readily be seen that the rail in its folded position will not interfere with the raising of the berth in the position it occupies during the day—that is, against the side or roof of the car. In lowering the rail the spring-catch *c* is depressed by the finger of the operator. In place of locating the fixed stops *d* on the rail-plates and providing the groove and recess on said rail-plate said plate may, if desired, be made without such groove and recess and stop and said spring and stop be secured to the side of said berth or bed-frame above said plate. Each of said bars may also,

if desired, be pivoted to individual rail-plates or directly to the bed-frame, in which case last referred to the spring-catch would be secured within a groove in said bed-frame.

While I have described said rail as constructed of two sections with a central interval, I do not care to limit myself to making the sections of equal length or to providing a central interval. One section may, if desired, be constructed longer than the other and the interval be nearer to one end of the berth; or, if desired, only one section may be constructed and that placed centrally with intervals between each end thereof and the end of the berth, in which case the passenger would enter the berth before the rail was raised and would lower the rail before leaving the berth, all of which constructions and modifications are comprised in my said invention. Said rail may also be used for berths on boats and for other bed-frames. I regard this as an important feature of my invention to provide a central space between the sections, so that a passenger can readily get into and out of the berth without lowering either of the sections, and at the same time the sections can be arranged in the same longitudinal plane and folded down into the central space.

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

1. In combination with the frame of a bed, of a guard-rail composed of vertical bars pivoted at their lower ends to the inner side of the frame, and pivotally connected at their upper ends to a horizontal cross-bar, an L-shaped spring-catch secured at its rear end to the inner side of the bed-frame, while its outer free end projects outwardly against the inner side of one of the vertical bars when the guard-rail is in a raised position and prevents the said guard-rail from accidentally lowering, the bed-frame being provided with a recess to receive the bent free end of the spring when it is pressed inward, and a stop for preventing the guard-rail being pushed too far in the wrong direction, substantially as described.

2. A guard-rail composed of a rail-plate provided with a groove and recess for the reception of a spring-catch, bars pivoted at their lower ends to said plate and at their upper ends to a horizontal bar; a spring-catch secured at one end to said plate leaving the other end free to engage or bear against the edge of one of the bars which is pivoted to said plate, and a stop to engage the opposite edge of said bar, substantially as described.

3. The combination with the side of a berth or bed-frame, of a guard-rail made in two sections, each section of which is composed of a rail-plate provided with a groove and recess for the reception of a spring-catch, bars pivoted at their lower ends to said plate and at their upper ends to a horizontal bar; a spring-catch secured at one end to said plate leaving the other end free to engage or bear against the edge of one of the bars which is pivoted to said plate, and a stop to engage the opposite edge of said bar, substantially as described.

4. The combination with the side of a berth or bed-frame, of a guard-rail made in two sections, with a central space between them, each section of which is composed of vertical bars pivoted at their lower ends to the inner side of the frame, and pivotally connected at their upper ends to a horizontal cross-bar, an L-shaped spring-catch secured at its rear end to the inner side of the bed-frame, while its outer free end projects outwardly against the inner side of one of the vertical bars when the guard-rail is in a raised position and prevents the said guard-rail from accidentally lowering, the bed-frame being provided with a recess to receive the bent free end of the spring when it is pressed inward, and a stop for preventing the guard-rail being pushed too far in the wrong direction, substantially as described.

5. The combination with a berth or bed-frame, of bars pivoted thereto at one end of said bars; a spring-catch secured to said frame at one end; the other end thereof being free to engage one of said bars when the bar is in its vertical position, and adapted to be depressed between the face of said bar and said bed-frame when said bar is in its lowered position; a stop secured to said bed-frame to prevent said bars falling in the opposite direction of said catch, and a horizontal bar pivoted to the upper ends of said first-named bars, substantially as described.

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

JOHN MEGINS.

Witnesses:
JAMES T. WATSON,
JOHN M. MCCLINTOCK.