No. 660,651. Patented Oct. 30, 1900.

F. A. OLMSTED.

WAGON SEAT LOCK.

(Application filed July 27, 1900.)

(No Model.)

Fig. 1.

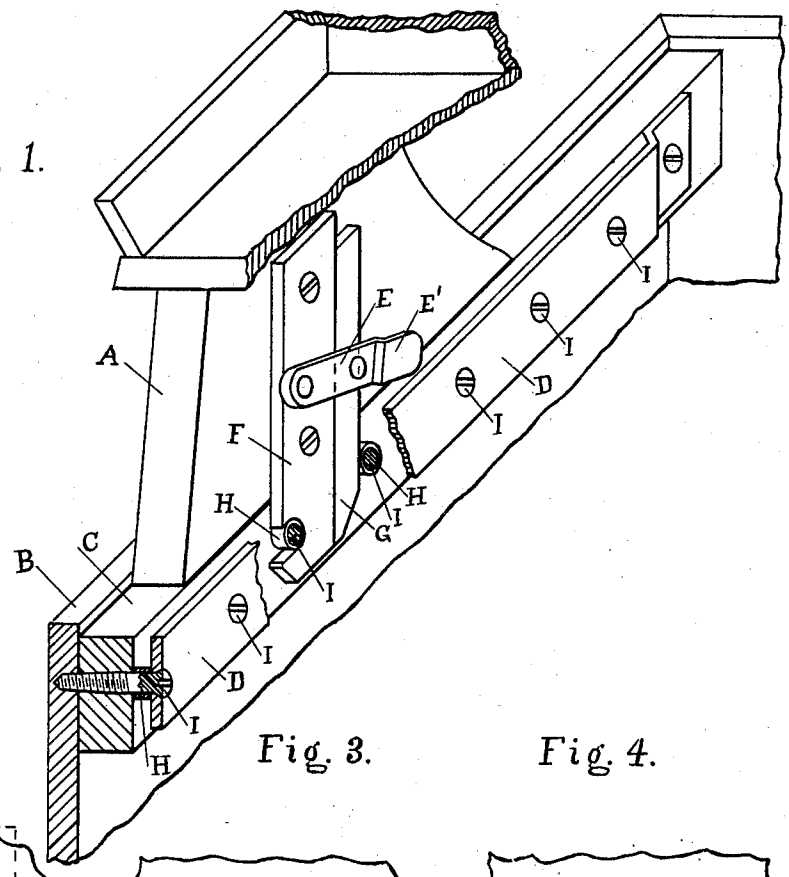


Fig. 2.

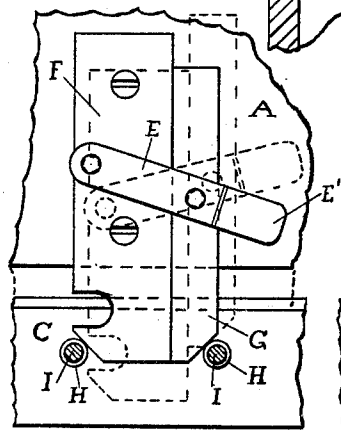


Fig. 3.

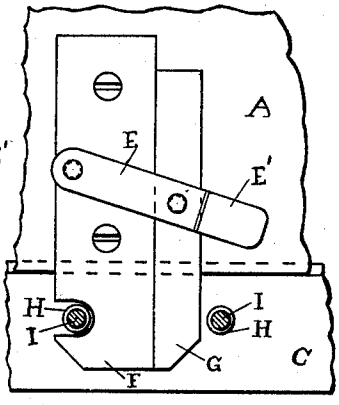
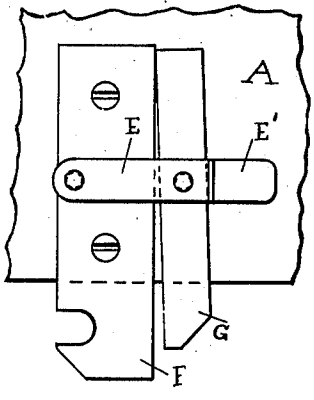


Fig. 4.



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UNITED STATES PATENT OFFICE.

FRED A. OLMSTED, OF SOUTH FALLSBURG, NEW YORK.

WAGON-SEAT LOCK.

SPECIFICATION forming part of Letters Patent No. 660,651, dated October 30, 1900.

Application filed July 27, 1900. Serial No. 25,018. (No model.)

To all whom it may concern:

Be it known that I, FRED A. OLMSTED, a citizen of the United States, and a resident of South Fallsburg, in the county of Sullivan and State of New York, have invented certain new and useful Improvements in Wagon-Seat Locks, of which the following is a specification.

My invention relates to an improvement in wagon-seat locks; and it consists of a rack secured to the side of the wagon-body, a hook secured to the seat-riser, which may engage with any tooth of said rack, and a key secured to said hook by a link which may lock said hook in engagement with said rack.

Reference being had to the sheet of drawings, in which similar characters refer to similar parts, Figure 1 is a perspective view of my device in operative position. Fig. 2 is a front elevation showing the hook about to enter the rack. Fig. 3 is a front elevation showing the hook locked in engagement with the rack, and Fig. 4 is a front elevation of the hook and key with the lower end of the key separated as far as possible from the hook.

In Fig. 1, A is the riser on one end of the wagon-seat.

B is a portion of one side of the wagon-body.

C is a portion of the rail on the inner side of the side B of the wagon-body.

D is an iron strap secured to the inner side of the rail C by screws I I.

H H are collars lying between the strap D and the rail C, through which the screws I I pass. These collars H H and screws I I retain the strap D at a fixed distance from the rail C and, together with the strap, they form the rack referred to, of which the collars H H and the portion of the screws I I passing through them constitute the teeth. It is intended that this rack shall be continuous and extend along such a portion of the rail C as may be required to support the seats. The ends of the strap D are offset and fastened to the rail, as shown in Fig. 1.

F is an iron strap secured to the inner side of the riser A, below the bottom of which one end of the strap extends. A recess or notch is made in the front edge of the lower end of this strap, thus forming it into a hook. This recess is made at such a point that when the riser A rests on the rail C the recess may engage with any one of the teeth of the rack. The lower front corner of the hook F is chamfered off to facilitate its entry between the teeth of the rack.

G is an iron strap with parallel sides placed along the rear edge of the hook F, to which it is attached by the link E and constitutes the key referred to. The rear end of the link E is extended and offset inwardly to form the handle E'. The link E is of such a length that the key G may move up and down back of the hook from a position where the lower end of the key is flush with the lower end of the hook to a position indicated by dotted lines in Fig. 2. The lower rear corner of the key G is chamfered off to correspond with the lower front corner of the hook F. This key G is of such a width that it, together with the hook F, nearly fills the space between any two of the teeth of the rack when the hook is in engagement with one of said teeth, and thus it locks the hook in said engagement. The upper end of the key G is extended so that the maximum opening possible between the lower end of the key and the lower end of the hook, as shown in Fig. 4, is not sufficient to permit one of the teeth of the rack to enter the opening.

In Fig. 1 a portion of the strap D, and in Figs. 2 and 3 the entire strap D, is removed in order to expose the lower end of the hook and key to view. The pivots of the link E are intended to be loose enough to permit free play of the key G up and down behind the hook F. Thus the normal position of the key will be its lower position. Then to operate this device introduce the hook and key between two of the teeth of the rack, as shown in Fig. 2, when the weight of the seat will force the hook downward and backward to the position indicated by dotted lines, while the key will be driven upward and backward to the position also shown by dotted lines. Now if the seat be pushed forward until the hook has engaged with the tooth next before it the key will drop down and nearly fill the space between the back of the hook and the next tooth in the rear, thus locking the hook in engagement with the rack, as shown in Figs. 1 and 3. To disengage the lock, a slight upward pressure applied to the handle E' of the link E will

elevate the key to such a position that the hook can be pulled backward out of engagement with the rack, when the seat can be easily removed.

I prefer to use a key with parallel sides rather than a wedge-form key, because the latter might be forced upward by backward pressure on the wagon-seat, while the former could not be thus driven upward.

Both risers of each wagon-seat are equipped with a hook and key, the rail on either side of the wagon-body is supplied with a rack, and the teeth or pins of these racks are equidistant, so that the seat may be locked in many positions but a short space apart through the entire length of the wagon-body. In case it is desired to use a short rack only, it is not necessary to use the collars H H, as the screws alone will then serve the purpose.

I do not wish to be understood as limiting myself to the precise construction here illustrated and described.

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

1. In the rack of a wagon-seat lock the combination of a strap of iron or other suitable material pierced with a row of equidistant holes; screws, pins, or similar fastenings which may pass through said holes and become fastened to the side of the wagon-body; and rings or collars over said screws, pins, or similar fastenings which may lie between said strap and said wagon-body and prevent the nearer approach of said strap to said wagon-body.

2. In a wagon-seat lock the combination of a hook secured to the riser of the wagon-seat and projecting downward therefrom, a key secured to said hook by a link which may permit its free movement through a short space up and down behind said hook, an extension of said link beyond said key said extension being inclined or offset inwardly out of the plane of said link, and a toothed rack secured to the side of the wagon-body in such manner that when said wagon-seat is in operative position on said wagon-body said hook may be engaged with one of the teeth of said rack and said key may enter and nearly or quite fill the space between the back of said hook and the next tooth behind said hook.

3. In a wagon-seat lock the combination of a hook secured to the riser of a wagon-seat and projecting downwardly therefrom; a key secured to said hook by a link; a strap of iron or other suitable material secured to the side of the wagon-body by screws, pins or similar fastenings at equal distances from each other; and rings or collars over said screws, pins or similar fastenings which lie between said strap and said wagon-body and which may prevent the nearer approach of said strap to said body, said hook and said rings or collars being so situated that when said seat-riser is in operative position on said wagon-body said hook may be engaged with any one of the said rings or collars, and said key may enter and nearly or quite fill the space between the back of said hook and the next ring or collar behind said hook.

Signed at Monticello, in the county of Sullivan and State of New York, this 20th day of July, A. D. 1900.

FRED A. OLMSTED.

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