No. 837,138. PATENTED NOV. 27, 1906.

H. SMITH.

CARRIAGE TOP IRON.

APPLICATION FILED JAN. 5, 1906.

Fig. 1.

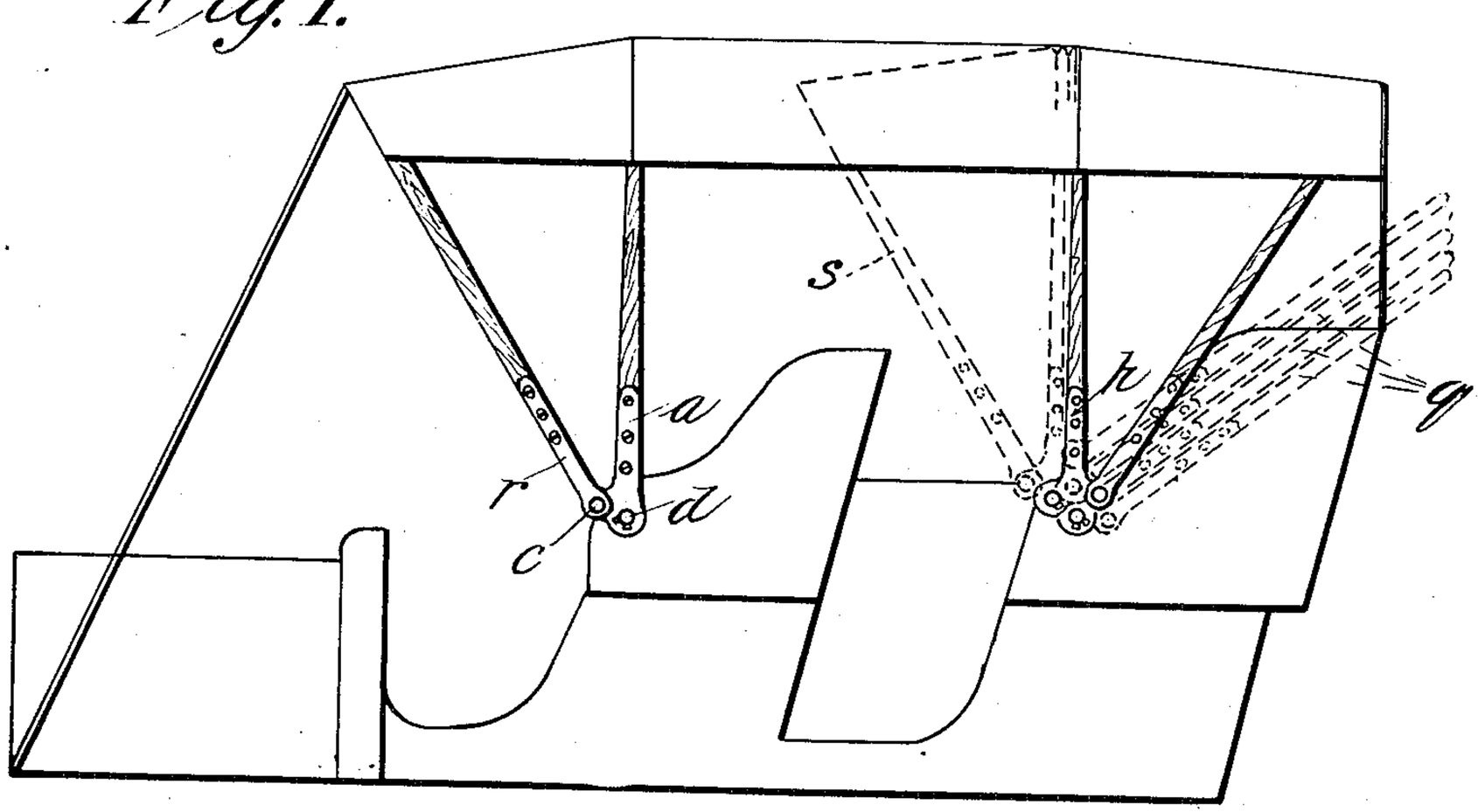


Fig. 2.

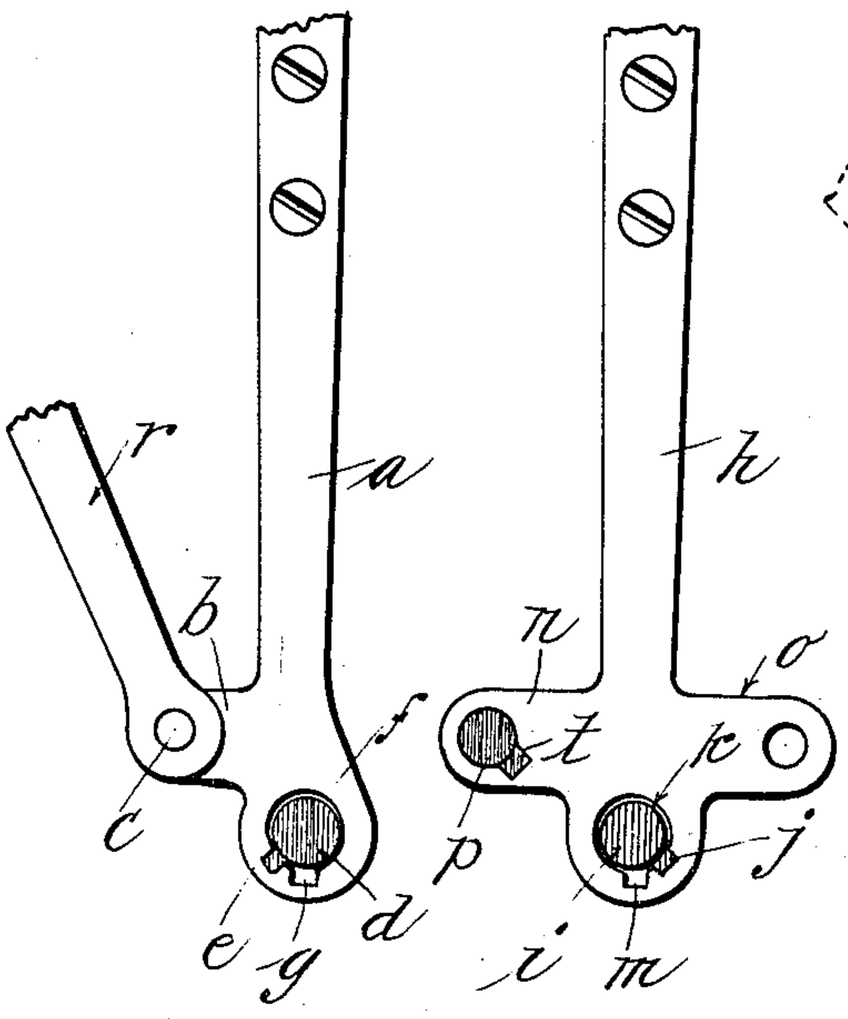
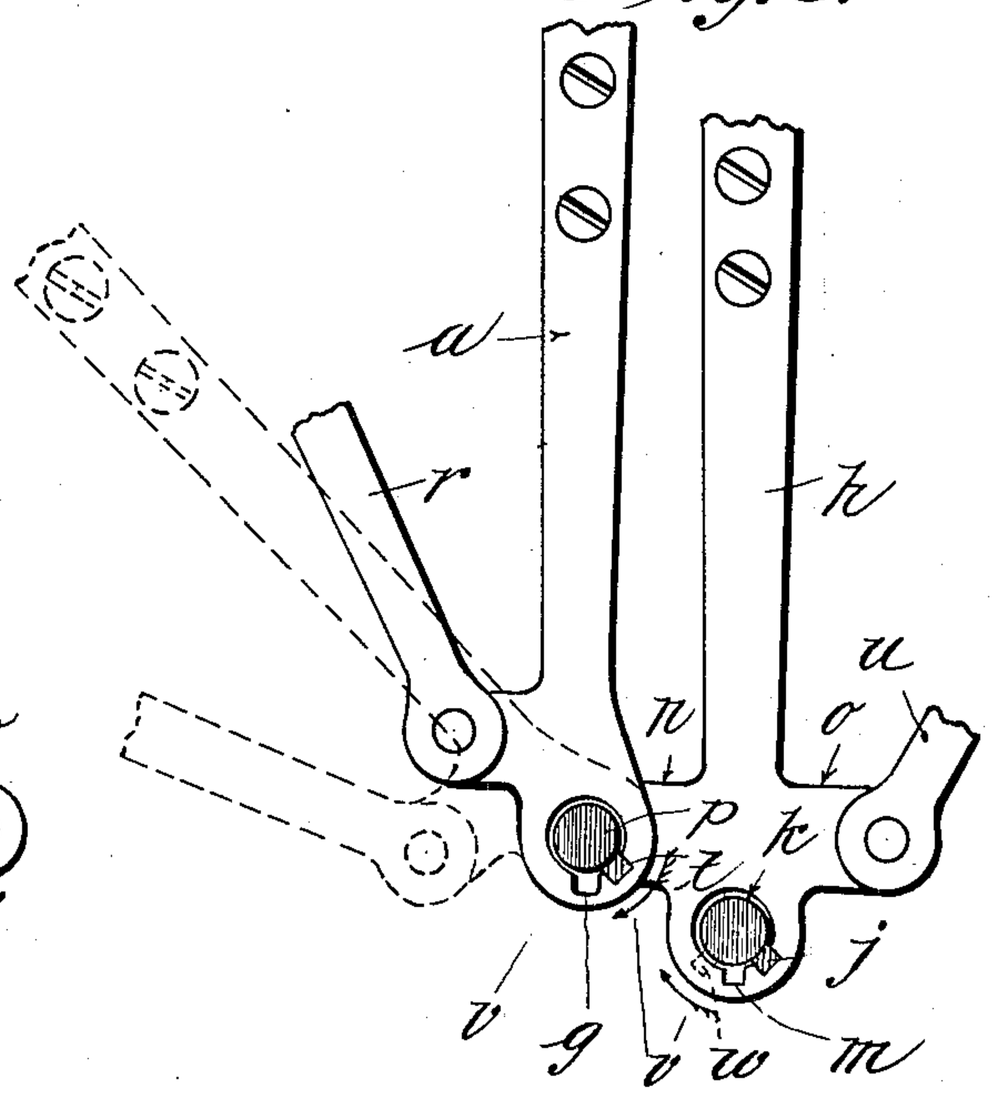


Fig. 3.



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UNITED STATES PATENT OFFICE.

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CARRIAGE-TOP IRON.

No. 837,138. Specification of Letters Patent. Patented Nov. 27, 1906.

Application filed January 5, 1906. Serial No. 294,768.

To all whom it may concern:

Be it known that I, HINSDALE SMITH, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Carriage-Top Irons, of which the following is a specification.

This invention relates to the class of carriages and wagons, and more particularly to that class of inventions known as "carriage-top irons," which has for its object to pivotally secure the top of a carriage to the body thereof; and the invention consists in constructing these carriage-top irons so that they can be readily put in place and removed from the carriage-body.

Heretofore the common way of detachably securing the carriage-top to the body has been by the use of a threaded bolt, which is secured to the wagon-body or generally to the top side and rear portion of the seat, the same standing in a vertical position, the carriage-top irons being so formed as to slip over the vertical bolt and be held in place by a nut. The objection to the use of this arrangement is that after a time the nut works loose, allowing the carriage-top irons to become loose and rattle. Another objection is the trouble and inconvenience to remove the holding-nut every time it is necessary to secure the top.

By the use of my invention I do away with these objections, enabling the top to be put on or removed without the use of any instrument or tool whatever. This is accomplished by securing at right angles to the side of the carriage-seat or body portion a stud circular in cross-section and having an offset or lug which extends at right angles to the main portion of the stud. This offset or lug forms, in effect, a stop or pin to prevent the carriage-top iron from disengaging the stud. In order to prevent this disengagement, certain of the carriage-top irons are formed at their lower ends with a keyhole-slot or opening, the top-iron being held on the stud by the offset or lug, as described in detail below.

In the drawings forming part of this application, Figure 1 is a side view of the carriage-body, showing the top-irons in place and in a vertical position. Fig. 2 is a detailed view of the irons which are used at the front and back portions of the carriage-body, while Fig. 3 shows the front and rear irons pivotally secured together, the top-irons which are used at the forward part of the body being placed on the irons that are used at the rear part of the body.

Referring to the drawings in detail, *a* designates one of the irons that is secured to the forward part of the carriage-body and having wings or ears *b* at right angles thereto and at the lower portion of the same.

c designates a pivot on the offset portion *b*, while *d* designates a stud or bolt that is permanently secured to the side of the carriage-body. The stud *d* carries at the outer end and integral therewith an offset portion or lug *e*, which stands at right angles to the longitudinal axis of the stud and at an acute angle to the vertical plane passing through the axis of the stud, as shown. The lower end of the iron *a* has a keyhole-slot or opening *f*, which is located so that the part *g* thereof lies in the median line of the iron *a*.

In order to place the iron on the stud *d*, the same is tipped rearward until the lug and the lower part of the keyhole-slot are in alinement, when the same can be readily pushed onto the stud. Upon bringing the iron *a* to a vertical position, as shown, the lug-lock securely holds the iron in place.

h designates one of the irons that is adapted to be secured to the rear part of the carriage-body. This iron is detachably secured to the body in the same manner as the iron *a*. A stud *i*, having an integral offset or lug *j*, is permanently secured to the carriage-body, the irons *h* having a keyhole-slot or opening *k*, the part *m* thereof being at the lower end of the slot. It will be noticed that the lugs *e* and *j* stand in opposite directions. This construction permits the iron *h* to be put on and taken off from the body of the vehicle in the same manner as the iron *a*, except that a forward tipping of this iron is necessary to bring the lug and slot in alinement. The iron *h* has at its lower end two offset or wing portions *n* and *o*, the part *n* having a stud *p* thereon, the purpose of which is to permit the iron to be removed from the stud *d* at the forward end of the body and slipped over the stud *p*, thus permitting the entire top of the carriage to be folded back into the dotted-line position *q*, as shown in Fig. 1.

In order to permit the iron *a* and its carriage-brace *r* to be placed on the iron *h*, it is necessary to tip the same forward into the dotted-line position *s*, as shown in Fig. 1, so

that the part *g* of the keyhole-slot therein will register with the offset *t* or lug on the stud *p*. The wing *o* on the iron *h* is for the purpose of pivotally carrying the carriage-brace *u*.

The arrows *v* in Fig. 3 show the direction in which the irons *a* and *h* are to be rotated when it is required to fold the top down into the dotted-line position *q*, as shown in Fig. 1. At the same time the irons *a* and *h* are securely locked to the studs *k* and *p* by the lugs *j* and *t* assuming the dotted-line position *w*. (Shown in Fig. 3.) The dotted-line position of the iron *a* and brace *r* in Fig. 3 indicates the point at which it is necessary to tip them forward in order that they may be placed on the stud *p* on the iron *h*.

It is therefore seen that I have invented a convenient and useful means for securing the top-irons to a carriage-body and for removing the same therefrom.

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

1. In a device of the class described, a stud having an offset or lug portion adapted to be permanently secured to a fixed part, a top-iron having a slot therein and corresponding in contour to the outer portion of the stud whereby the top-iron is adapted to be placed in position on the stud and locked to the same.

2. In a device of the class described, the combination with an upright having a slot therein, a wing at right angles thereto and carrying a pin or stud having an offset thereon, a second element having a slotted opening in the lower extremity thereof, the upright being adapted to be secured to a stud on the carriage-body, said stud being of the same shape as the first-mentioned slot, a lug on the fixed stud, said lug serving to lock the upright in position.

3. In a device of the class described, a stud secured to the body of a carriage, a lug on said stud, a carriage-top iron having a keyhole-slot therein and adapted to be placed over said stud, a wing portion on said iron, a stud on said wing portion and having a lug thereon, a second carriage-top iron having a keyhole-slot in its lower end, said keyhole-slot being formed so as to be placed over said last-mentioned stud whereby the second top-iron is locked to the first-mentioned top-iron.

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