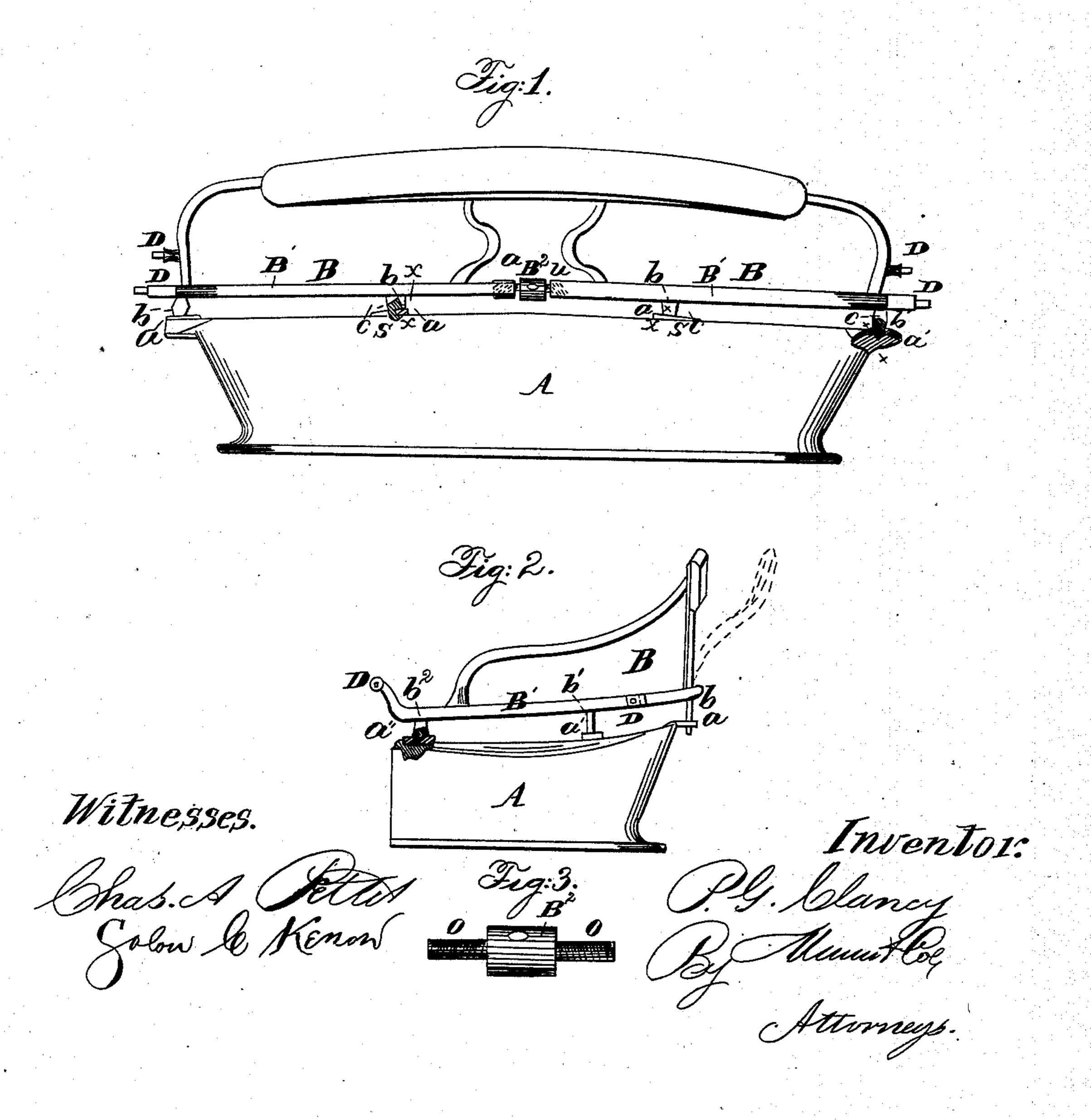
P. G. CLANCY.

Shifting-Rail.

No. 68,843.

Patented Sept 17, 1867.



Anited States Patent Pffice.

PATRICK G. CLANCY, OF AUGUSTA, MAINE.

Letters Patent No. 68,843, dated September 17, 1867.

IMPROVEMENT IN SHIFTING-RAIL FOR CARRIAGE-TOPS.

The Schedule referred to in these Netters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Patrick G. Clancy, of Augusta, in the country of Kennebec, and State of Maine, have invented a new and improved Shifting-Rail for Carriage-Tops; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a rear view of a carriage-seat provided with my shifting-rail.

Figure 2 is an end view of the same.

Figure 3 is a view of the centre-piece B².

Similar letters of reference indicate corresponding parts in the several figures.

In this invention the carriage-top is fixed to a rail which can be easily attached to or detached from the seat. The means for attaching and detaching it are short hooked projections on the rail, catching in eyes in plates attached to the seat, and held in position in the eyes by shortening the rail. The rail is made extensible by means of an independent piece screwed into its centre by right and left screws.

In order that others skilled in the art to which my invention appertains may be enabled to make and use

the same, I will proceed to describe it in detail.

In the drawings, A represents the carriage-seat and B the rail to which the carriage-top is fastened, and which is capable of being quickly and easily attached to or detached from the seat by means hereafter described. $b b^1 b^2$ are short arms projecting downward from the rail B; b b near its centre; $b^2 b^2$ at its ends; and $b^1 b^1$ between b and b^2 , a little nearer the latter than the former. The arms b^1 and b are each provided with a small, stout hook, or a transverse gain in their outer side, as shown at c c. The arm b2 is bent forward a little at its lower extremity. In connection with these short hooked arms I provide corresponding slotted plates a a a a2, fastened in any suitable manner to the seat, so that their slotted end shall either rest on the upper edge of the side of the seat, as shown at $a^1 a^2$, or project over the edge and out from it a short distance, as shown at a. The slots in these plates correspond in dimensions to the hooked arms that are intended to work in them. I attachthe rail B to the seat by placing it in position, as shown in fig. 1, and then forcing the arms b^2 b^2 down into the corresponding slots or sockets $a^2 a^2$, and afterwards forcing the arms $b^1 b^1$ into the sockets $a^1 a^1$, and the arms b into the sockets a a, so that the edge of the plate shall set into the gain or hook of the projecting arms of the rail. The weight of the rail or of the rail and carriage-top will alone be sufficient, when the parts are properly made, to force the arms into their proper position in the sockets. It remains now to describe the method by which I hold the rail in that position or release it at pleasure. This is accomplished by making the rail in three pieces, two long end pieces B1 B1, having each the three arms b b1 b2, and one centre piece B2, the ends of which are provided with male screws o, the screw on one end running in an opposite direction to the screw on the other end, and both screws working in connection with female screws u in the ends of the rail pieces B1 B1. The rail being constructed in this manner, and the hooked projections inserted into the eyes or sockets a a a a a a give the screws o a turn, which draws the end pieces of the rail towards each other, forcing the edge of the socket-plates under the shoulder of the gain or hook c, so that the arms $b b^1 b^2$ cannot be detached from the carriage-seat until the screws o are turned in the opposite direction. The central piece ${f B^2}$ of the rail I make of the same shape as the rest of the rail, so that when the three pieces are screwed tightly together they have the appearance of one continuous symmetrical rail. A hole may be drilled in the centre piece into which to insert a wrench to turn the screws o o, in order to extend or contract the length of the compound rail B. I would call particular attention to the shape of the projecting arms b b1, having the gain c. The shoulder x on the under side of the gain is shorter than the shoulder x' on the upper side, in order that the arm may readily enter and escape from the socket. The lower corner of the arm, on the side s opposite to the shoulders x x', is bevelled or rounded off, so that when the rail is screwed apart the arms b b^1 shall at the same time be forced out of the sockets a at by the force of the screws o o. The gains c c in the arms b b b1 b1 are made taper-this arrangement, when the arms are screwed towards each other, the edge of the plates is wedged tightly into the gain so as absolutely to prevent all rattle and noise of the parts against each other. I preferably make the

upper side of the gain horizontal, bevelling the under side up towards it, in order that the arm may rest evenly and firmly on the plate. D D are short lateral arms, by which the carriage-top is attached to the rail.

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

- 1. The arms b b^1 , having the gain c, decreasing in width from its outer to its inner side, and having the short shoulder x, the long shoulder x', and the rounded or bevelled corner s, substantially as and for the purposes specified.
 - 2. The wedge-shaped socket-plates a a^1 , substantially as and for the purpose specified.
- 3. The combination of the bent arms b^2 b^2 with the notched arms b b^1 , substantially as and for the purpose specified.

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To the above specification of my improvement I have signed my hand this eighteenth day of July, 1867.

PATRICK G. CLANCY.

Witnesses:

CHARLES A. PETTIT, Solon C. Kemon.