R. W. SCHWAB.

METALLIC COUCH.

APPLICATION FILED MAY 4, 1910.

983,776.

Patented Feb. 7, 1911.

Fig. 1.

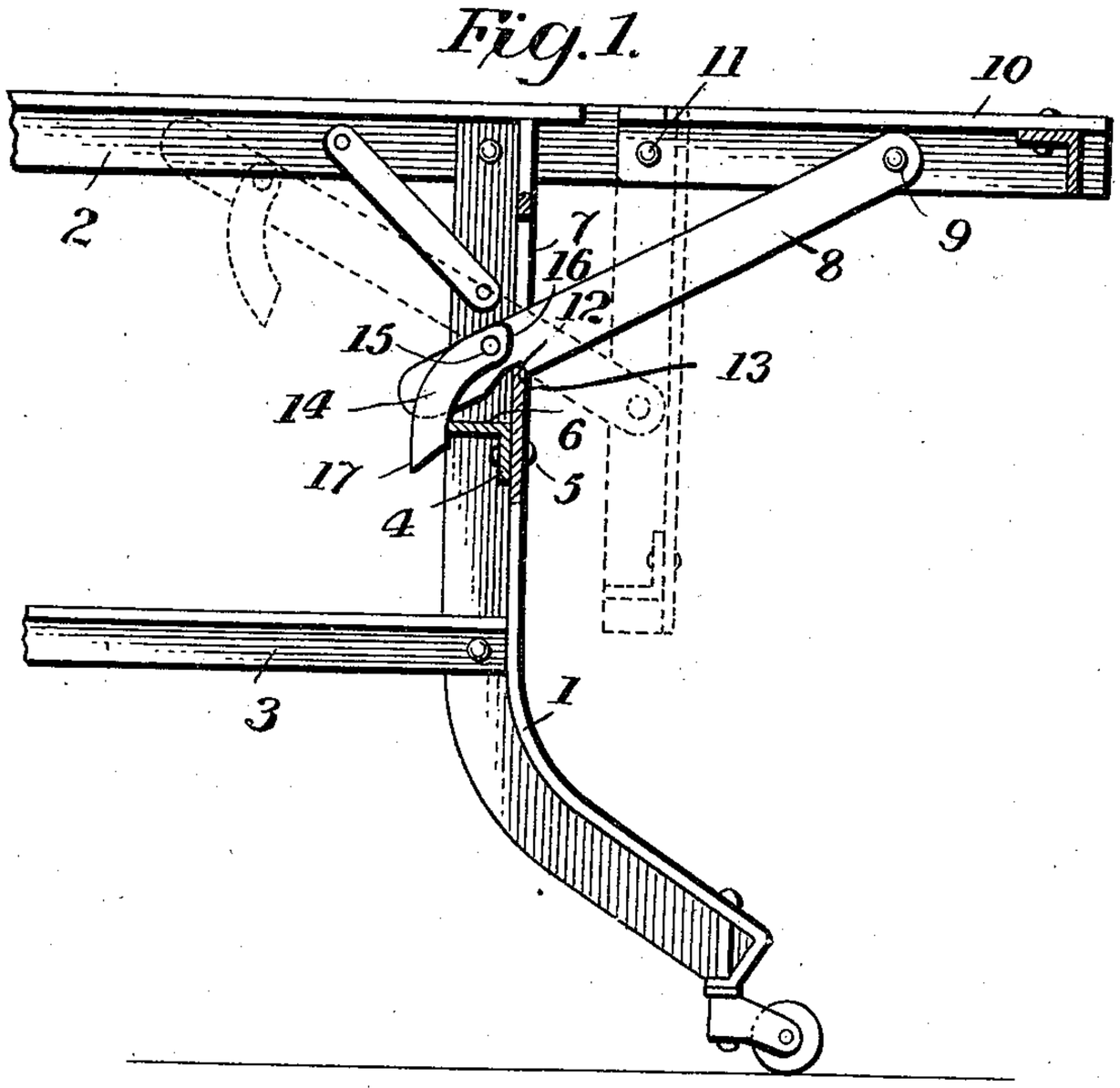


Fig. 2.

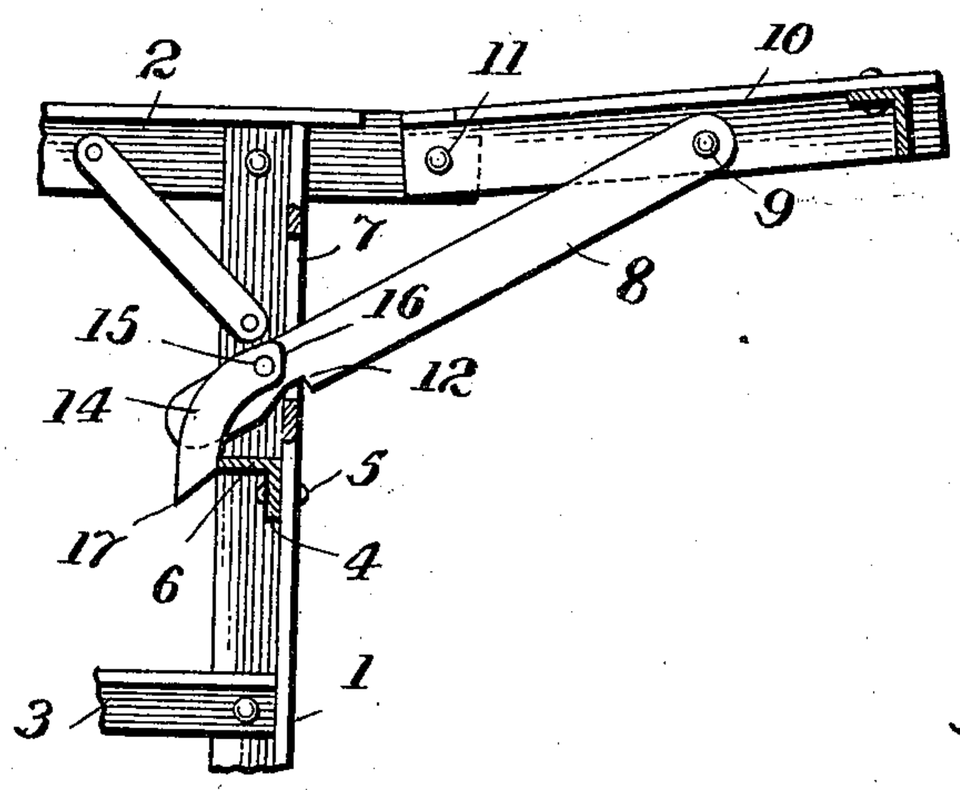
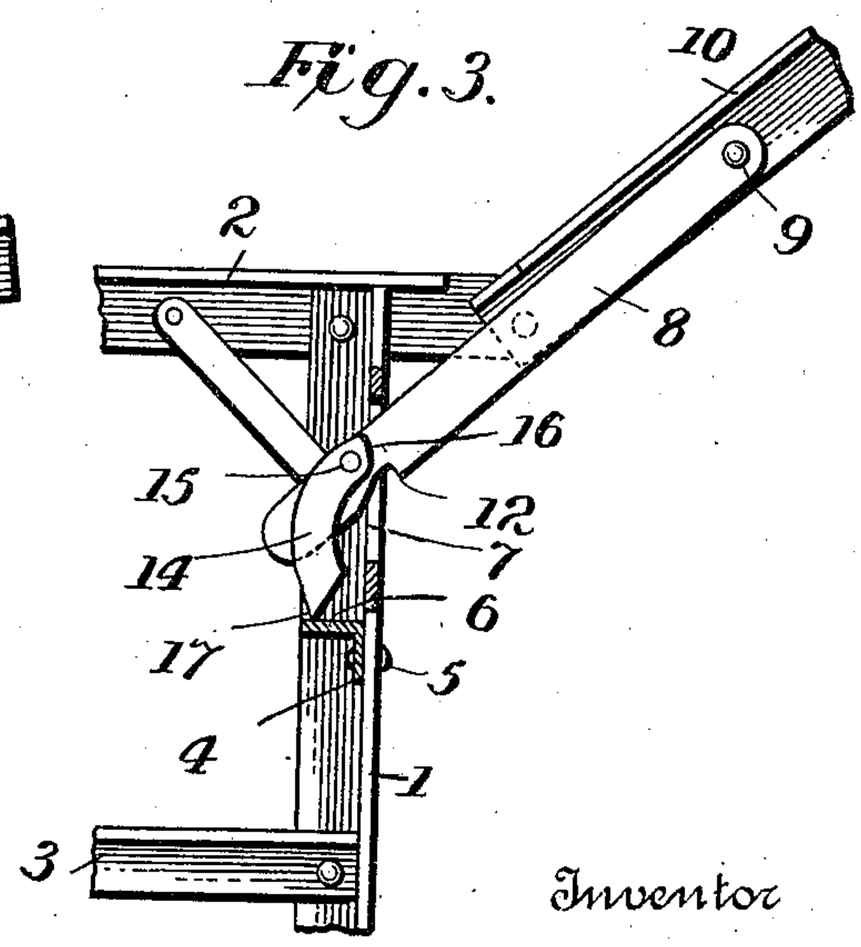


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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METALLIC COUCH.

983,776. Specification of Letters Patent. Patented Feb. 7, 1911.

Application filed May 4, 1910. Serial No. 559,381.

To all whom it may concern:

Be it known that I, ROBERT WILFRED SCHWAB, a citizen of the United States, and resident of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Metallic Couches, of which the following is a specification.

This invention relates to couch bedsteads which have hinged sides which may be allowed to hang down or may be brought up into horizontal position to constitute an extension of the couch.

It relates particularly to the means for automatically supporting the extension when raised to horizontal position, and for automatically releasing said support so as to permit the extension to descend without the necessity for manually releasing any catch.

It consists in the novel construction of such automatic supporting and releasing mechanism, as will be apparent from the following description, taken in connection with the accompanying drawing.

In the drawing,—Figure 1 is a cross section of a portion of a metallic couch near one end, showing my invention applied thereto; Fig. 2 is a similar view with the extension partly elevated in the act of releasing the couch; and Fig. 3 is a similar view showing the extension elevated to such an extent that the supporting means is released.

In these drawings, 1 represents the corner post of an ordinary metallic couch which is preferably made of angle irons, and 2 represents the cross bar at the top which joins the two corner posts. The two corner posts at the end are connected by the brace bar 3 and the two corner posts on the same side are connected by the angle bar 4, which is secured to the corner posts by means of bolts 5. This side bar has a flat upper surface 6 which coöperates with a trip pawl hereinafter described for the purpose of releasing the support for the side extension. The corner post 1 has therein a vertical slot 7 through which loosely passes the flat bar 8 which is loosely pivoted at 9 to the extension 10. This extension 10 is pivoted at 11 to the ends of the cross bars 2 so that when the extension is in the position shown in Fig. 1 it adds to the width of the couch. The loosely pivoted bar 8 has on its under surface near the lower end a notch 12 which is adapted to engage the metal of the post 1 at the bottom 13 of the slot 7 so as to support the extension 10 in horizontal position. Immediately adjacent the notch 12 and on the inside of the flange of the post 1 a pawl or latch 14 is pivotally secured to the bar 8 by a pin 15 which furnishes a loose connection so as to permit the pawl to swing freely. This pawl being secured to the side of the bar 8 will at its upper edge engage the corner post 1 along the side of the slot, the point of engagement being the upper end 16 which, as shown, is rounded, but which at the same time makes contact above the pivot 6 so as to force the lower end of the pawl inward toward the post. As clearly shown in the drawings, this trip pawl 14 is curved from the pivot point inward toward the corner post, so that it hangs down over the edge of the side bar 6 with its end in a practically vertical position. The lower end is cut diagonally so as to leave a sharp point 17 and so that when the trip hangs vertically its end will be almost vertical. It will be observed that this curved construction of the trip pawl is such as to throw the center of gravity of that pawl to the side away from the corner post 1 so that the natural tendency of the trip is to swing inward and occupy a position over the side bar 6. When the extension 10 is raised to the position shown in Fig. 3 the pivoted bar 8 will slide up the slot 7 by reason of the contact of the part 16 on the trip pawl 14 against the side of the corner post. This will have some tendency to bring the lower end or point 17 of the trip over the side bar 6, and as soon as the point 17 has cleared the side bar 6 in its upward movement it will by gravity swing in over that bar. If after the trip 14 swings over the bar 6 as described, the extension 10 is lowered, the lower end of the bar 8 will be supported by the trip so that the notch 12 will not engage the corner post and will not support the extension 10, and therefore that extension may easily descend to the position shown in dotted lines in Fig. 1.

I am aware that trip pawls have been used to release the supporting bar in devices of this class, but so far as I am aware the particular form of trip set forth having the curved construction with the center of gravity tending to force it into operative position is new. I have found that this form for

the trip makes it operate more certainly and more effectively and with greater ease.

Having thus described the invention what is claimed is:

In a device of the class described, the combination of the main frame having a vertical slot therein, of an extension hinged to said frame, a flat bar pivoted to said extension and extending through said slot, the said bar having a notch on its under surface near the free end, a support on said frame below said slot, an elongated flat pawl pivoted at one end to said bar opposite said notch and adapted to rest against said support, the said pawl being curved with its concave side toward said support, and having its lower free end cut diagonally to a point and its upper end rounded.

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

ROBERT W. SCHWAB.

Witnesses:

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