To all whom it may concern:

Be it known that I, ANDREW T. Osbron, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Folding Window-Balconies, of which the following is a specification.

This invention relates to a folding window balcony, one of the objects being the construction of a folding balcony frame which may be supported permanently outside a window and partly upon the window ledge, in either folded or unfolded condition.

A further object is to produce an article of this character which may be conveniently manipulated from the window opening, and which will not conceal the window or shut off the view therefrom when the device is folded or not in use.

Another object is the production of a folding balcony which will be simple, strong, and inexpensive in construction and which may be easily applied to or removed from the position where it is to be used.

A still further object is to provide a construction which will be certain in its operation, and which will be automatically locked when drawn into its position for use.

The invention also contemplates the provision of additional locking means to insure safety while the device is in use, as well as the component of the same with means for screening its interior from the wind or rain as well as from the view of outsiders.

With these objects in view the invention comprises certain novel and peculiar features of construction as hereinafter described and claimed, and in order that the same may be fully understood, reference is to be had to the accompanying drawings, in which—

Figure 1, is a perspective view of the frame and operating means shown attached to a building adjacent a window and in unfolded condition or position for use; Fig. 2, is a vertical section through the device showing the same supporting a cot mattress and springs. Fig. 3, is a similar view, omitting the mattress and springs and showing the balcony collapsed. Fig. 4, is a perspective view, partly broken away, of the device inclosed by its canvas coverings or canopy; Fig. 5, is a perspective view of one of the safety bolt brackets.

Referring to the drawings, the balcony frame is made up of a number of pipe sections of suitable diameter and joined together by T’s and elbows as shown, the same comprising three longitudinal or side bars 2, 4, and 6, the bars 2, and 4 being joined by a series of cross bars 8, and the bars 4 and 6 by similar cross bars 9. The longitudinal bar 2, rests partly upon the window ledge 10, of the building and forms the pivot about which the balcony frame swings when being folded or unfolded. The ends of the bar 2 rest at the lower ends of guideways formed between two upright rods 12 and 14, which are firmly secured by stay bolts 15 embedded in the wall of the building, having their heads 16 countersunk on the inside of the wall and nuts 17 being provided on the outside for removably securing the rods 12 and 14 in place. The guideways are formed by offsetting each rod 12 between its ends from the adjacent rod 14.

At the ends of the bars 2 and 4 are upward elbow extensions 18 connected by cross bars 20, additional vertical bars 22 and inclined bars 24 joining the elbow extensions 18 with the longitudinal bar 6 in the vertical planes of the bars 20, the bars 20 and 24 serving as end bars to hold the mattress 25, springs 27 and bedding, when supported upon the cross bars 8, against endwise movement.

Pivotedly connected to the ends of the side bar 6 are swinging stay rods 26, having their other ends pivotally joined to the ends of a rod 28, which is provided with antifriction rollers 30 held in position by means of cotters 32. The rod 28 is adapted to slide up and down with its rollers 30 in the guideways between the rods 12 and 14, and to be supported in its upper position by means of swinging struts, comprising rods 34 pivoted at the ends of the rods 28 adjacent the rod 28 said rods 34 and 26 also being held positioned upon the rod 28 by means of cotters 32. The struts 34 have each a slight bend as shown, and are forked at their lower ends to engage the extensions 105 at the ends of bar 2, in order to support the rods 28 and 26 in the position shown in Fig. 1. It will be noted that the front prongs of the forked ends of said rods 34 are longer than the rear prongs, and 110 when the rod 28 is lifted, the rear prongs will swing across the extensions 18 auto-
matically by gravity, but the rod 28 cannot rise high enough to allow the longer front prongs of the rods 34 to pass over the said extensions.

The balcony frame is lifted into its horizontal position by means of cords 36 passing around sheaves 38 fastened to the window casing above the rod 28. These cords are attached to rings 40 secured to the ends of the rod 6, the cords being prevented from passing entirely through the sheaves 38 by rings or loops 42 fastened to the cords.

Each of the upright rods 14 carries near its lower end a bracket 44 of the form shown in Fig. 5, each of which brackets is equipped with a barrel 48 in which operates a sliding bolt 48. The bolts 48 are designed for engagement with the holes 49 in the swinging struts 34 to retain the same in vertical position upon the extensions 18 of the rods. A tripping mechanism is also carried by the brackets 44, the same consisting of a rod 50 journaled in passages 52 of the brackets 44, and provided with crank arms 54 adapted to engage and trip the struts 34 off the extensions 18, when the bolts 8 are withdrawn. A handle 56 is secured to the rod 50 for convenience in operating the same.

It will be observed that the side bar 2 will bear against the underside of the brackets 44, which will receive the upward thrust of the bar 2 when the cot frame is being raised to horizontal position.

From the above description in connection with the drawing the operation will now be clearly understood.

Assuming that the balcony frame is in folded position, that is, suspended and out of use as shown in Fig. 3, and it is desired to raise the same to horizontal position, a person at the window will pull upon the cords 36. This swings the frame about the side bar 2 as an axis, and thereby forces the rod 28 to travel on its rollers 30 along the passage or guideway formed by the rods 12 and 14. As the rod 28 reaches its highest position, the struts 34 automatically swing inward with the front prongs at their lower ends against the extensions 18. The pull on the cords 36 is now relaxed to allow the struts to settle into position with their forked ends in locking engagement with said extensions, and to insure against accidental disengagement of the struts the bolts 48 are slid through them. Whenever it is desired to lower the balcony frame again to its first position, the bolts will be shot back and by swinging the handle 56, the struts 34 will be tripped off the extensions 18, whereupon the frame will be lowered as the cords are released.

I prefer to use screening 58 across the spaces between the bars 4 and 6 and also to bridge the triangular spaces between the bars 20 and 24 at the ends. A covering or canopy 60 will also be formed to fit the balcony, being composed of top and side curtains, made out of canvas or any suitable awning material, to afford a shelter in bad weather, and similar provision will be made for a lower curtain 62 to screen the bedding from view from below. Any suitable fastening means, as automobile curtain buttons 64 may be employed to hold the curtains in place. A curtain 68 will also be provided to be located between the balcony, when raised, and the adjacent window opening.

From the foregoing it will be apparent that I have produced a folding window balcony embodying the features of advantage enumerated as desirable in the statement of the object of the invention, and while the above represents one embodiment of the same, I do not wish to be limited to the precise construction and arrangement shown, but reserve the right to such changes and modifications as fall within the spirit and scope of the appended claims.

I claim—

1. The combination with a window casing, of a balcony frame, means for pivotally supporting one side of said frame at the lower edge of said casing, a vertically adjustable bar extending horizontally across the window casing, connections between said bar and the other side of said frame, means connected to said frame and adapted to raise it from a vertically suspended position to a horizontal position whereby said bar is moved to elevated position, and means to hold said bar elevated and maintain the frame in horizontal position.

2. The combination with a window casing, of a balcony frame, means for pivotally supporting one side of said frame at the lower edge of said casing, a vertically adjustable bar extending horizontally across the window casing, connections between said bar and the other side of said frame, means connected to said frame and adapted to raise it from a vertically suspended position to a horizontal position whereby said bar is moved to elevated position, and means carried by said bar to support said bar in its elevated position and thereby maintain the frame in horizontal position.

3. The combination with a window casing, of a balcony frame, means for pivotally supporting one side of said frame at the lower edge of said casing, a vertically adjustable bar extending horizontally across the window casing, connections between said bar and the other side of said frame, means connected to said frame and adapted to raise it from a vertically suspended position to a horizontal position whereby said bar is moved to elevated position, and means acting automatically to lock said bar and support it in elevated position to maintain the frame in horizontal position.
4. The combination with a window casing, of a balcony frame, means for pivotally supporting one side of said frame at the lower edge of said casing, a vertically adjustable bar extending horizontally across the window casing, connections between said bar and the other side of said frame, means connected to said frame and adapted to raise it from a vertically suspended position to a horizontal position whereby said bar is moved to elevated position, means carried by said bar and acting automatically to lock said bar and support it in elevated position and thereby maintain the frame in horizontal position, and means to trip said last means from locking position.

5. The combination with a window casing, of spaced uprights secured at each side of said casing and forming vertical guideways, a folding balcony frame having a side bar supported in the lower ends of said guideways, a second bar provided with anti-friction rollers arranged to travel along said guideways and with connections secured to the other side bar of said frame, second bar is moved to the upper ends of said guideways, vertically swinging struts carried by said second bar and having forked lower ends adapted to automatically engage said first side bar to support said second bar in raised position and thereby maintain the frame in horizontal position, and means to trip said last means from locking position.

6. The combination with a window casing, of spaced uprights secured at each side of said casing and forming vertical guideways, a folding balcony frame having a side bar supported in the lower ends of said guideways, a second bar provided with anti-friction rollers arranged to travel along said guideways and with connections secured to the other side bar of said frame, second bar is moved to the upper ends of said guideways, vertically swinging struts carried by said second bar and having forked lower ends adapted to automatically engage said first side bar to support said second bar in raised position and thereby maintain the frame in horizontal position, and locking means adapted to engage said struts and hold the same in engagement with said first side bar.

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

ANDREW T. OSBRON.

Witnesses:

C. F. MATHEWSON,
U. S. G. PEABODY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."