C. S. JOHANSON.

EXTENSIBLE WINDOW FRAME.

APPLICATION FILED NOV. 9, 1916.

1,227,152.

Patented May 22, 1917.

2 SHEETS—SHEET 1.

FIG. 1.

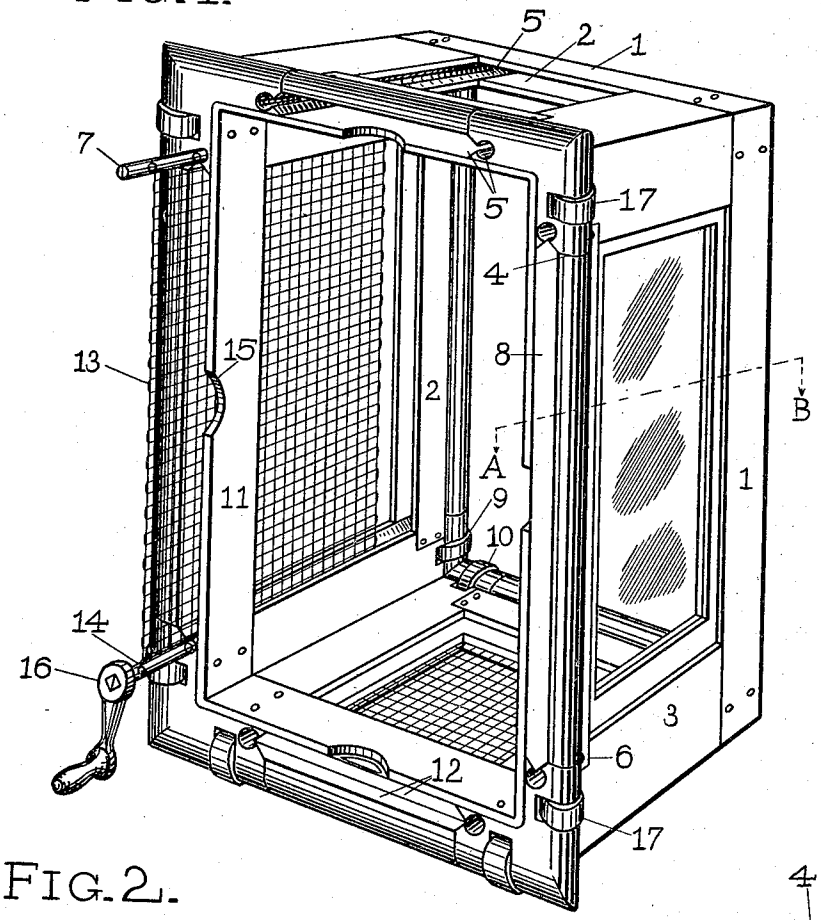


FIG. 2.

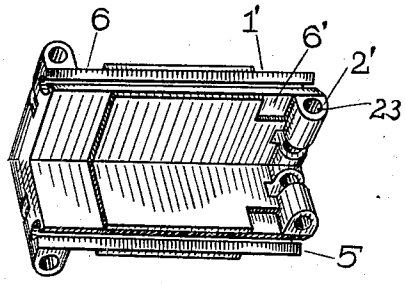
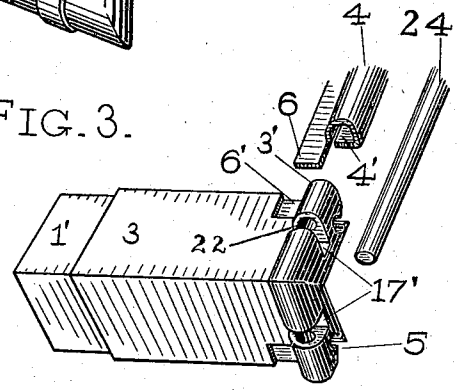


FIG. 3.



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2 SHEETS—SHEET 2.

FIG. 4.

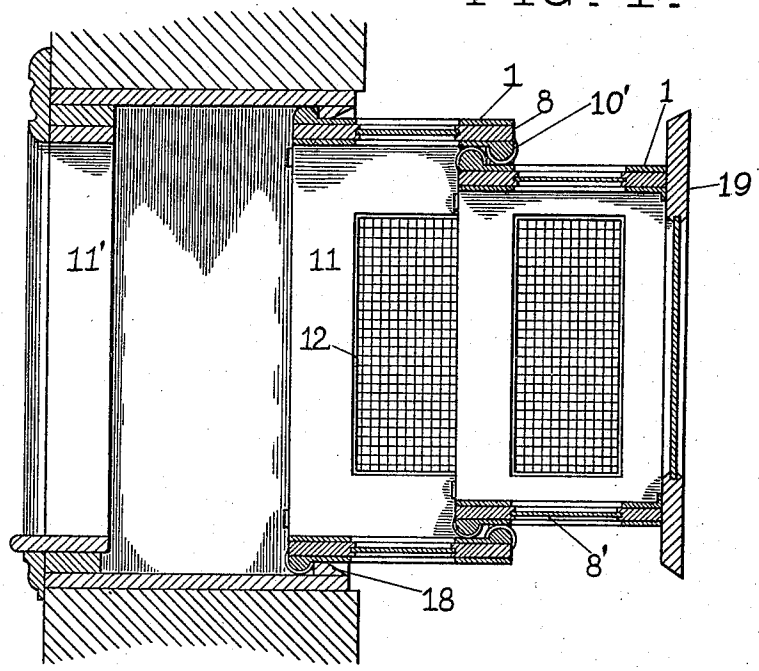


FIG. 5.

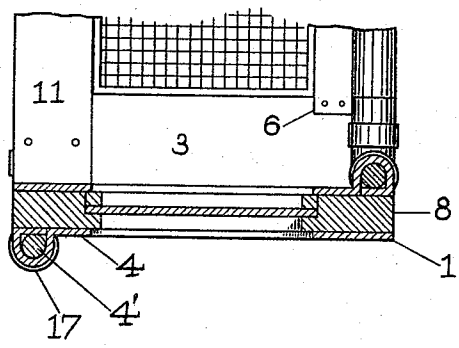
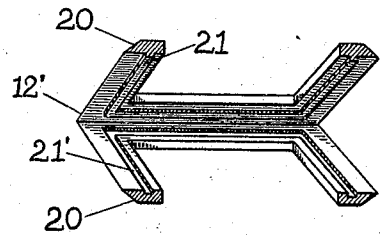


FIG. 6.



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UNITED STATES PATENT OFFICE.

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EXTENSIBLE WINDOW-FRAME.

1,227,152. Specification of Letters Patent. Patented May 22, 1917.

Application filed November 9, 1916. Serial No. 130,441.

To all whom it may concern:

Be it known that I, CARL SEVERIN JOHANSON, a citizen of the United States, and a resident of 92 Walnut street, Montclair, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Extensible Window-Frames, of which the following is a specification.

This invention relates to window construction and particularly to that class wherein a frame or sash is adapted to receive a framed screen or a screen secured to a pair of split rods.

The main object of this invention is to provide a window easy of conversion from screens to glass panels and vice versa.

Another object is to provide a window frame wherein either a framed screen or loose wire screen secured to a pair of split rods may be inserted.

Another object is to provide a window frame wherein a loose wire screen secured at both ends to split rods may be inserted and one of said split rods turned to tighten said screen and be thus secured.

Another object is to provide in an extensible window a practical and economical as well as unusually durable construction of the extensible parts.

Further objects and advantages will become apparent as the specification proceeds.

In my application filed March 30, 1916, Serial Number 87,780, which has become Patent No. 1,209,164; patented Dec. 19, 1916, the type of window construction is shown wherein the present improvements are designed to be especially advantageous and useful.

In the drawings, the same numerals apply uniformly to the same parts.

Figure 1 is a view of a single window frame or unit embodying this invention.

Fig. 2 is a view of a corner block 3 of Fig. 1.

Fig. 3 is another view of the same block with fragments of related parts.

Fig. 4 is a vertical central cross section of a complete window embodying this invention.

Fig. 5 is a sectional view of Fig. 1 on line A—B.

Fig. 6 is a sectional perspective view of screen 12 of Fig. 1.

In the construction of window frames of an extensible type, it has been found imperative to make the frames very rigid and strong in order to prevent them from sagging out of shape and thus rendering difficult or impossible the easy extension or withdrawal of the window. It is chiefly for this reason that the present peculiar construction of a window frame shown in Fig. 1 is deemed useful.

In Fig. 4 two such frames or telescoping members are illustrated in normal extended position. The frame 11 will be rolled in to meet casing frame 11′ when sash 19 is drawn in to stop 18, when the window will be entirely closed, exposing only the outer face of sash 19.

Returning to Fig. 1, the corner posts 4 and 2 are identical except in length, while 4 is an exterior and 2 an interior post. They are preferably formed of sheet metal so that they would present a cross section as shown by 4 in Fig. 5. The flat ends are made longer than the rounded portion so as to present a lip 6 at either end, as especially shown in Fig. 3.

The corner block 3 has on one side rounded corners 2′ and on the other the corner 3′, alongside of which are the slots 6′, 6′, etc. These corners 2′ and 3′ have each a hole 22, 23, drilled therein, as well as slots 17′ which house the rollers 17, 9, 10 and 10′ of the several views. In Fig. 3 the manner of fitting a corner post 4 to the block 3 is shown. The lip 6 is set into slot 6′ and rod 24 passed into hole 4 of the post, roller 17 placed in slot 17′ and the rod 24 further pushed into hole 4′ in corner 3′ and the rod there secured by screws or other means known to the trade. The band 1 is secured in shoulder 1′ and band 11 into the shoulder within corner 3′, the shoulder being shown in Fig. 2. All similar corners are of the same construction, providing the interior continuous band 11 of Fig. 1 within the exterior posts 4, and the exterior band 1, 1, outside the interior posts 2, 2. The portions of the corner blocks 3 which are in the sash spaces are provided with bevel slots 5, 5, for keeping sashes or screens in position, the slots having further an under circular slot for the purpose of receiving rods 7 and 14. These latter are split rods having a loose wire screen 13 secured between them, and when fully inserted into position the handle 16 may be turned more or less to tighten the screen, the handle being subsequently disengaged.

The screen 12 is further shown in section in Fig. 6, the parts 20, 20, being hinged at

12′. When a wire screen is laid across this frame and parts 20, 20, folded together, the rib 21 will force the engaged wire into slot 21′ and thus tighten the screen.

It is, of course, understood that I am not limited to the exact details of this specification, but may modify it in practice as is deemed commensurate with the spirit and scope of this invention.

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

1. A window frame comprising four angle corner blocks provided with an exterior circumscribing band securing said blocks in their respective corner positions to form a unit, substantially as described.

2. A window frame comprising 4 blocks arranged parallel as corners of a parallelogram, a band secured to the outer faces of said corner blocks at one end of each, exteriorly circumscribing said blocks; and a second band interiorly secured to the interior faces of said blocks at the other end of each block.

3. A movable window frame including angle blocks at the four corners, bands secured about and within said blocks, circumscribing and including the same exteriorly and interiorly at the ends of the blocks, and rods connecting said blocks and extending into the same and secured parallel to said bands, providing between each pair of adjacent blocks exterior rods spaced from an interior band and interior rods spaced within an exterior band, securing said blocks and providing between adjacent edges of adjacent blocks spaces into which panels may be introduced.

4. A movable prismatic window frame comprising corner blocks horizontally arranged and provided each at one end with an exterior shoulder and at the other end with an interior shoulder, a band exteriorly circumscribing said blocks in said exterior shoulders and an interior similar band secured in said interior shoulders, and rollers in said corner blocks at the ends providing the roller exteriorly exposed at the ends having interior shoulders and interiorly exposed rollers at the other ends of said blocks, substantially as described.

5. A movable window frame including horizontal corner blocks, continuous bands including said blocks providing one band at either end, separate bands secured at said ends between the adjacent horizontal edges of adjacent blocks, providing one separate band at each end between each adjacent pair of blocks, said continuous bands and separate bands being parallel and spaced apart by the included blocks, and channels in said horizontal adjacent edges providing guides between said bands for introducing panels, substantially as described.

6. A window frame including corner blocks, provided each with one edge parallel and adjacent to a similar edge on the adjacent block on each side of said frame, a groove in each said edge and an open slot beneath each groove opening into the same adapted to retain a rod introduced endwise into said slot, substantially as described.

7. A window frame including corner blocks provided with adjacent edges in parallel disposition, an open undercut slot in each said edge providing the openings in each pair of adjacent edges opposite in the same plane and adapted to retain a rod in each slot with a wire or screen suspended between each pair of rods directly through said openings, said slots being adapted to permit turning said rods for tightening said screens.

8. A window frame including corner blocks provided with a pair of edges parallel to the similar edges of the adjacent blocks, a pair of bands secured about said blocks at the ends thereof and a similar pair of bands secured within said blocks in parallel relation to the exterior bands and spaced from the latter by the included portions of said blocks, and a channel in each aforesaid edge, providing guides for retaining panels introduced in the spaces between said interior and exterior bands, substantially as described.

9. In a window including a plurality of extensible telescoping frames, slots or grooves in all inclosed horizontal edges and double corner posts in each telescoping frame, providing a space between each pair of posts at a corner, the pair of said spaces in each side being in the same plane with said slots and adapted in combination therewith to retain panels introduced into said spaces, substantially as described.

10. In a window a frame including horizontally disposed corner blocks, a shoulder upon the outer sides of said blocks at one end and upon the inner sides at the other end, a continuous band secured about said blocks in the outer shoulders and a similar band in the inner shoulders connecting the latter, rollers interiorly exposed upon the inner edges of said first named ends and similar rollers exteriorly exposed on the outer edges of the other ends, and rods parallel with said bands connecting said corner blocks and extending into the same and through said rollers, substantially as described.

11. In a window including telescoping frames, provided each with horizontal corner blocks, enlargements of the outer edges at one end of each block and exteriorly exposed rollers located in slots in said enlargements, and similar enlargements of the inner edges at the other ends and interiorly exposed rollers similarly located therein,

and corner posts or rods connecting said enlargements and extending into them and through said rollers, substantially as described.

12. A frame including a pair of parallel opposite edges in the same plane, a channel in each of said edges adapting the two in combination to receive a panel, and an undercut slot beneath each channel dividing the same and adapted to receive and retain a rotatable rod.

13. A frame including corner blocks, separate bands extending into slots in said blocks connecting the adjacent portions thereof, rods disposed in parallel relation beside said bands, and extensions of the sides of said bands formed to incase said rods, providing rounded posts integral with said bands.

Signed at 132 Nassau street, in the borough of Manhattan, in the county of New York, city and State of New York, this 7th day of November, A. D., 1916.

CARL SEVERIN JOHANSON.

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