G. J. KARRO.

WINDOW SCREEN.

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1,335,583. **Patented Mar. 30, 1920.**

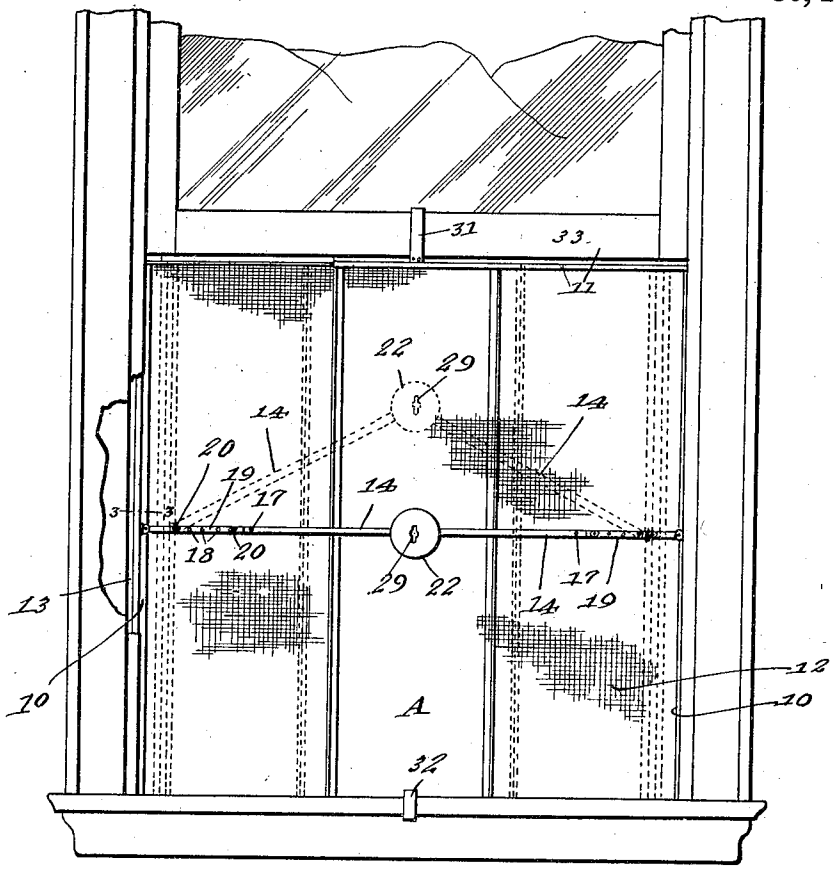


Fig. 1.

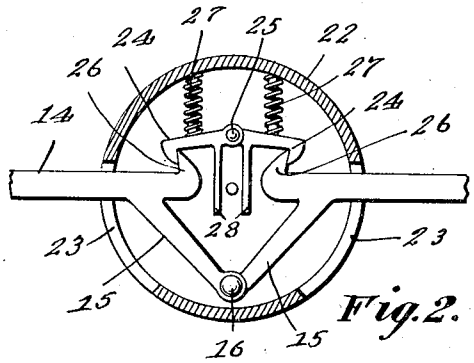


Fig. 2.

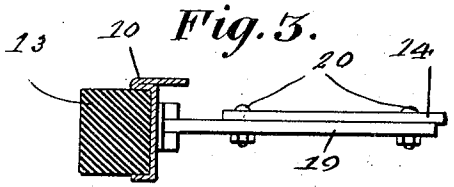


Fig. 3.

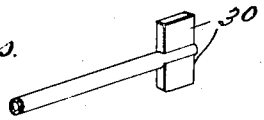


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

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WINDOW-SCREEN.

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To all whom it may concern:

Be it known that I, GUSTAVE J. KARRO, a citizen of the United States, residing at New York city, in the State of New York, have invented new and useful Improvements in Window-Screens, of which the following is a specification.

This invention contemplates the provision of a window screen attachment, designed to effectively maintain the screen associated with the window, so that the screen cannot be pushed out by young children, by reason of which fact, children often fall through windows with serious results.

To this end, the invention makes use of a rod or bar adapted to extend across the window, having its terminals secured to the opposite sides of the screen in a manner whereby the rod exerts a lateral pressure upon the screen to hold it effectively positioned upon the window.

More specifically stated, the locking rod includes two pivotally connected sections to permit the rod to break in the center when it is desired to remove the screen from the window, but when the sections are moved to horizontal alinement, they exert a pressure against the screen to hold the latter immovably arranged upon the window casing.

Another important object of the invention, resides in the provision of a locking rod for this purpose wherein the pivoted extremities of the respective sections of the rod operate within a casing including key actuated locking mechanism for holding the respective sections of the rod fixed relatively in active position, so that the rod cannot be broken in the center by children playing about the screen.

A further object of the invention resides in the use of a locking rod for the purpose mentioned, and which rod is susceptible of adjustment to vary its length, so that the rod can be used in connection with screens of different widths.

Other objects and advantages will appear when the nature and advantages of the invention is better understood from the following detail description when taken in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawing forming part of this specification like numerals of reference indicate similar parts in the several views and wherein:—

Figure 1 is a front elevation showing the screen arranged in the window, the locking element being indicated in its active position by full lines, and in inactive position by dotted lines.

Fig. 2 is a vertical sectional view taken through the lock casing showing the manner of locking the rod sections in active position.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a view of the key.

Referring to the drawing in detail, A indicates generally a screen of the usual well known construction, including the side members 10 and upper and lower members 11 unitedly defining the frame of the screen which supports the screen fabric 12. The screen as shown is of the extensible type, wherein the respective sections slide laterally to allow the screen to accommodate itself to windows of different widths. The side members 10 are of the usual channel formation in cross section, and each of these members is provided with a strip of rubber or other suitable material 13, so that the screen may obtain an effective purchase against the side of the window casing.

The attachment forming the subject matter of my invention comprises a locking rod adapted to extend across the screen, and associated with the latter in a manner whereby the screen is effectively held in position upon the window to prevent the screen from being casually pushed out by children, which frequently results in the loss of life by children falling through a window. The locking rod as shown, is made up of two sections 14, each being identical in construction and formed with obliquely disposed extensions 15 which are pivotally connected together as at 16. The outer extremity of each section is provided with a plurality of openings 17 adapted to register with similar openings 18 of an adjustable section 19 which allows the rod as a unit to be varied in length to accommodate itself to screens of different widths as will be readily understood. Fastening elements 20 are passed through the alined openings of the sections 14 and 19 respectively, to hold these sections fixed relatively in a given position. Each section 19 is hingedly secured to the adjacent side 10 of the screen, the hinge connection being of

any suitable construction. By reason of the construction thus far described, it is manifest that the locking rods may be broken in the center to allow the sections 14 to assume the position illustrated by dotted lines in Fig. 1, in which position, the respective sections of the screen are drawn toward each other out of engagement with the window casing. However, when the sections 14 are moved into horizontal alinement. the respective sections of the screen are moved away from each other into effective engagement with the adjacent side of the window casing, the rod in this instance, exerting a lateral pressure against the sections of the screen to hold the latter immovably positioned upon the window casing.

With a view of locking the sections 14 of the rod in their active positions, so as to prevent the rod from being broken by children playing about the screen, I provide a locking casing 22 which is of cylindrical formation in cross section as shown in Fig. 2. The opposite sides of the casing 22 are provided with elongated slots 23 for the reception of the adjacent or pivoted extremities of the sections 14 of the rod. Arranged within the casing 22 is a key actuated locking mechanism, designed to engage the adjacent extremities of the sections 14 to hold the latter fixed relatively in active position. This mechanism includes by preference a pair of locking dogs 24 pivoted as at 25. Each dog is designed to engage over the hook like extremity 26 of the adjacent section 14 of the rod, being normally maintained in this position through the instrumentality of the springs 27 which are terminally secured to the casing 22 and to studs projecting from the dogs 24. Each dog is provided with an extension 28, and when the parts are arranged in the manner illustrated in Fig. 2 these extensions 28 lie in parallelism at the opposite sides of the key hole slot 29. A key of the design illustrated in Fig. 4 is adapted to be inserted in the key hole 29, and when turned in either direction, the wings 30 of the key are brought into engagement with the extensions 28, moving the dogs upon their pivots out of engagement with a hook like extremity 26 of the sections 14. Subsequent to the release of the sections 14, the casing 22 is elevated to the position shown by dotted lines in Fig. 1, the sections 14 being free to move upon their pivot 16. During this movement of parts, the screen sections are drawn toward each other out of engagement with the window casing as hereinabove described permitting the screen to be readily removed.

With a view of bracing the screen when placed in position for use, I provide the upper and lower members 11, of the screen frame with hooks 31 and 32 respectively. The hook 31 is designed to engage the lower rail of the window sash 33, when the window is elevated to the position illustrated in Fig. 1, while the hook 32 carried by the lower member of the screen section is designed to engage over the window sill. These hooks 31 and 32 coöperate with the sections 14 of the rod to effectively embrace the screen at four points, when the parts are arranged in the manner shown in Fig. 1.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself in this connection, the same being merely illustrative, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

Having thus described my invention what I claim as new is:—

1. The combination with a window screen having sliding sections, of a rod arranged across the screen and pivotally secured to the sides thereof, said rod including pivotally connected sections coöperating to hold the sections of the screen in effective engagement with the window casing, and means for holding said sections fixed relatively in active position.

2. The combination with a window screen having sliding sections, of a sectional rod arranged across the screen and having its terminals pivotally secured to the sides of the screen, the adjacent terminals of said sections being pivotally associated, each section of the rod being adjustable to vary the length of the rod as a unit, said sections cooperating to hold the sections of the screen in effective engagement with the window casing, and means for locking said sections of the rod fixed relatively in active position.

3. The combination with a window screen having sliding sections, of a sectional rod arranged across the screen and having its outer ends pivotally connected to the sides thereof, the adjacent ends of said sections of the rod being pivotally connected together, said rod sections coöperating to hold the sections of the screen in effective engagement with the window casing, a lock casing carried by the adjacent extremities of the rod sections, and a key actuated mechanism for holding the rod sections fixed relatively in active position.

4. The combination with a window screen having sliding sections, of a sectional rod arranged across the screen and having its outer ends pivotally connected with the sides thereof, the adjacent extremities of said sections of the rod being pivotally connected together, a casing supported by the pivot of the rod section and receiving the adjacent extremities thereof, said casing having opposed slots for the reception of the rod sections, and key actuated spring pressed dogs pivoted within the casing and operable to

hold the rod sections fixed relatively in active position.

5. The combination with a window screen having sliding sections, of a sectional rod arranged across the screen, and having its outer ends pivotally connected to the sides thereof, the adjacent extremities of said rod sections being pivotally associated, a lock casing receiving the adjacent extremity of said rod sections and carried thereby, key actuated mechanism within the casing for holding the rod sections fixed relatively in active position, and each rod section being adjustable, whereby the length of the rod as a unit may be varied for the purpose specified.

6. The combination with a window screen having sections, of a sectional rod arranged across the screen and terminally connected to the sides thereof to hold the screen sections in effective engagement with the window casing, a lock casing receiving the adjacent extremities of the rod sections, said extremities being pivoted, and means within the casing for holding said rod sections fixed in active position.

In testimony whereof I affix my signature.

GUSTAVE J. KARRO.