(No Model.)

A. DOENITZ.

ADJUSTABLE EXTENSION SCREEN.

No. 457,639. Patented Aug. 11, 1891.

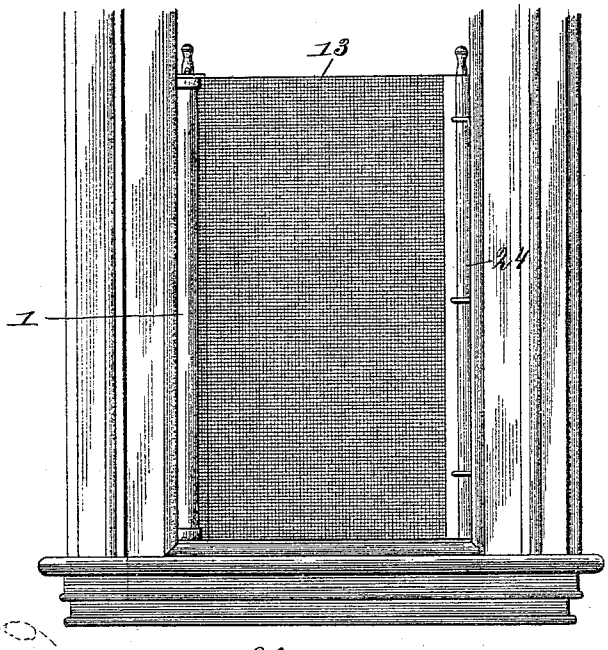


Fig. 1.

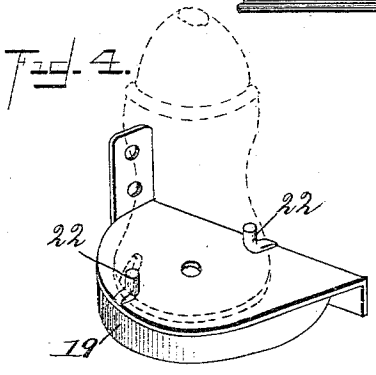


Fig. 4.

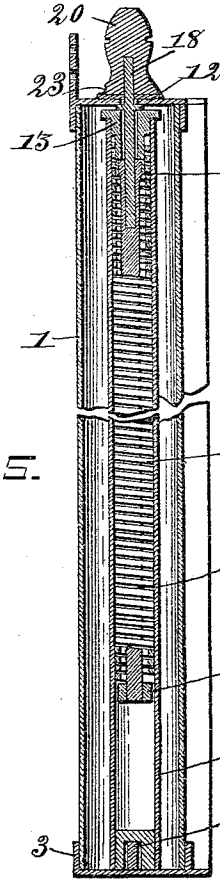


Fig. 2.

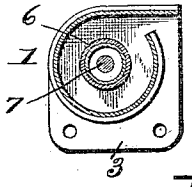


Fig. 3.

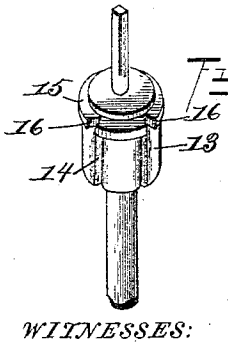


Fig. 5.

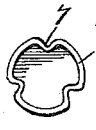


Fig. 6.

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ADJUSTABLE EXTENSION-SCREEN.

SPECIFICATION forming part of Letters Patent No. 457,639, dated August 11, 1891.

Application filed February 24, 1891. Serial No. 382,434. (No model.)

To all whom it may concern:

Be it known that I, AUGUST DOENITZ, a citizen of the United States, and a resident of Ashland, in the county of Ashland and State of Wisconsin, have invented certain new and useful Improvements in Adjustable Extension-Screens; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in adjustable extension-screens for windows and other places.

The object of the invention is to provide an improved construction of device which can be readily placed in position in a window-frame and which will extend across the same from side to side, whereby the entrance of flies, mosquitoes, and other insects is prevented.

The device is adjustable, so that it may be used in connection with windows of varying widths.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a view of a window with my improved screen applied thereto. Fig. 2 is a vertical sectional view of the casing or housing. Fig. 3 is a cross-section of the same. Figs. 4 and 5 are detail views, and Fig. 6 is a view of the upper end of the tube which contains the coiled spring.

In the said drawings, the reference-numeral 1 designates the housing or casing, consisting of a hollow cylinder having one side flattened, as seen in Fig. 3, and provided with a slot 2 extending from end to end thereof. At its lower end the cylinder is provided with a bracket 3, which is adapted to be secured to one side of a window-frame, so that it will be held in a vertical position, the flattened side thereof being flush with the window-sash and the slot 2 facing the opposite side of the window. This bracket is provided with an inwardly-projecting pin or stud 4, which is adapted to enter a recess in the end of a hollow tube 6, located in said casing and extending from end to end thereof, the said pin forming a journal for the tube. Located within this tube is a rod 7, having a collar 8, to which is secured one end of a spring 9, which is coiled around said rod. At its opposite end the rod is provided with a rod 10, having a collar 10, between which and the end of rod 7 is loosely secured a flanged sleeve 13 and to which the other end of said spring is secured. This sleeve is provided with a series of vertical recesses 14 and its flange 15 with a series of notches 16, registering with and forming part of said recesses. This sleeve fits snugly within the open end of the hollow tube 6, which is provided with interior ribs 17, which engage with the recesses and notches in the sleeve and prevent it from rotating. The upper end of rod 10 is formed into a shank 18, passing through an opening in bracket 19, secured to the casing, and which is also adapted to be secured to the window-frame. The outer end of this shank is made angular and enters a correspondingly-shaped aperture in a knob 20, whereby said rod may be actuated to regulate the tension of spring 9. This knob is also provided with recesses or depressions 21, which engage with studs or lugs 22 on the bracket 19.

To the hollow tube 6 is secured one end of a flexible screen 23, composed of mosquito-netting or other similar material, which is capable of being wound or rolled upon said tube by the tension of the spring, so as to be entirely concealed within the casing or housing. The other end of the screen is secured to a vertical rod 24, which may be secured to one side of the window-frame when the screen is in use.

In constructing the device the rod 7, with the loose sleeve 13, collar 8, and spring 9, is inserted within the hollow tube 6. The ends of the spring are secured, respectively, to the said collar and sleeve, and the latter by means of its recesses and notches and the ribs in said tube will rotate with said tube as the latter is actuated, as hereinafter described. The tube is then inserted in the housing or cas-

ing with the stud 4 of the lower bracket resting in the recess therein. The bracket 19 is then placed in position and the shank 18 passing therethrough with its outer end resting in the opening in knob 20 and the depressions in the latter engaging with studs 22. In this position the rod 7 cannot revolve or rotate. The screen connected with the tube 6 passes through the slot in the casing.

If the device be now secured in a vertical position to one side of a window-frame, the screen can be drawn over to the other side and fastened, thus effectually preventing the entrance of insects. When the screen is released, the tension of the spring will cause the hollow tube to be rotated, winding up the screen thereon and inclosing it within the casing or housing, the free end of the screen being prevented from being drawn in the casing by means of the vertical rod 24.

To regulate the tension of the spring the depressions in the knob are disengaged from the lugs or studs 22, when the rod 7 can be turned by means of said knob a proper distance, when the depressions or lugs are again engaged.

Having thus described my invention, what I claim is—

The combination, with the casing or housing having end brackets, one of which is provided with an inwardly-projecting stud and having a vertical slot and flattened, of the hollow tube having a recess at one end with which said lug engages and inwardly-projecting ribs at its other end, the screen secured to said tube, the rod located in said tube, the flanged sleeve loosely mounted on said rod and provided with recesses and notches engaging with said ribs, the coiled spring encircling the rod, having one end secured thereto and the other end secured to the sleeve, the angular shank, the knob having depressions therein, and the lugs on the bracket engaging with said depressions, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

AUGUST DOENITZ.

Witnesses:

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