

G. W. PEARSON.
DETACHABLE AWNING BLIND.
APPLICATION FILED APR. 24, 1908.

992,447.

Patented May 16, 1911.

2 SHEETS-SHEET 1.

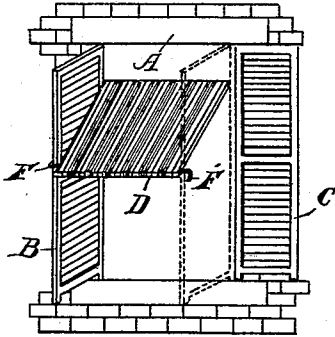


Fig. 1.

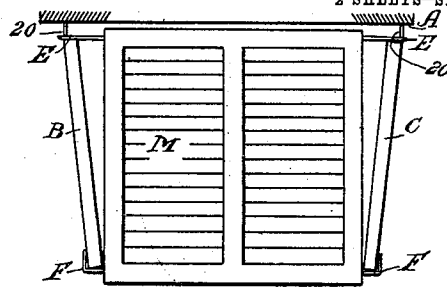


Fig. 2.

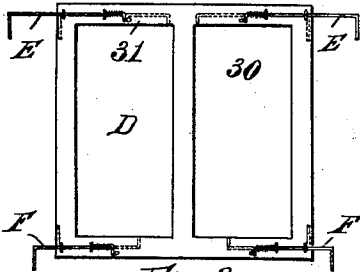


Fig. 3.

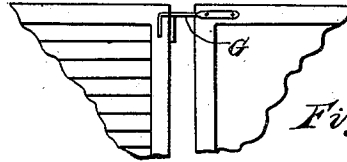


Fig. 4.

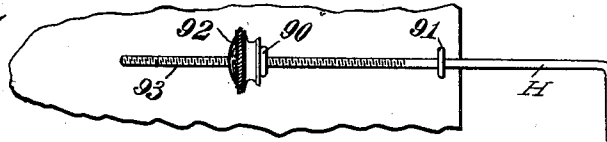


Fig. 5.

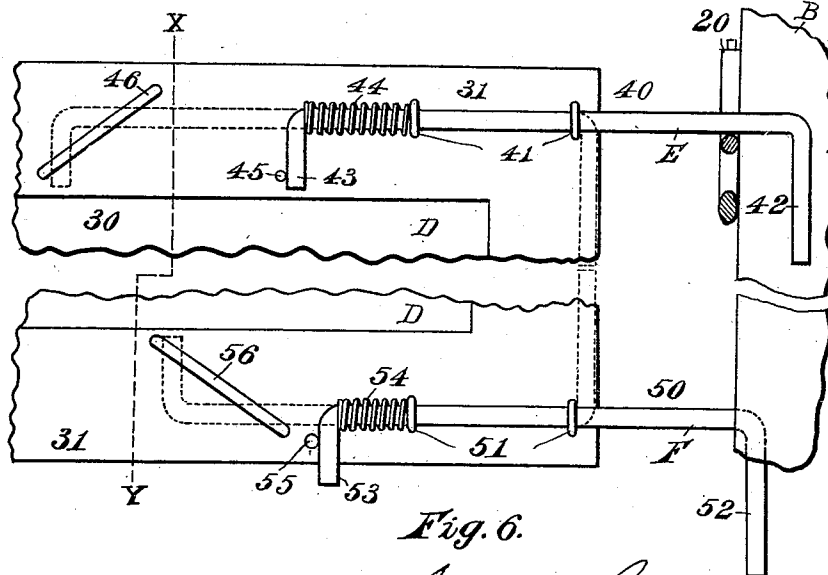


Fig. 6.

WITNESSES
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2 SHEETS—SHEET 2.

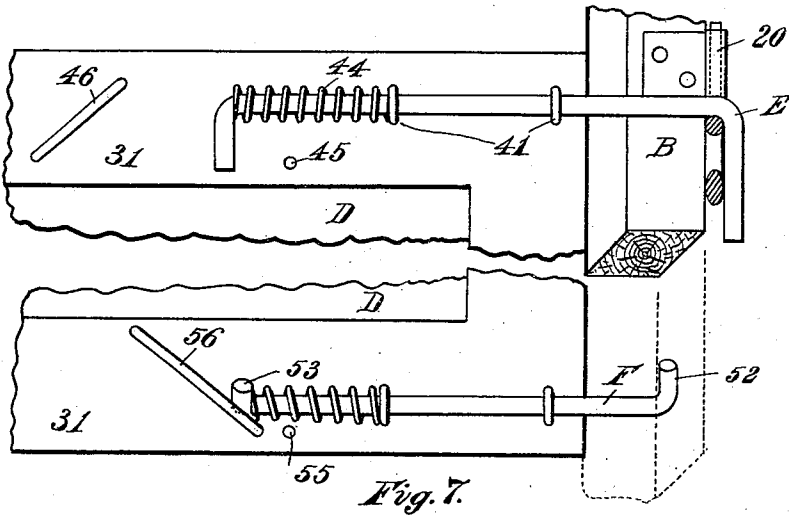


Fig. 7.

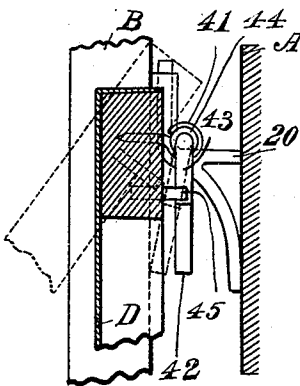


Fig. 8.

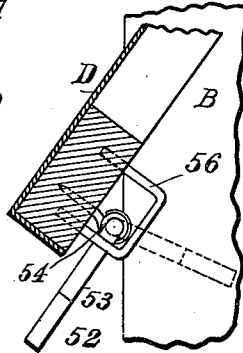


Fig. 9.

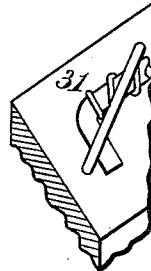


Fig. 10.

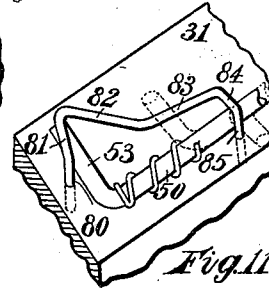


Fig. 11.

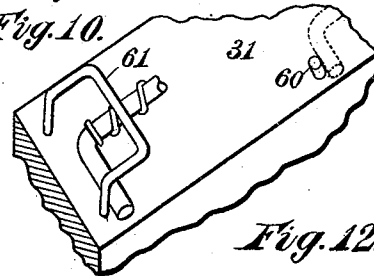


Fig. 12.

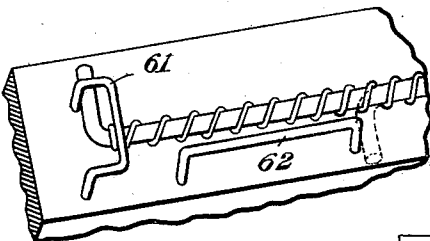


Fig. 13.

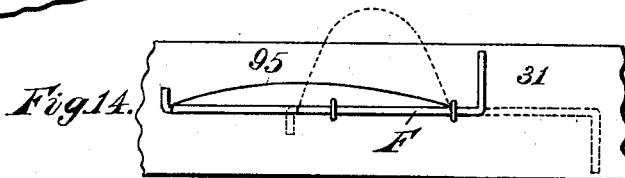


Fig. 14.

WITNESSES

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UNITED STATES PATENT OFFICE.

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DETACHABLE AWNING-BLIND.

992,447.

Specification of Letters Patent.

Patented May 16, 1911.

Application filed April 24, 1908. Serial No. 428,978.

To all whom it may concern:

Be it known that I, GARDNER W. PEARSON, a citizen of the United States, residing at Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Detachable Awning-Blinds, of which the following is a specification.

This invention has reference to window blinds and has special reference to detachable awning blinds of a similar character to that shown in patent to Gardner W. Pearson, #871,044 of Nov. 12, 1907.

This invention has special reference to the bolts or catches by which the top blind or screen is detachably attached to the ordinary house blinds. In this invention, the ordinary house blinds are intended to be swung outward at about right angles to the house and an auxiliary blind or preferably a canvas screen is detachably hung in a slanting position between them in such a way that all the parts are firmly held together. In this way an awning or a substitute for an awning is produced.

Some of the advantages of this device are that it can be placed between blinds of different widths or thickness and adjusts itself automatically and instantly to such conditions, and it requires no catches, lugs or other devices to be permanently attached to the ordinary blinds.

In the drawings, Figure 1 shows the screen hooked to both blinds at the top and to one at the bottom. Fig. 2 shows a slat screen in place as it appears viewed from the top. Fig. 3 is a view from the back of the screen with the top and bottom hooks drawn out and caught ready to be attached to the blinds, and in dotted lines shows the hooks housed. Fig. 4 shows a fixed hook at the top of the screen instead of a sliding hook. Fig. 5 shows another form of top hook with a thumb nut instead of a spring. Fig. 6 is a detail from the back of the screen with the house blind caught back and one of the top hooks of the screen hooked on before being tripped. Fig. 7 is a view similar to Fig. 6, but with the screen pushed outward and top and bottom hooks tripped into place; the house blind being swung out and cut away at the bottom to show the bottom hook. Fig. 8 is a detail view from the left, of a top hook as from line X Y of Fig. 6. Fig. 9 is a detail of a bottom hook drawn out, and in

dotted lines, its position when tripped. Fig. 10 is a perspective of the back holder of the top hook with the hook housed. Fig. 11 is a modification of the stop and back holder guide of the bottom hook. Figs. 12 and 13 are modifications of the stops, back holders, and guides. Fig. 14 shows a different style of spring.

A represents a window frame to which are hinged by the usual hinges or butts the ordinary house blinds B and C.

D is a screen formed of a rectangular frame 31 covered with canvas 30. Screen D is of a width less than the distance between the blinds B and C when they are swung out at right angles to the house. Instead of a canvas screen D, I may use a slat screen M, Fig. 2. At each side, on the top of screen D or M are the top hooks E E which comprise a straight bolt 40 slidably supported by being passed through eye bolts 41 or other similar bearings. At what is the outer end, when in place, bolt 40 is bent at approximately a right angle to form a long arm 42 and at its inner end, it is bent to form a short arm 43. Surrounding bolt 40 between ring bolt 41 and short arm 43 is a spiral spring 44 which tends normally to keep bolt E inside screen D, as shown in the dotted lines in Fig. 6.

To retain bolts E E, in the position shown in Figs. 6 with long arms 42 out from the screen, I provide a stud 45 against which short arm 43 rests when the hook is drawn outward and then turned down. This stud 45 serves as a stop for hook E. It will be seen that hook E can rotate freely, being limited only when short arm 43 strikes the frame 31. To prevent such rotation when the screen D is not in use and thereby to properly house top hook E and also to serve as a back stop, I provide a staple 46 driven in at an angle as shown. It will be seen that when short arm 43 is released from stop or stud 45, the spring 44 forces hook E inward until it strikes staple 46. As the pressure continues, hook E is still forced inward and short arm 43 being pressed against staple 46 at an angle, is turned down until the whole hook E assumes the position shown by the dotted lines in Fig. 6 and by the full lines in Fig. 10. It is thus normally held or housed in this position and cannot rotate, as short arm 43 is held under staple 46. At the bottom, I provide two

bottom hooks F similar to top hooks E comprising a bolt 50, guides 51, long arm 52, and short arm 53. The action is similar, except that staple 56 is at a different angle from 46, and is nearer to stop 55. It will be seen that when short arm 53 is turned upward from the position shown in Fig. 6 until it clears stop 55, spring 54 forces hook F inward until long arm 52 is pressed against the outside of blind B as shown in Fig. 7.

Normally, the hooks E and F are in the position shown by the dotted lines in Fig. 6 and are thus out of the way and not liable to catch upon clothing or window draperies. With the hooks in this position, screen B is pushed out from inside the house through the window. Hooks E and F are now drawn outward by hand into the position shown by the full lines in Fig. 6 and in Fig. 3 with their short arms resting against their respective stops. Screen D is then raised and top hooks E E are passed over the top hinges 20 of blinds B and C. Blinds B and C should be back against the house, as is blind C in Fig. 1 and preferably caught there in the usual manner. Screen D pivoting on hooks E E is now swung outward, which action brings long arms 42 in contact with the back surface of blinds B and C, as shown in the dotted lines in Fig. 8. As the motion continues, bolts 40 are turned until short arms 43 clear stops 45 as shown by the dotted lines in Fig. 8, when springs 44 immediately act and force hooks E E inward until stopped by long arms 42 coming in contact with the outside of hinges 20. It will be seen that in this way screen D will fit within certain limits between blinds of different sizes and that when swung outward and tripped, hooks E hold screen D firmly but elastically in place. It is apparent that hooks E E may be readily tripped by hand if desired, or if, for any cause, they fail to act when screen D is pushed outward. The bottom of screen D is now pushed far enough out from the house to allow blinds B and C to be successively swung outward against it inside of hooks F. Blind B is first uncaught and swung outward with the right hand while screen D is held out with the left hand. When blind B rests against the side of screen D, screen D is dropped inward until the bolt 50 of hook F rests against the edge of blind B. Screen D is now released by the left hand and short arm 53 of hook F is turned over and upward until it clears stop 55 when spring 54 begins to act and forces hook F inward until blind B is firmly gripped on the outside as shown in Fig. 7, by long arm 52. As short arm 53 rests against staple 56, it prevents hook F from turning downward by gravity and thus releasing blind B. Blind C is now swung outward and the process is repeated

with its side of screen D. When the device is in place, the springs on hooks E and F have sufficient pressure to hold the parts firmly together, but in case of a high wind, screen D may be blown off entirely or the lower part may be freed by the wind without any damage to the permanent blinds or to the windows.

Referring to Fig. 12, I can use instead of a staple 46 or 56 a stud 60 and a housing staple 61, if desired. For both top and bottom I can use the stud 60 and a housing staple 61 which curves over the short arm of the bolt as shown, thus preventing the respective hooks from turning.

Instead of the stud just described for bottom hooks F F, I can use an ordinary long staple 62, see Fig. 13, which serves the additional purpose of preventing the hook from turning by gravity when it ought not to turn. The diagonal staple guides 46 and 56 are preferable, however, as they automatically house the hooks, keep them in place, and serve to break the blow when the hooks are tripped. For the lower hooks F, F, I may use the irregular staple guide shown in Fig. 11 to replace staple 56 and stud 55. This guide comprises back leg 80, bent at 81 to form a back arm, back guide 82, front guide 83, front arm 84 and front leg 85. In this case, front leg 85 and front arm 84 serve the purpose of a stop and front and back guides 82 and 83 prevent short arm 53 from falling over by gravity and guide it into position to be housed under back arm 81 and against back leg 80.

Instead of the sliding hooks E E with springs and accessories, I may use, at the top, fixed hooks such as G shown in Fig. 4. Where such hooks are used there is likely to be some rattling and give to the parts in a high wind, but the hooks prevent the top of screen D from falling off, as might be the case were screen D relatively small and were straight spindles used at the top.

In place of the spring bolts at the top, I may use a hooked bolt, such as H in Fig. 5, supported by ring bolts 90 and 91 and adjustable by means of a thumb nut 92 which works on a threaded shank 93. I may also show a different form of spring as 95 in Fig. 14 for either the top or bottom sliding hook.

My device may be used to equal advantage with a slat blind, a canvas screen, or any other kind of screen, and consists mainly in the use of hooks at the top and sliding hooks at the bottom.

What I claim as my invention and desire to cover by Letters Patent, is:—

1. An awning blind comprising two outside blinds hung to the window casing on vertical pivots and extended outward from said casing, combined with an auxiliary blind or screen detachably attached at its top between said outside blinds by means of

slidable hooks and detachably attached by spring actuated hooks near its bottom to the outer edges of said outside blinds.

2. An awning blind comprising two outside blinds hung to the window casing on vertical pivots and extended outward from said casing, combined with an auxiliary blind or screen detachably attached at its top between said outside blinds by means of slidable, spring actuated hooks and detachably attached by slidable, spring actuated hooks near its bottom to the outer edges of said outside blinds.

3. An auxiliary blind or screen provided at top and bottom with slidable hooks, bearings therefor, actuating springs, and stops therefor.

4. An auxiliary blind or shield provided at top and bottom with slidable and rotatable hooks, bearings therefor, actuating springs therefor, stops therefor, and housing guides therefor.

5. In a fastener for an awning blind a

slidable and rotatable bolt comprising at opposite ends a long and a short arm, bearings therefor, an actuating spring therefor, a stop, and a housing guide, as described.

6. In a fastener for an awning blind a slidable and rotatable bolt comprising at opposite ends a long and a short arm, bearings therefor, an actuating spring therefor, a stop, and a diagonal guide, as described.

7. In a fastener for an awning blind a slidable and rotatable bolt comprising at opposite ends a long and a short arm, bearings therefor, a spiral spring which surrounds said bolt and bears against the short arm and one of said bearings, a stop, and a diagonal guide, as described.

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

GARDNER W. PEARSON.

Witnesses:

NATHAN D. PRATT,
FLORENCE A. PARR.

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