(No Model.)

G. E. BLAINE.

SLIDING SCREEN AND BLIND.

No. 531,828. Patented Jan. 1, 1895.

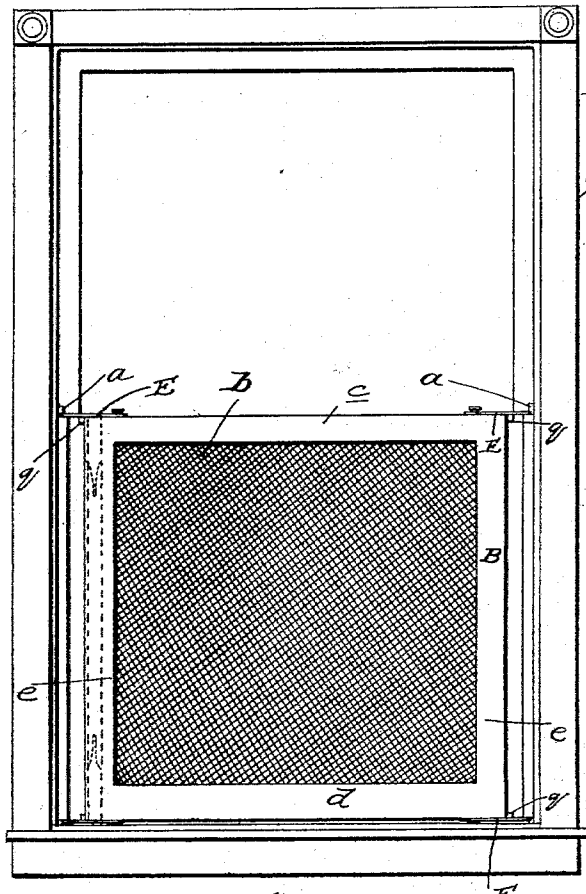

Fig. 1.

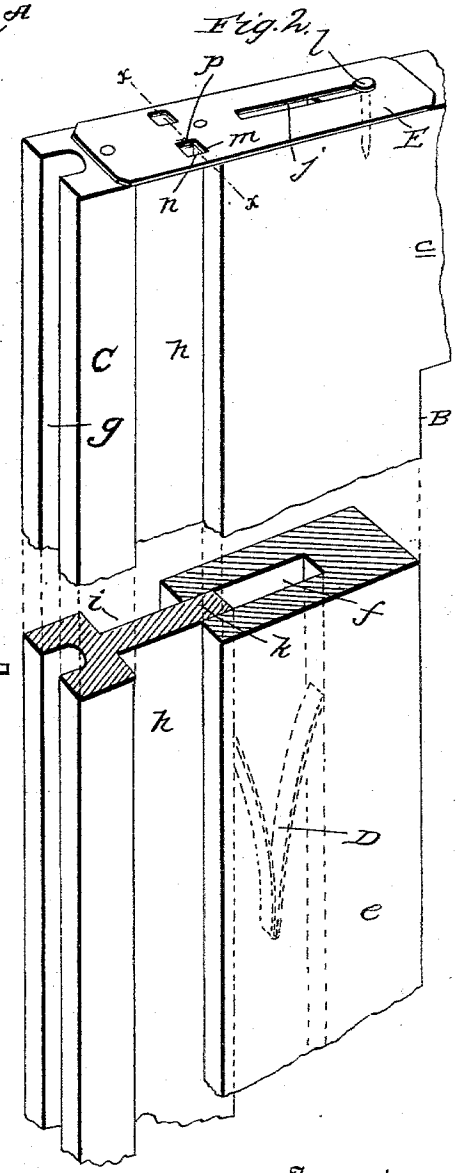

Fig. 2.

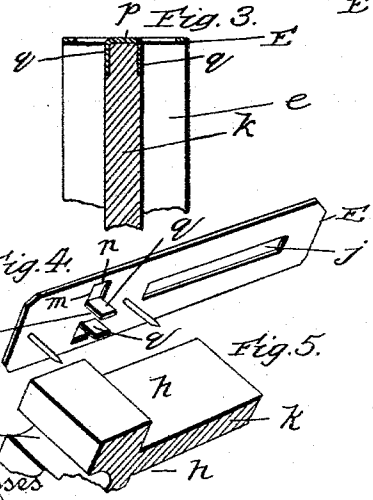

Fig. 3.

Fig. 4.

Fig. 5.

Witnesses
K. F. Matthews

Inventor
George E. Blaine
By James J. Shechy
Attorney

UNITED STATES PATENT OFFICE.

GEORGE E. BLAINE, OF ALLIANCE, OHIO.

SLIDING SCREEN AND BLIND.

SPECIFICATION forming part of Letters Patent No. 531,828, dated January 1, 1895.

Application filed September 8, 1894. Serial No. 522,415. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. BLAINE, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Sliding Screens and Blinds; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in that class of sliding screens and blinds for windows, which comprise a frame having grooves in its side bars, extensible strips having reduced portions adapted to enter the grooves in the side bars of the frame, and springs interposed between the extensible strips and the side bars of the frame; and it consists in the peculiar construction, novel combination and adaptation of parts hereinafter described and particularly pointed out in the claim appended.

In the accompanying drawings Figure 1, is a face view of a window frame or casing, illustrating my improvements as applied to a screen and placed therein. Fig. 2, is an enlarged, detail view partly in section, and partly broken away. Fig. 3, is a detail, sectional view taken in the plane indicated by the dotted line *x*, *x*, on Fig. 2. Fig. 4, is a perspective view of one of the guide plates removed, and Fig. 5, is a perspective, sectional view with parts broken away, of one of the extensible, side-strips or bars.

Referring by letter to said drawings:—A, indicates a window casing, which may be of any ordinary or approved construction. This casing is provided on the inner sides of its stiles with vertically-disposed guide-strips *a*, and these strips when used in connection with the character of groove which I have illustrated in the side bars or strips of the screen or blind frame, should be rounded or beveled, although it is obvious that they may be of an angular form or other suitable shape to correspond with the shape of the grooves provided in the side strips on the screen or blind frame.

The frame B, which may be that of a fly screen or blind is of a rectangular form in outline, and when used as a screen, should have a wire netting *b*, covering the opening. This frame comprises the upper and lower cross-bars *c*, and *d*, and the lateral, vertical bars *e*. The lateral bars are provided in their outer side throughout their length with a central, angular groove *f*.

C, indicates the extensible, lateral strips. These strips are provided on their outer sides or edges with longitudinal grooves *g*, corresponding to the configuration of the guide strips to be placed in the stiles of the window casing, and are designed to receive the latter. The inner sides of these strips C, are rabbeted as shown at *h*, and *i*, so as to form a proportionately long tongue to enter the grooves or recesses *f*, of the lateral bars *e*, of the frame; springs such as D, and illustrated in dotted lines, being placed within the grooves *f*, and back of the tongues *k*, so as to keep the strips or bars C, normally extended.

E, indicates guide plates; there being four employed. These plates are of a peculiar construction and for the sake of cheapness in manufacture, are formed from sheet metal, and are provided with an elongated slot *j*, for the passage of a guide pin or screw *l*, which takes into the top and bottom cross-bars of the frame B, as shown; the head of the pin or screw lying on the outer side of the plate so that said plate may slide true and yet be prevented from casual displacement. The opposite or outer ends of these plates are secured to the ends of the spring backed, extensible strips C, by nails, screws, or other suitable fastening devices. The plates in addition to serving as guides, serve the function of strengthening the tongues *k*. To do this, the plates are cut or slit transversely as shown at *m*, and thence longitudinally of the plate as shown at *n*, leaving the parts *p*, intact, and there is one of these slitted portions arranged opposite each other and out of the longitudinal center of the plate. By thus slitting the plate, I provide two tongues *q*, which I turn inwardly at an angle and snugly against the opposite side of the tongues *k*, of the extensible strips, as by this means I effectively strengthen the tongues and prevent them from slitting or otherwise becoming injured. These strengthening tongues are pressed sufficiently into the strips as not to interfere with the free movement of said strips in the grooves *f*, of the lateral rails or bars. A frame as thus

constructed may be produced at a comparatively small expense. It is very effective for the purposes designed, and there is nothing about it to get out of order. It will also be observed that the friction will be equal on both sides of the window, and that there are no nails, screws, or like devices employed for holding the springs.

Having described my invention, what I claim is—

The herein described device consisting essentially of the rectangular frame B, having its lateral or vertical side bars *e*, provided in their outer sides with grooves or recesses which extend throughout their length, the extensible strips C, having longitudinal grooves in their outer sides and rabbeted on opposite sides to form the tongues or reduced portions *k*, adapted to enter the grooves or recesses in the side bars of the frame B, springs arranged in the grooves or recesses of the lateral bars *e*, of the frame B, and interposed between said lateral bars and the reduced portions *k*, of the extensible strips C, the guide plates E, arranged above and below the frame B, and having the elongated slots *j*, and the integral tongues *q*, embracing the tongues or reduced portions *k*, of the extensible strips, pins or screws secured to the lateral bars of the frame and passing through the slots *j*, of the plates E, and pins or the like for securing the plates E, to the ends of the extensible strips, substantially as and for the purpose set forth.

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

GEORGE E. BLAINE.

Witnesses:
SAML. D. LANE,
R. S. KAYLER.