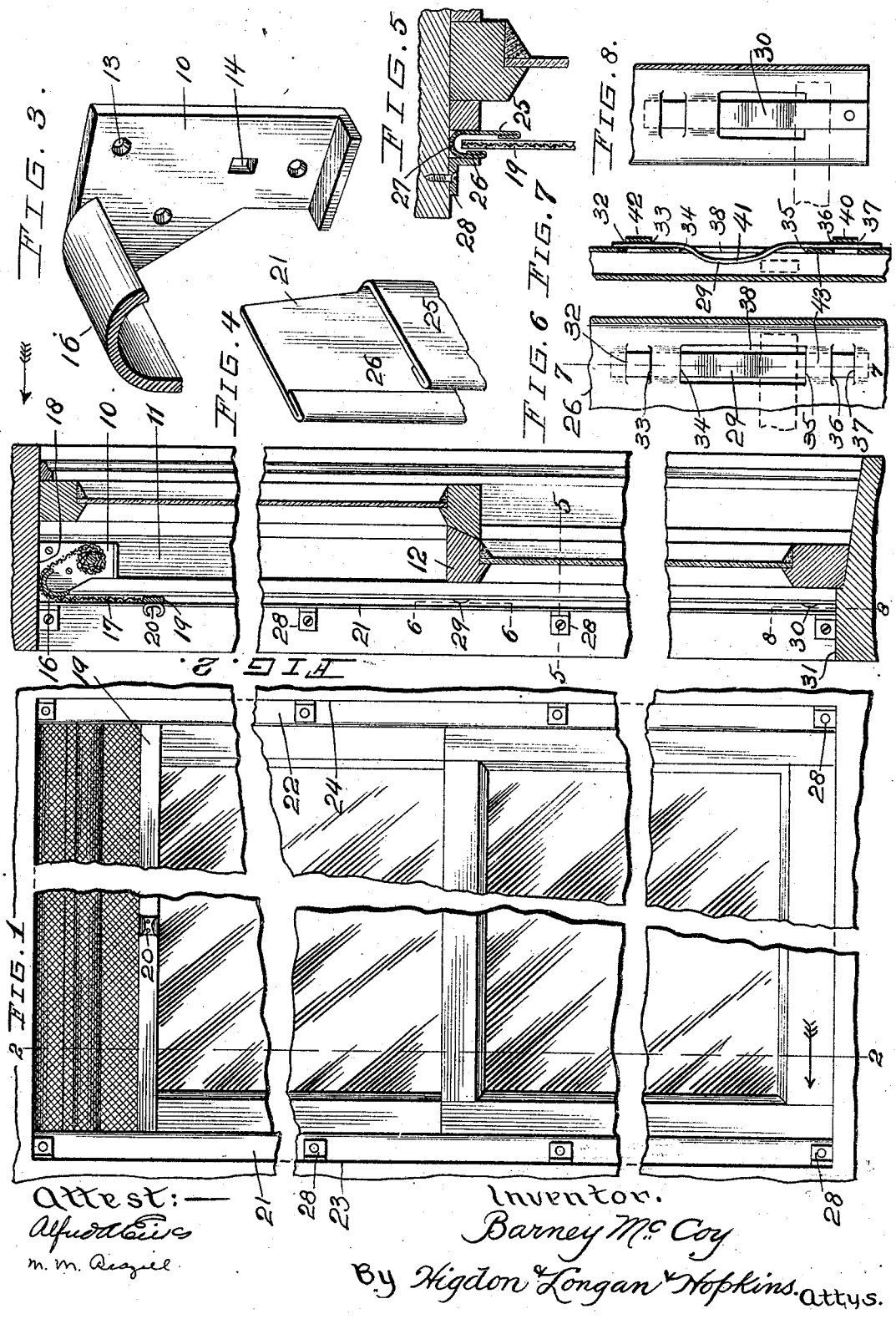
No. 785,226. PATENTED MAR. 21, 1905.

B. McCOY.

WINDOW SCREEN.

APPLICATION FILED JULY 25, 1904.



Attest:—
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Inventor.
Barney McCoy
By Higdon & Longan & Hopkins. Attys.

No. 785,226. Patented March 21, 1905.

UNITED STATES PATENT OFFICE.

BARNEY McCOY, OF ST. LOUIS, MISSOURI, ASSIGNOR OF TWO-THIRDS TO W. L. BEECHER AND CHARLES G. WOODS, OF ST. LOUIS, MISSOURI.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 785,226, dated March 21, 1905.

Application filed July 25, 1904. Serial No. 217,912.

To all whom it may concern:

Be it known that I, BARNEY McCOY, a citizen of the United States, and a resident of St. Louis, Missouri, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in window-screens; and it consists of the novel features herein shown, described, and claimed.

In the drawings, Figure 1 is a front elevation of a window fitted with a window-screen embodying the principles of my invention and taken looking in the direction indicated by the arrow 1 in Fig. 2, parts being broken away to economize space. Fig. 2 is a sectional detail on the line 2 2 of Fig. 1 and looking in the direction indicated by the arrow. Fig. 3 is a perspective, upon an enlarged scale, of one of the attaching-plates which supports the spring-roller and the guide. Fig. 4 is a perspective of the upper end of one of the guide-strips. Fig. 5 is a horizontal section on the line 5 5 of Fig. 2 and looking downwardly. Fig. 6 is a sectional detail on the line 6 6 of Fig. 2. Fig. 7 is a sectional detail on the line 7 7 of Fig. 6. Fig. 8 is a sectional detail on the line 8 8 of Fig. 2.

Referring to the drawings in detail, an attaching-plate 10 is secured to the inner face at the extreme upper end of each side of the window-sash directly in line with the lower sash 12, there being screw-openings 13 in the attaching-plate through which screws are inserted into the window-frame and there being a bearing 14 in each plate to receive the spindles of the spring-roller 15.

A semicircular guide-bar 16 connects the extreme upper forward corners of the attaching-plates, so that as the window-screen 17 passes over the guide-bar it is in close contact with the lower face 18 of the upper end of the window-frame.

The movable binding-strip 19 is secured to the lower edge of the window-screen 17, and a handle 20 is secured to the center of this binding-strip to be used in moving the binding-strip up and down. The rigid binding-strips 21 and 22 are secured to the inner faces 23 and 24 of the sides of the window-frame, each of said binding-strips comprising a strip of sheet metal bent to form the rear guide-plate 25, the front guide-plate 26, the U-shaped portion 27, connecting the plates 25 and 26, and the brackets 28, secured to the front plate 26 by rivets and secured to the window-frame. The upper end of the plate 25 is cut short, so as to fit below the lower edge of the guide-bar 16. The ends of the movable binding-strip 20 fit between the plates 25 and 26, and the edges of the screen fit between said plates, so that as the screen moves up and down said plates 25 and 26 form binding-strips and close the joints between the edges of the screen and the window-frame.

Spring-stops 29 are located in position to stop the binding-strip 19 in horizontal alinement with the upper bar of the lower sash. Similar spring-stops 30 are located in position to hold the binding-strip 19 against the upper face 31 of the lower side of the window-frame. The details of the spring-stops are shown in Figs. 6, 7, and 8.

Slits 32, 33, 34, 35, 36, and 37 are formed through the plates 25 opposite the meeting-rails of the window-frame, and similar slits are formed through the said plates at their lower ends. The portion 38 between the slits 34 and 35 is cut away, the portion 39 between the slits 32 and 33 is pressed backwardly, and the portion 40 between the slits 36 and 37 is pressed backwardly. The stops are formed of a leaf-spring, each comprising the central portion 41, extending through the openings 38 in position to be engaged by the ends of the movable binding-strip 19 and the end portion 42 extending through the slits 33 and 32 in front of the portion 39 and the end portion 43 extending through the slits 36 and 37 in front of the portion 40.

When it is desired to open the window and lower the screen, the handle 20 is manually engaged and pulled downwardly, thus unwinding the screen from the spring-roller and drawing it over the guide-bar 16 and down-

wardly between the rigid binding-strips, and when the ends of the movable binding-strip 19 reach the stop 29 sufficient force must be applied to force the central portions 41 backwardly and allow the binding-strip 19 to pass. Then if the handle 20 is released the screen will stand in position to close the upper part of the window. If desired, the handle 20 is again engaged and the binding-strip 19 forced downwardly past the stops 30, and the tension of the stops will resist the tension of the spring-roller and hold the screen in position to cover the entire window.

I claim—

1. In a window-screen: rigid rear guide-plates 25; rigid front guide-plates in apposition to the rear guide-plates; a window-screen mounted to move up and down between the front and rear guide-plates; a movable binding-strip upon the lower edge of the screen; there being slits 32, 33, 34, 35, 36, and 37 formed through the rear rigid guide-plates 25; the portion 38 between the slits 34 and 35 being cut away; and the portion 39 and 40 between the slits 32 and 33, and the slits 36 and 37 being pressed backwardly; and stops formed of leaf-springs comprising the central portions 21 extending through the openings 38; and in position to engage the ends of the movable binding-strip; and the end portion 42 extending through the slits 32 and 33; and the end portion 43 extending through the slits 36 and 37; substantially as specified.

2. In a window-screen: the rigid binding-strips 22 and 23, each comprising the rear guide-plate 25; the front guide-plate 26; the U-shaped portion 27 connecting the plates 25 and 26; the brackets 28 secured to the front plate and adapted to be secured to the window-frame; the upper end of each plate 25 being cut short; a spring-roller; a screen attached to and wound upon the spring-roller; a guide-bar above the spring-roller; said screen extending over the guide-bar and over the short ends of the plate 25 and downwardly between the plates 25 and 26; a movable binding-strip upon the lower edge of the screen; there being slits 32, 33, 34, 35, 36 and 37 formed through the plates 25; the portion 38 between the slits 34 and 35 being cut away; and the portions 39 and 40 between the slits 32 and 33, and 36 and 37 being pressed backwardly; and stops formed of leaf-springs comprising the central portions 21 extending through the openings 38; and the end portion 42 extending through the slits 32 and 33; and the end portion 43 extending through the slits 36 and 37; substantially as specified.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

BARNEY McCOY.

Witnesses:
M. M. BRAZILL,
ALFRED A. EICKS.