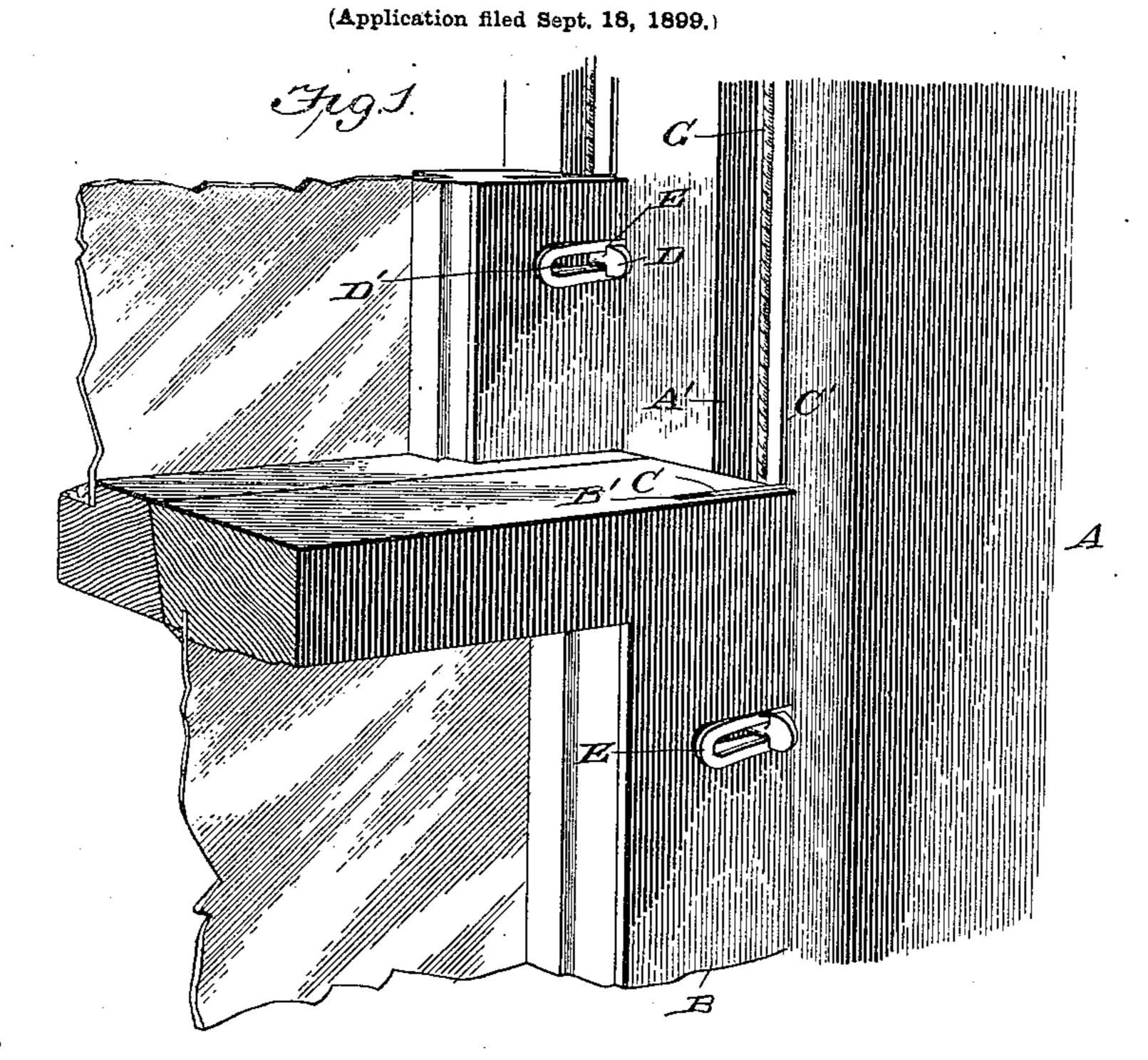
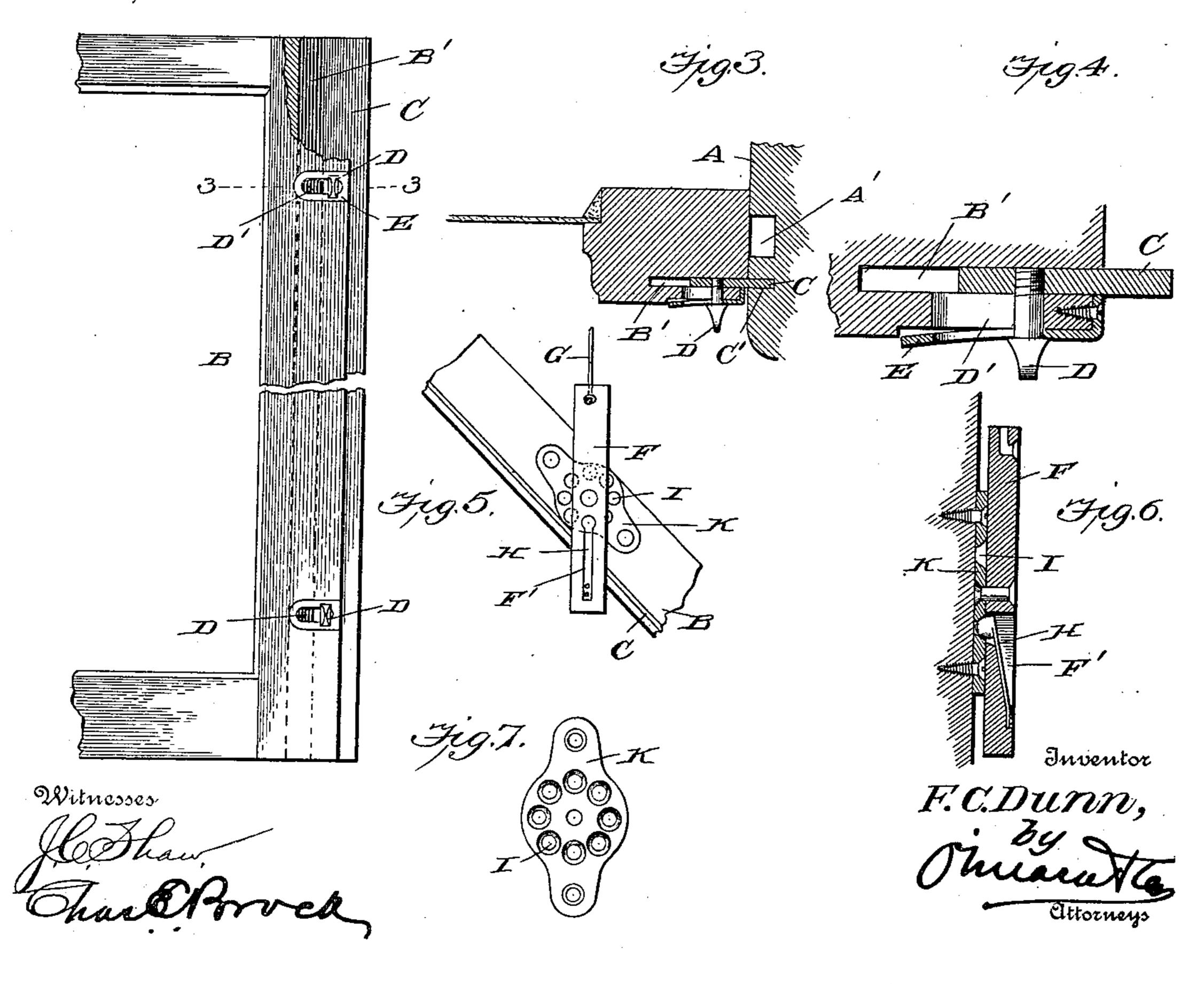
F. C. DUNN.

REVERSIBLE WINDOW SASH.

(No Model.)







UNITED STATES PATENT OFFICE.

FREDERICK COLEMAN DUNN, OF CHICAGO, ILLINOIS.

REVERSIBLE WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 659,654, dated October 16, 1900.

Application filed September 18, 1899. Serial No. 730,912. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK COLEMAN Dunn, a citizen of the United States, residing at Chicago, in the county of Cook and State 5 of Illinois, have invented a new and useful Improvement in Reversible Window-Sash, of which the following is a specification.

This invention relates generally to windows, and more particularly to a reversible so window-sash, one object being to provide a sash which can be reversed, so that the outside of the window can be washed from the inside, thereby avoiding the necessity of sitting outside of the window for the purpose of 15 cleaning the outside of the same.

Another object of the invention is to provide a reversible window-sash which can be turned to any angle and locked in that position; and a still further object is to provide 20 an improved construction of weather-strip which shall exclude the air and dust and at the same time prevent the window-sash be-

ing inadvertently reversed or tilted. With these objects in view the invention 25 consists in the peculiar construction of the various parts and in their novel combination and arrangement, all of which will be fully described hereinafter and pointed out in the

claims.

In the drawings forming part of this specification, Figure 1 is a view showing the practical application of my invention. Fig. 2 is a view showing one side of the window-sash, a portion of the stile being broken away. Fig. 35 3 is a detail sectional view on the line 3 3 of Fig. 2. Fig. 4 is an enlarged detail view of the same portion. Fig. 5 is a detail view showing means for locking the sash in a tilted position. Fig. 6 is a sectional view of said 40 mechanism. Fig. 7 is a detail face view of

the keeper-plate.

In the practical application of my invention I employ a window-frame A, which is devoid of the usual beading-strips, said frame 45 having two narrow guideways A' arranged upon opposite sides, the purpose of which will appear hereinafter. The window-sashes B slide upon the face of the window-frame, and the stiles of each sash have a vertical groove 50 B', produced in the side adjacent to the front face of the stile, and the weather-strip C, of

metal or any suitable material, is inserted within the said groove and is adapted to be projected into the grooves C', produced in the side of the window-frame adjacent to the 55 grooves or ways A', said strips being projected by means of hand-knobs D, fastened to the said strip and working in horizontal slots D', produced in the window-stiles, and also through a slotted plate E, secured to the said 60 stile. The inner end of the plate is bent at right angles and perforated for the reception of a screw, which enters the stile of the sash on the edge next to the casing, where it is concealed. The outer or free end of said 65 plate is curved outwardly to form a spring in order to create a tension or pressure upon the knob D, so that when the strip is withdrawn from the window-frame the tension of the spring-plate will hold the same in a disen- 70 gaged position and when the said strip is projected into the window-frame the curve of the spring-plate will tend to hold the same in its outwardly-projected position. It will be understood that there is a knob connected to 75 each end of the strip in order to facilitate the movement of the same. These weather-strips serve to exclude dust and air and also prevent the window from rattling, inasmuch as it holds the sash fixed against the side of the 80 window-frame.

One of the main objects of my invention is to render the window-sash reversible, so that the outside of the glass can be washed from the inside of the room, and in order to ac- 85 complish this I arrange a bar or plate F upon each stile, said bar or plate being pivotally attached thereto and is adapted to slide in the grooveways A', thereby guiding the movement of the window-sash, and this bar or go plate is adapted to receive the lower end of the sash-cord G, by means of which the window is raised or lowered, said sash-cords being provided with the usual sash-weights, which travel in the pockets of the window-frame. 95 The bar or plate F has a slot F', in which works a spring bolt or eatch H, which is adapted to engage one of a series of perforations I, produced in the keeper-plate K, said keeperplate being secured to the stile of the window- 100 sash, as most clearly shown in Figs. 5 and 6. As before stated, the bar or plate F acts as a

tongue working in the groove A', and thereby guides the window in its forward and downward movement, and when it is desired to reverse or tilt the window-sash the weather-5 strips are withdrawn from the grooves in the frame, and the sash can then be tilted in the desired direction, the head of the spring-bolt H being bullet-shaped, so that it will readily ride in and out of the recess I in the keeperto plate K, and by this means the window can be turned to any desired angle, it being understood that the force of the spring is sufficient to hold the window in any desired position after it has once been moved to the 15 proper adjustment. By this means the window-sash can be completely reversed, so that the washing operation can be accomplished from the inside of the room instead of from the outside, as heretofore.

It will thus be seen that I provide a window which can be reversed, and it will also be noted that in connection with such construction of window I employ an improved form of weather-strip for the purpose of holding the window firm and exclude air and dirt.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with the window-frame constructed as described, of a window-sash having grooved stiles and the weather-strips located in said grooves, said strips being provided with pins or knobs for operating the said strips, and the spring-plates adapted to engage the said knobs for the purpose of hold-

ing the strips in their adjusted position, substantially as shown and described.

2. The combination with the window-frame constructed as described, of a window-sash having grooved stiles, the strips arranged in 40 said grooves and having knobs or pins for operating the same and the slotted spring-plates grooved as described, and adapted to hold the strips in their adjusted positions, substantially as shown and described.

45

3. The combination, with the window-frame constructed as described, of a window-sash having grooved stiles, the strips arranged in said grooves, slotted plates, the inner end of each of which is bent at an angle and secured to the edge of the stile and the outer end is curved outward to form a spring, and knobs secured to each strip in position to project through said plates, the head of each knob resting against the plate and being kept in 55 position thereby, substantially as described.

4. The combination, with a plate provided with a circular series of holes, of a bar-plate pivotally secured thereto at the center of said series of holes, one end of which is provided 60 with means for connecting it with the sash-cord and the other end is slotted longitudinally, and a spring secured in said slot, the free end of which is provided with a rounded head in position to engage with said holes, 65 substantially as described.

FREDERICK COLEMAN DUNN.

Witnesses:

E. VERNER MCCAUKEY, F. C. BARNARD.