

S. C. HART.
FLY SCREEN.

Patented May 3, 1898.

Fig. 1.

Fig. 2.

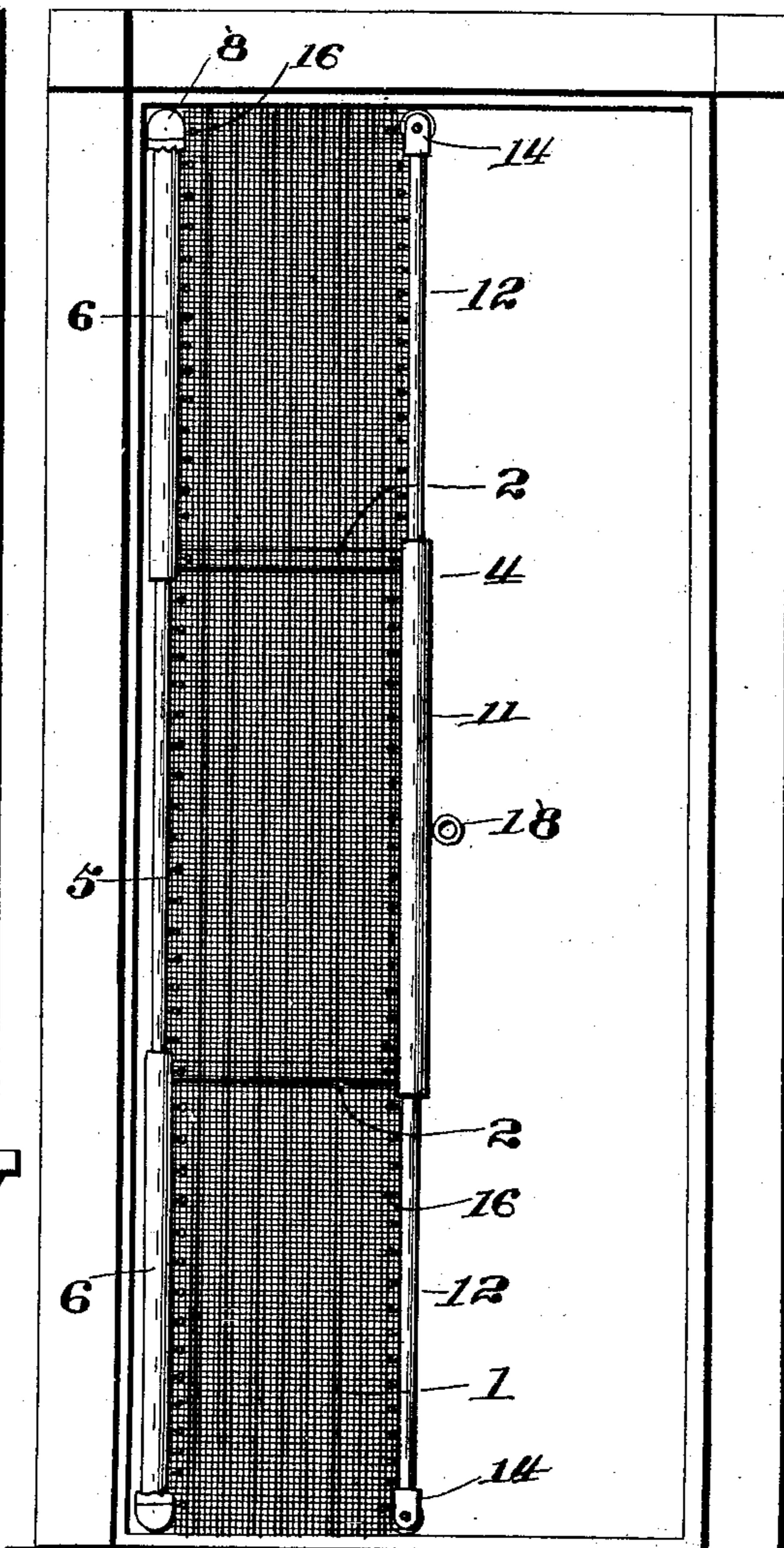
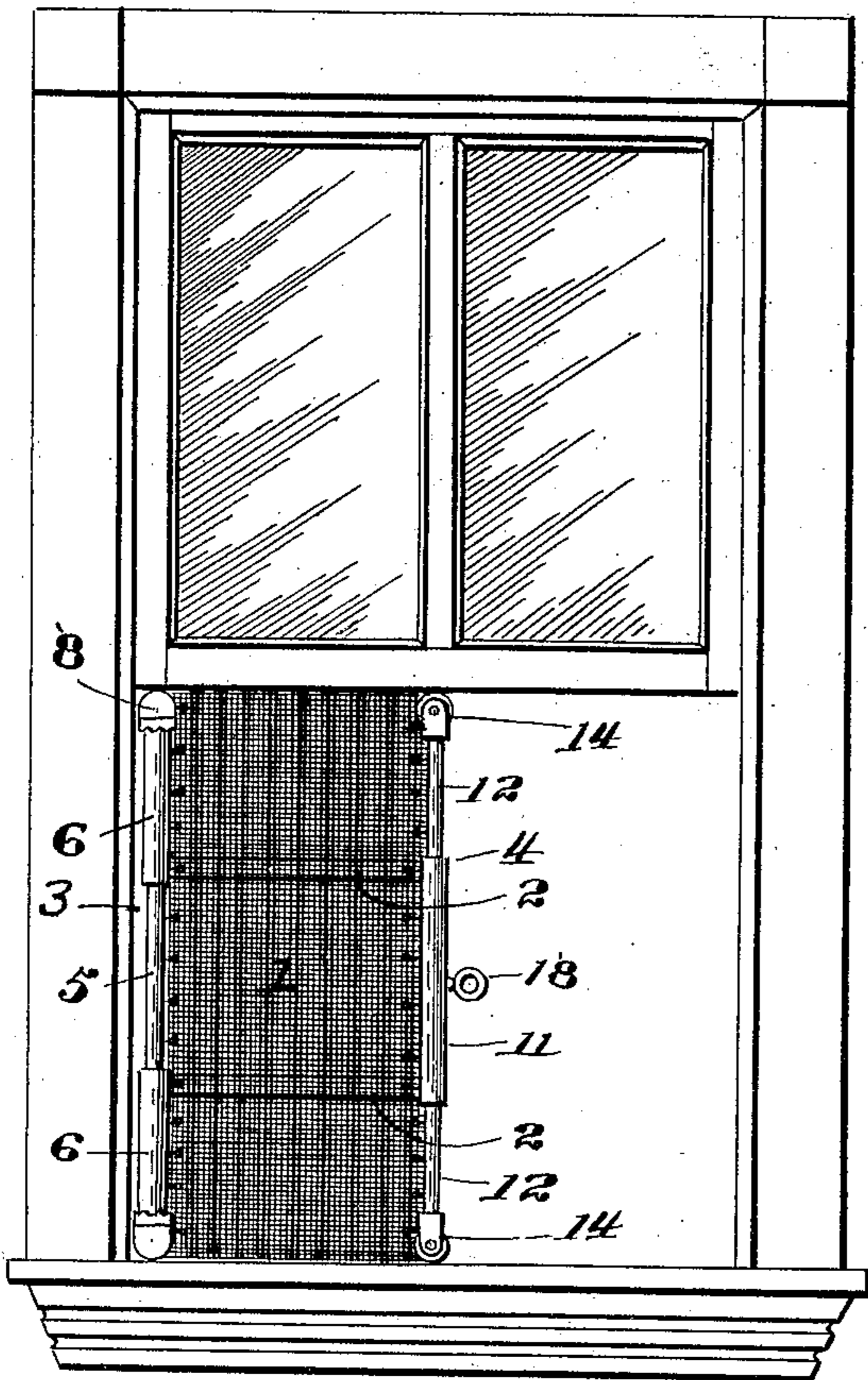
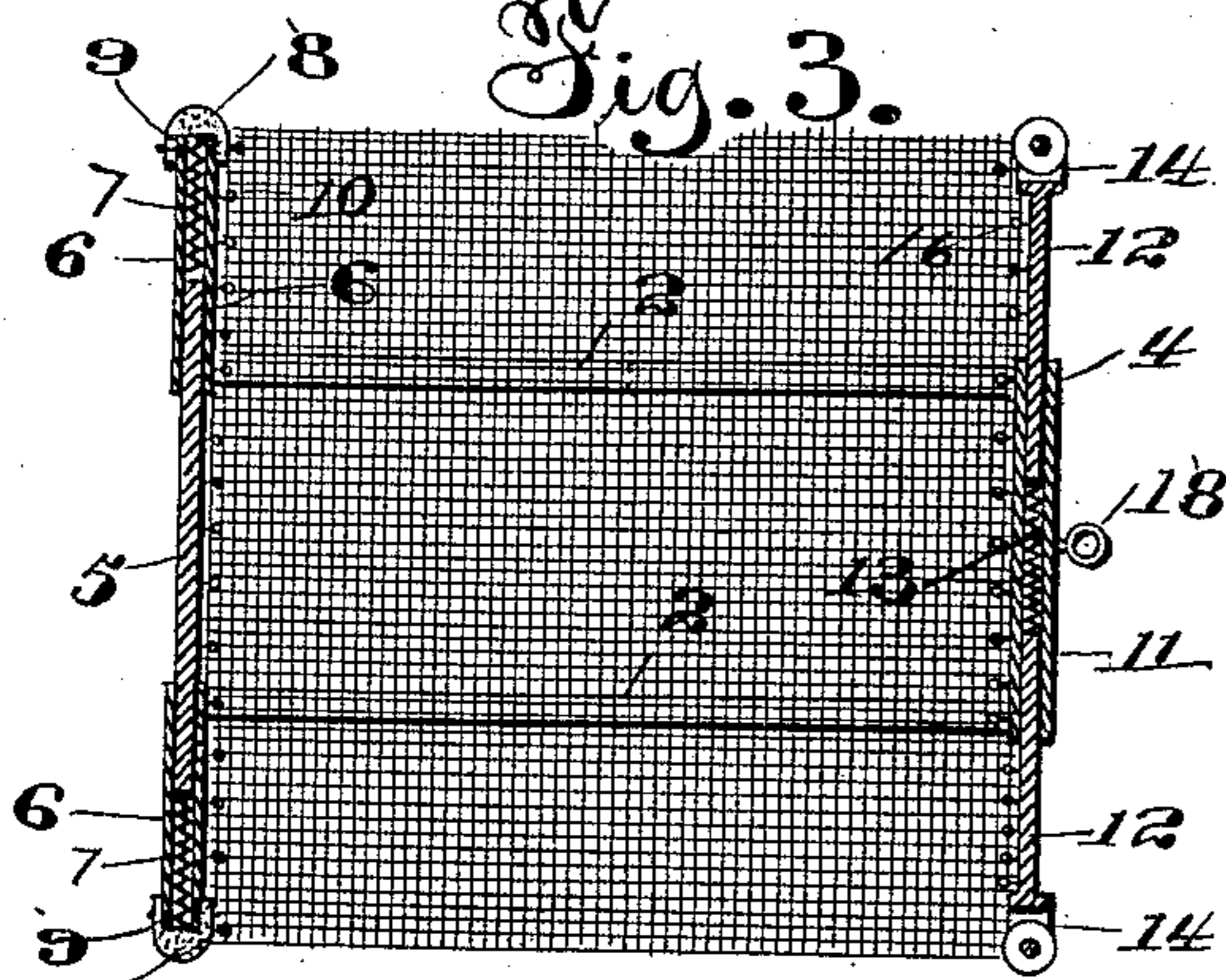


Fig. 3.



WITNESSES

Marcus L. Byng.

am. system

INVENTOR

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UNITED STATES PATENT OFFICE.

SARA C. HART, OF GALVESTON, TEXAS.

FLY-SCREEN.

SPECIFICATION forming part of Letters Patent No. 603,595, dated May 3, 1898.

Application filed March 20, 1897. Serial No. 628,431. (No model.)

To all whom it may concern:

Be it known that I, SARA C. HART, a citizen of the United States, residing at Galveston, in the county of Galveston and State of Texas, have invented certain new and useful Improvements in Fly-Screens; and I do hereby 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.

This invention relates to improvements in screens, and has more particular relation to adjustable fly or mosquito screens.

The invention consists of the combination, with a plurality of supporting-rods, each comprising a tubular portion containing a spring, of a rod or rods mounted in said tubular portions and adapted to be forced outward by said springs to engage a window-casing, and a flexible netting connecting said rods and provided with elastic contracting means, whereby said netting is contracted upon the rods being brought together or permitted to expand upon said rods being separated.

The invention also consists of certain other novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more fully described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a front elevation of my improvement applied in position in a window, the screen being half drawn. Fig. 2 represents a similar view with my invention applied to a door. Fig. 3 represents a central vertical section of my said improved screen.

1 in the drawings represents the netting; 2, the elastics; 3, the stationary rod, and 4 the movable rod. Said stationary rod 3 comprises a rod proper, 5, and two tubular casings 6 6, within which the respective opposite ends of said rod are adapted to fit. Each of said tubes 6 6 is provided with a coil-spring 7, which abuts at one end against the end of the rod 5 and at the opposite end against a padded cap 8, secured to the end of said tube by cords or threads passing through apertures 9, formed in said tube. Said caps 8 are adapted to contact with the inner surface of the window-frame, and thus prevent the tubes from slipping thereon and also avoid all injury to or scratching of the woodwork.

It will be observed from the foregoing that the rod 3 may be applied in windows of different heights, as the tubes 6 6 may be readily raised toward each other by compressing the springs 7, the tension of said springs holding said rod firmly in position in the window-frame by pressing the respective caps 8 into contact with the same. Each of said tubes 6 6, as well as the rod 5, is provided with a plurality of spaced eyes 10 10, to which is secured the edge of the netting 1. The rod 4 comprises a central tube 11 and two end rods proper, 12 12. Each of said rods has one of its ends mounted in said tube 11 and bearing against a coil-spring 13, mounted therein. The opposite ends of said rods are each provided with a cap 14, having two spaced apertured lugs, between which an antifriction-roller 15 is journaled. These rollers are adapted to engage the upper and lower portions of the window-frame with sufficient friction to be held firmly in position, but at the same time be capable of being moved back and forth at will to open and close the netting. The said tube 11, as well as the rods 12, is provided with spaced eyes 16, similar to the eyes 10 and adapted to secure the netting 1 in position. The said netting 1 is of any desired flexible reticulated material and is formed with a plurality of elastic bands 2, woven therein and having their opposite ends connected to the tubes 6 and 11, respectively. The said tube 11 is provided with a ring 18, by means of which the rod 4 may be drawn back and forth at will. It will be observed from the foregoing description that as the said rod 4 is drawn back and forth the slack in the netting is confined in position by the elastic bands 2, incorporated therein, and is thus prevented from flapping back and forth. These elastic bands while acting in this capacity at the same time permit the netting to be stretched when so desired to fully close the window. The whole device may be instantly applied to a window of any size by simply compressing the respective ends and permitting the rods to expand within the window-frames.

I do not care to limit myself to the exact construction of one rod formed with tubes at both ends and a rod in the middle and the other with a tube in the middle and a rod at both ends, as either one of said constructions

may be utilized for both rods or the positions may be reversed at will without departing from the spirit of my invention.

By the peculiar construction of this invention the device may be constructed very cheaply and placed upon the market at a very low figure, but at the same time is very effective and accomplishes the object intended in a perfect manner. When it is applied in position, the screen is firm and secure against any accidental displacement, but may at the same time be expanded to any desired degree by simply grasping the operating-ring 18 and moving the rod 4 back and forth, the rollers 15 passing smoothly over the window-frame.

I also do not care to limit myself to the exact application of my invention to a door or window in the position shown, as the same may be readily placed and operated horizontally as well as vertically.

The construction shown in connection with the door is practically the same as that constructed in connection with the window and with a corresponding operation.

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

1. The combination with a rod comprising two cylindrical portions containing springs, and an intermediate rod portion movably mounted in said tubular portions and engaging said springs, of another rod comprising

a tubular portion containing a spring, rods mounted in said tubular portion with their ends bearing against said spring, antifriction-rollers on the ends of said latter rods, and a flexible netting connecting said rods, substantially as described.

2. The combination with a rod comprising two spaced tubes containing springs and having flexible caps at their outer ends, of a rod having its ends movably mounted in said tubes and engaging said springs, another rod comprising a central tubular portion containing a spring, rods having their opposite ends mounted in said tubular portion and engaging said spring, antifriction-rollers mounted on the outer ends of said latter rods, a flexible netting connecting said rods, and elastic contracting means mounted on said netting for contracting the same when the rods are brought together, substantially as described.

3. In a fly-net, the combination with expansible rods one of said rods having antifriction-rollers mounted upon its opposite ends, of a flexible netting connecting the said rods, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

SARA C. HART.

Witnesses:

E. L. READING,
J. K. WALLIS.