

No. 607,382.

Patented July 12, 1898.

J. H. KOONS.

SCREEN FOR DOORS OR WINDOWS.

(Application filed Aug. 28, 1897.)

(No Model.)

Fig. 1.

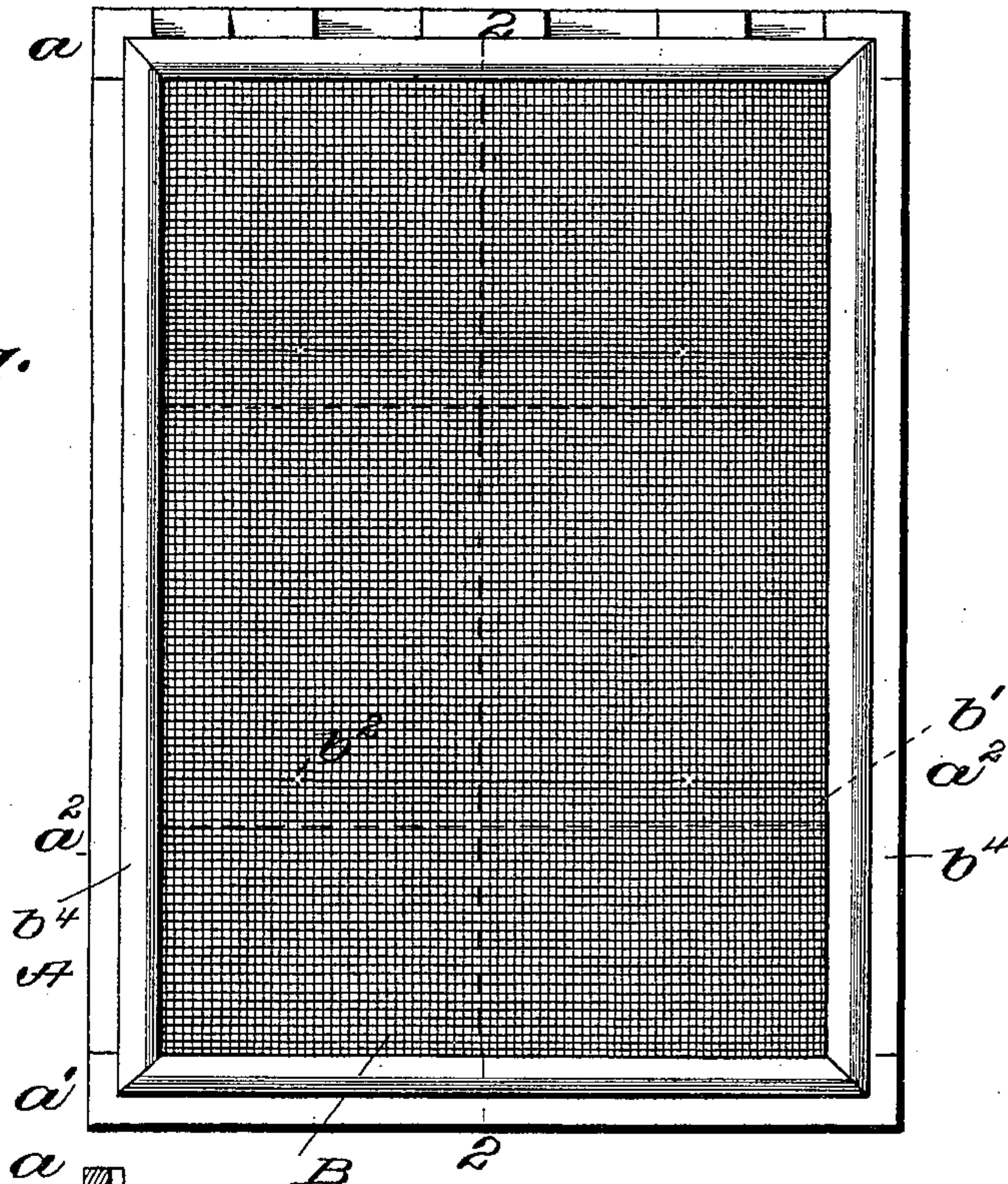


Fig. 2.

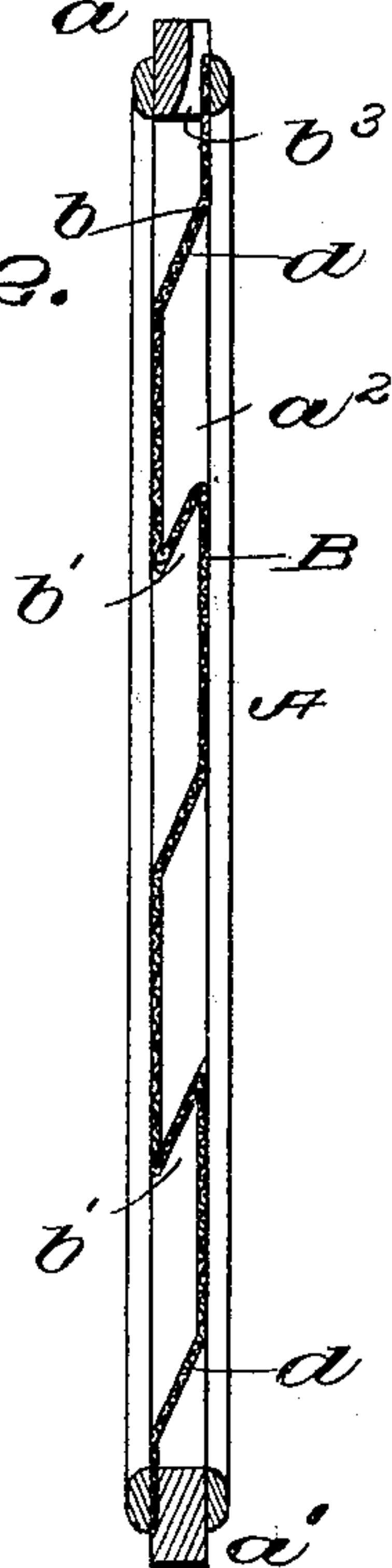
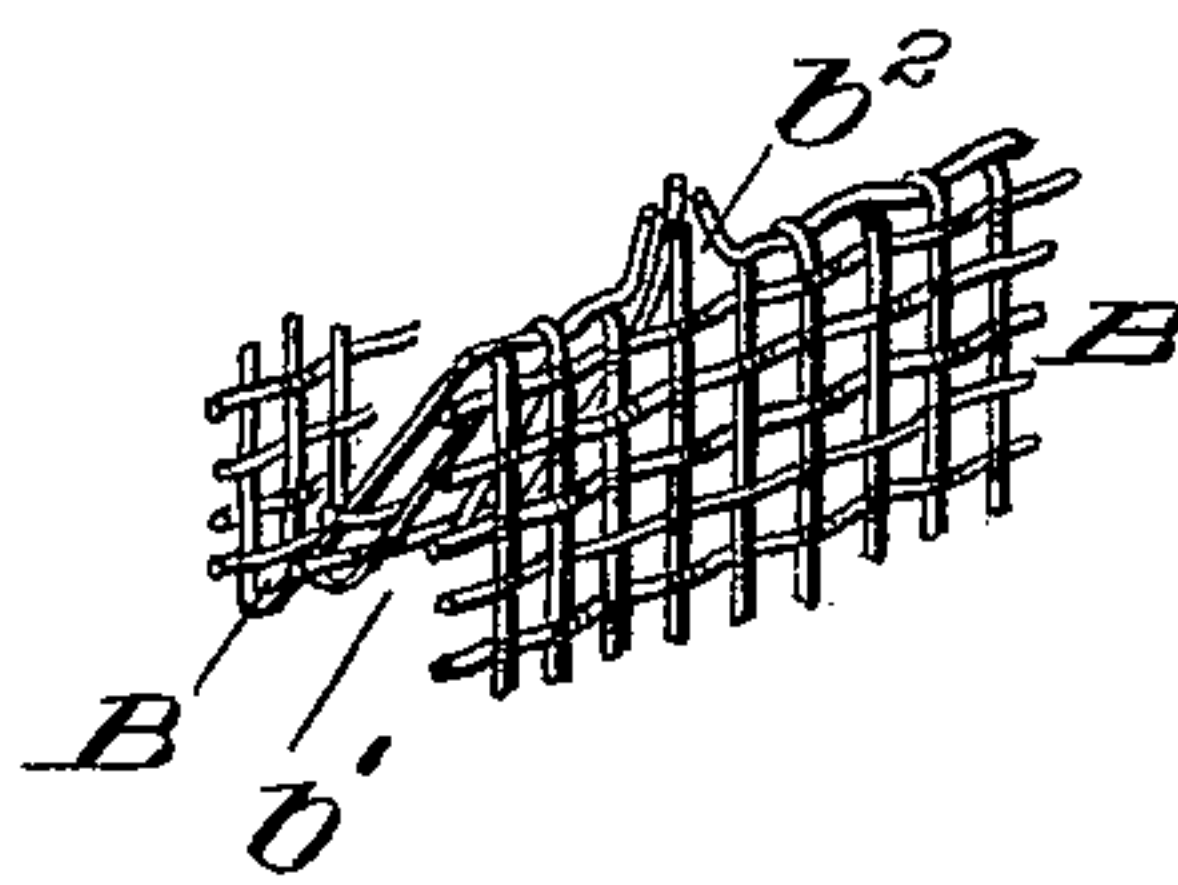


Fig. 3.



Witnesses

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SCREEN FOR DOORS OR WINDOWS.

SPECIFICATION forming part of Letters Patent No. 607,382, dated July 12, 1898.

Application filed August 28, 1897. Serial No. 649,810. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. KOONS, of Seattle, in the county of King and State of Washington, have invented certain new and useful
5 Improvements in Screens for Doors or Windows; 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
10 use the same.

This invention contemplates certain new and useful improvements in screens for doors and windows.

The object of the invention is to provide
15 simple and highly efficient means for securing a screen within a door or window frame and also to insure the egress of flies on the inner face of the screen and at the same time prevent their ingress from the outside. These
20 objects I accomplish by providing the inner faces of the upright of a frame with diagonally-arranged grooves which receive and accommodate the side edges of the screen, whereby overlapping portions of the screen form
25 guideways or chambers up into which the flies will rise. At the apex of each overlapping portion forming a chamber are formed holes or openings through which the flies will egress. These holes are formed by cutting
30 two intersecting strands of wires, the ends of which are bent outward, permitting the egress of the flies, but preventing their ingress from the outside of the screen. The upper cross-bar of the frame is provided with a series of
35 inclined openings over which the screen extends, leaving sufficient space at the upper end for the exit of flies and the like.

The invention will be hereinafter fully set forth, and particularly pointed out in the
40 claim.

In the accompanying drawings, Figure 1 is a view in elevation. Fig. 2 is a vertical sectional view on line 2 2, Fig. 1. Fig. 3 is an enlarged view in detail of a portion of the
45 screen.

Referring to the drawings, A designates a frame composed of upper and lower horizontal members a a' and side uprights a^2 . In the inner opposite faces of these uprights a^2
50 are formed obliquely-arranged grooves d , all of which are parallel and at an angle of about sixty degrees. The result is the same as if a

series of spaced-apart strips having tapered ends should be secured to the inner side of
55 said uprights.

B is the screen, the side edges of which are secured first to the outer face of the frame and then carried inward and downward in the uppermost groove b , and then down the front face of the frame, and thence upward
60 through the second groove to the upper end of the latter, and then brought straight down over the outer face of the frame, and so on to the lower cross-bar a' . In passing the screen upward and outward through one of
65 these small grooves d and then downward chamber-like spaces b' are formed, into which flies walking upward on the screen will enter. In the extreme apex of each bent portion of the screen forming these chambers two or
70 more small holes b^3 are made by cutting two intersecting wires. These holes are not made smooth or perfectly round; but the cut ends of these wires are slightly bent outward in such manner as to permit of the flies on the
75 inner side of the screen passing out through said holes, but preventing flies from the outside passing in through the latter. The projecting ends of the cut wires will retard this
80 ingress of the flies.

The upper cross-bar a of frame A is formed with a series of spaced-apart tapering grooves b^3 , through which flies can pass out from on the inner face of the screen. The screen B is secured to the faces between these tapered
85 grooves, but sufficient space is left between the upper edges of the screen and the upper edge of each tapered groove.

From what has been said it will be seen that I have provided an extremely simple
90 and inexpensive screen for doors or windows. By providing the inner faces of the uprights of the frame with diagonally-arranged grooves and passing the edges of the screen through these grooves and alternately along the inner
95 and outer faces of the uprights the outlet-chambers for the flies are provided. After the screen has thus been secured in place I preferably attach strips b^4 to the uprights over the edges of the screen, so as to entirely
100 conceal the latter.

I claim as my invention—

The frame having upper and lower cross-bars and side uprights, said upper cross-bar

having inclined recesses in its outer face, and
said side uprights having on their inner, op-
posite faces inclined grooves, and a wire-net-
ting secured to the said upper cross-bar and
5 extended over portions of said recesses, the
side edges of said netting being held in said
grooves, whereby overlapping portions of the
netting will form chambers, holes being made
in said overlapping portions by cutting in-

tersecting strands of the netting-wires, sub- 10
stantially as and for the purpose set forth.

In testimony whereof I have signed this
specification in the presence of two subscrib-
ing witnesses.

JOHN H. KOONS.

Witnesses:

SAML. S. CARLISLE,

EDWARD J. DELBRIDGE.