

No. 816,441.

PATENTED MAR. 27, 1906.

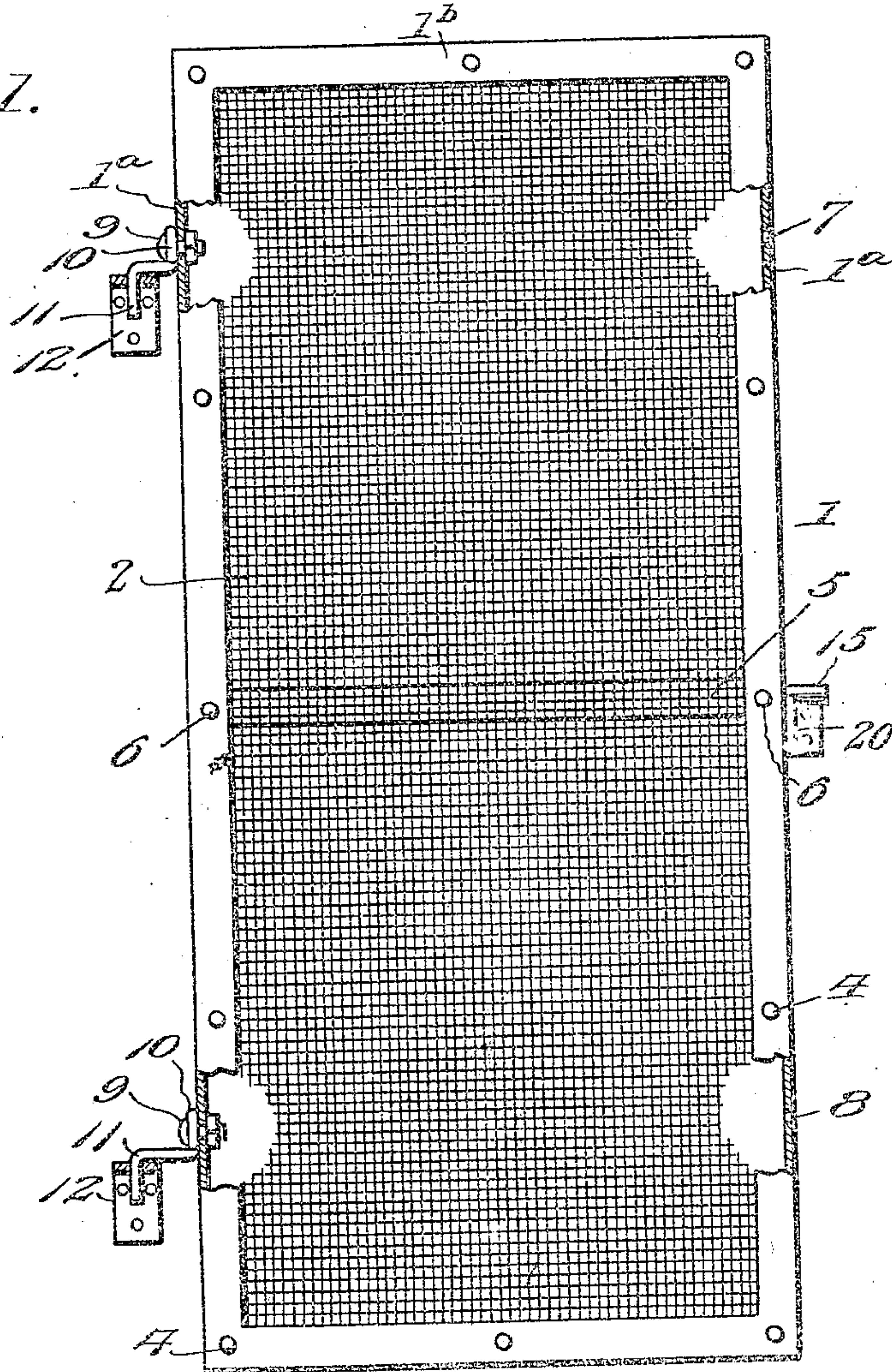
F. K. & A. M. EASTMAN.

DOOR.

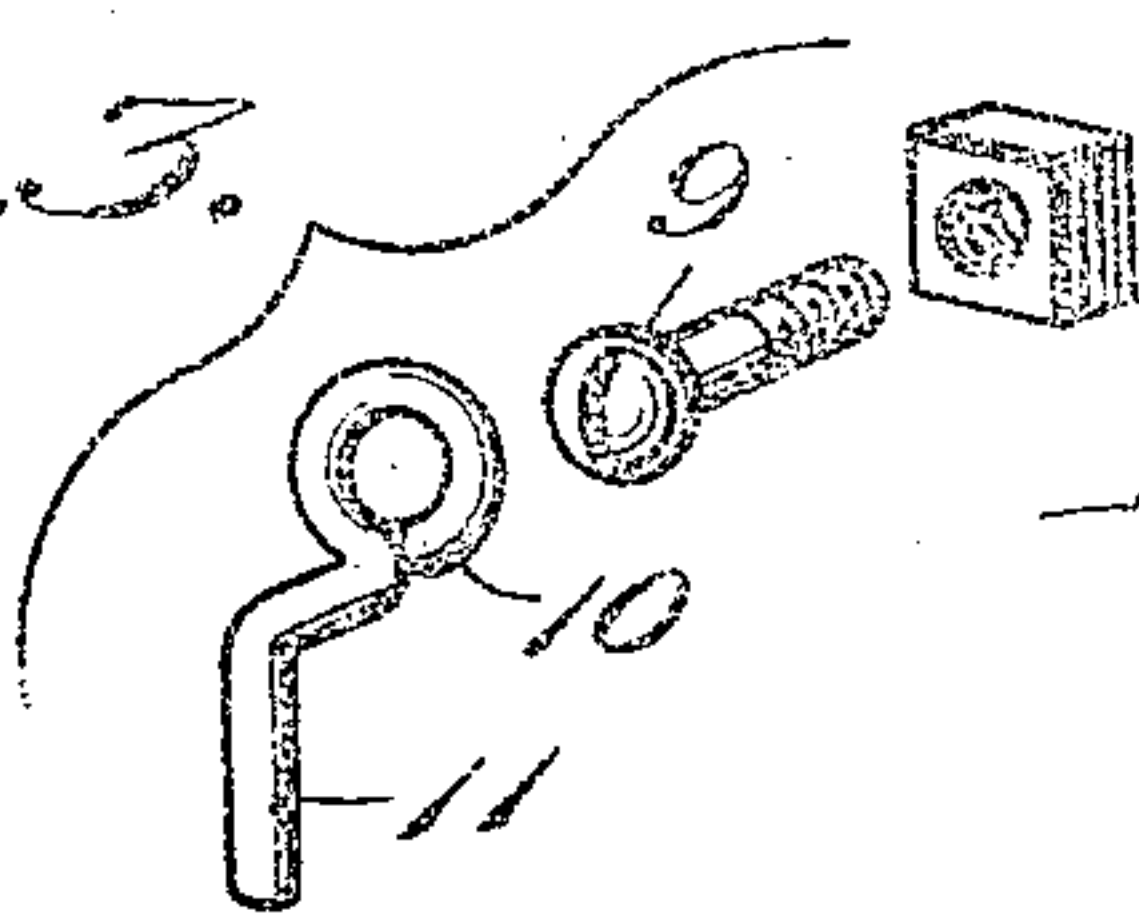
APPLICATION FILED JAN. 14, 1905.

2 SHEETS—SHEET 1.

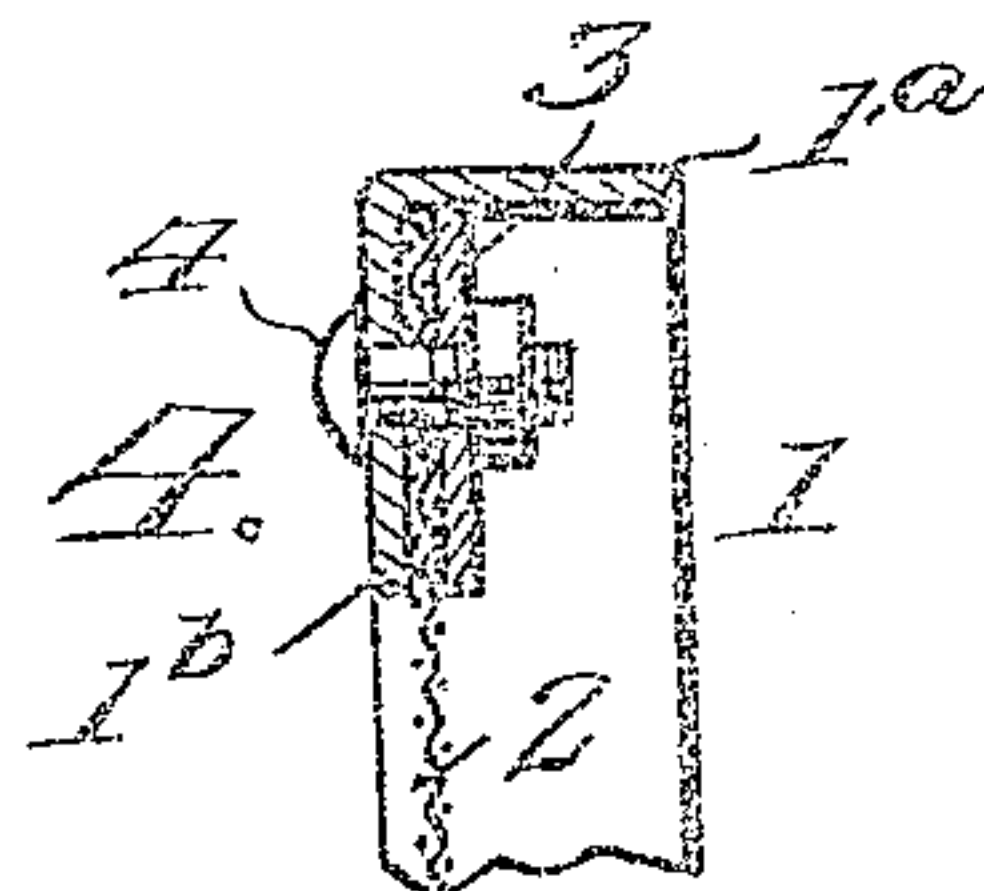
*Fig. 1.*



*Fig. 3.*



*Fig. 4.*



Witnesses

*Edwin G. McKee*

*W. H. Clarke*

By

*F. K. Eastman*  
*A. M. Eastman*  
*Victor J. Crank*

Attorney



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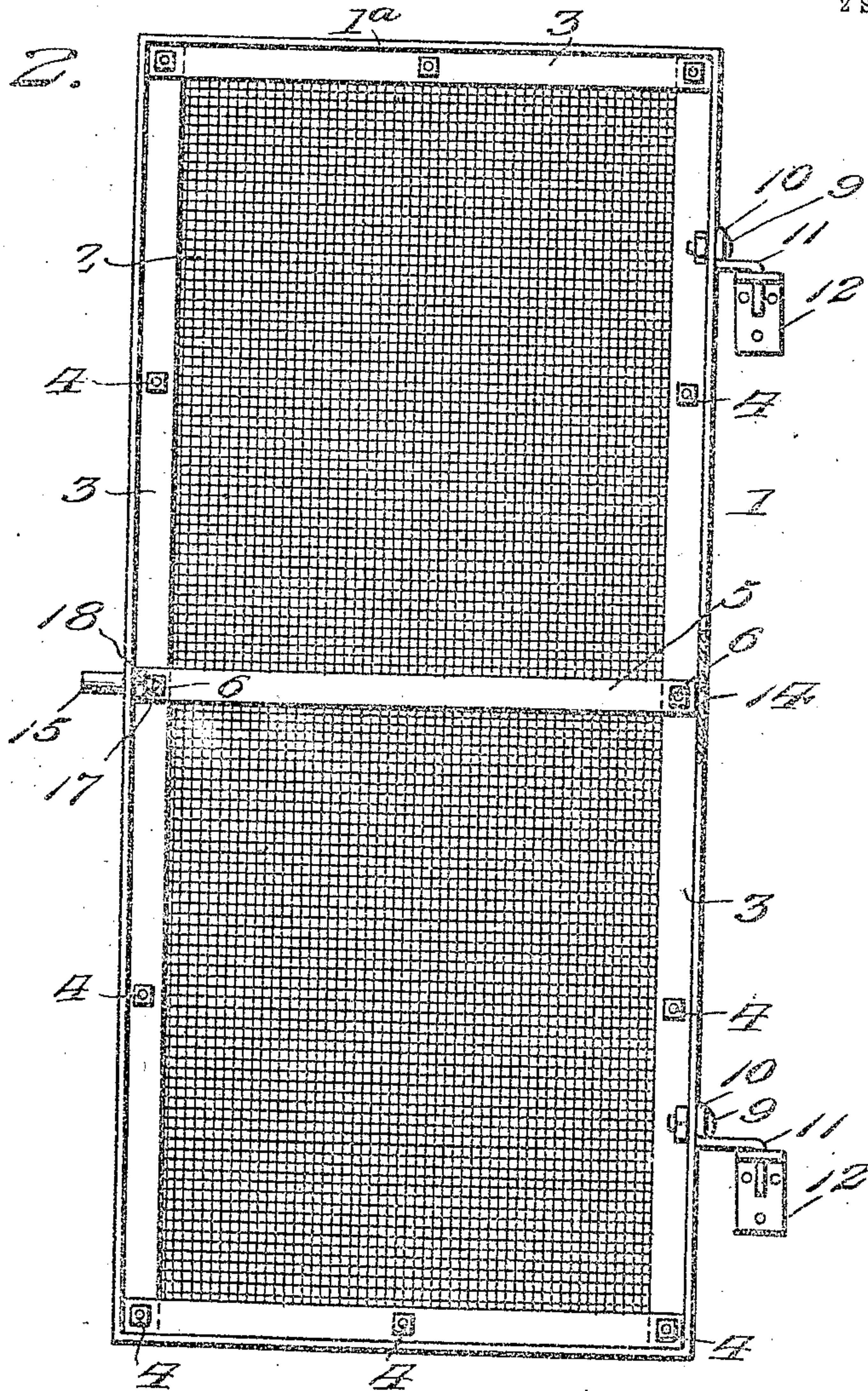
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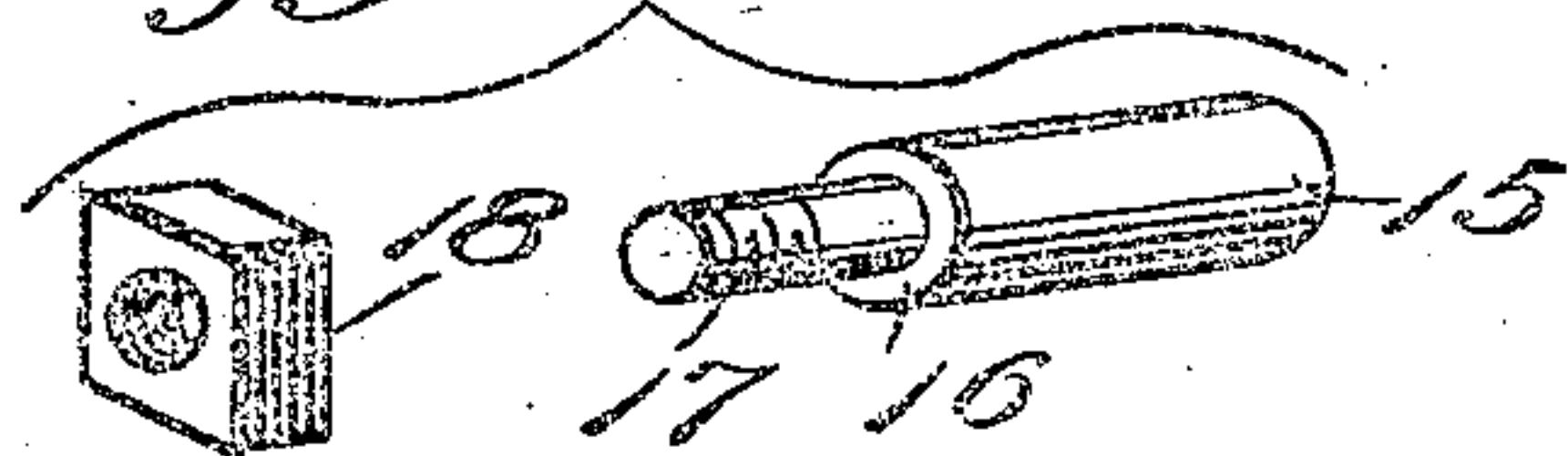
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2 SHEETS—SHEET 2.

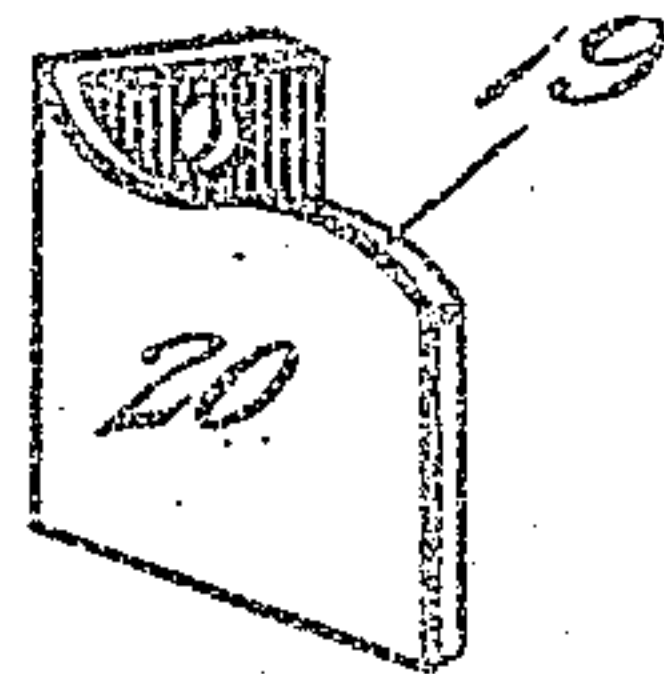
*Fig. 2.*



*Fig. 5.*



*Fig. 6.*



Witnesses

*Edwin G. McKee*

*W. H. Clarke*

Inventors

*F. K. Eastman*

*A. M. Eastman*

By

*Victor J. Crank*

Attorney



# UNITED STATES PATENT OFFICE.

FLOYD K. EASTMAN AND ARTHUR M. EASTMAN, OF MANCERLONA,  
MICHIGAN.

## DOOR.

No. 816,441.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed January 14, 1905. Serial No. 241,144.

*To all whom it may concern:*

Be it known that we, FLOYD K. EASTMAN and ARTHUR M. EASTMAN, citizens of the United States, residing at Mancelona, in the county of Antrim and State of Michigan, have invented new and useful Improvements in Doors, of which the following is a specification.

This invention relates to doors, and particularly to screen-doors.

The objects of the invention are to improve, simplify, and strengthen the construction of such devices; furthermore, to lessen their weight and to increase their durability.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment thereof.

In the accompanying drawings, forming a part of this specification, Figure 1 is a front elevation, partly in section, of a door constructed in accordance with the invention. Fig. 2 is a rear elevation thereof. Fig. 3 is a separated detail view showing one of the hinges and the means for detachably securing the same to the door. Fig. 4 is a transverse section through one side of the door-frame. Fig. 5 is a separated detail view of the detachable latch-pin. Fig. 6 is a detail perspective view of the latch-bracket, which is adapted to be engaged by the latch-pin for locking the door in closed position.

Like reference - numerals indicate corresponding parts in the different views.

The door-frame 1, which preferably is rectangular in shape, as usual, is formed of angle metal, having the flanges 1<sup>a</sup> 1<sup>b</sup>, as shown clearly in Fig. 4 of the drawings. The flange 1<sup>b</sup> lies in the plane of the door and has secured thereto the filling material 2, which consists, preferably, of wire-netting, although, if desired, other suitable material may be employed. The filling material 2 is removably secured to the inside of the flange 1<sup>b</sup> by means of removable strips 3, which are secured to the flange 1<sup>b</sup> by means of nut-bolts 4.

In the event that the filling material 2 should become worn or broken through use the strips 3 may be readily detached from the frame 1 in order to permit the substitution of new filling material.

The central portion of the filling material is preferably braced by a cross-piece 5, which is detachably secured at its ends to the frame 1 by means of removable nut-bolts 6.

The flanges 1<sup>a</sup> at each side of the door-frame 1 are formed with perforations 7 8, which are identical in size and location with each other—that is to say, the perforations on one side of the door are disposed exactly opposite the perforations on the opposite side of the door. Extending through the perforations 7 and 8 on one side of the door are nut-bolts 9, to the outer ends of which are secured the looped ends 10 of angle-hinges 11, which are adapted to engage perforations in hinged brackets 12. The lower hinge 11 preferably is longer than the upper hinge, so as to cause the door to swing closed by gravity, as usual in hinge constructions. It will be apparent that if it be desired to hinge the opposite side of the door to the casing the bolts 9 may be disengaged from the perforations on one side of the door and engaged with the perforations on the opposite side thereof, so that the hinges may be disposed on either side of the door. It will be seen, therefore, that the perforations 7 and 8 on opposite sides of the door constitute means to receive detachable hinges.

In addition to the perforations 7 and 8 the door-frame is formed on opposite sides thereof with perforations, such as 14, which constitute means on opposite sides of the door to receive a detachable locking-pin, such as 15, which is formed with an annular shoulder 16 and a reduced shank 17, which extends through the perforation 14 and is held securely in position by means of a nut 18. The locking-pin 15 is adapted to engage the approximately S-shaped upper edge 19 of a latch-bracket 20, which is secured to the door-frame in any suitable manner. It will be understood that when the hinges are transferred from one side of the door to the other the latch-pin 15 is of course transferred to the side of the door opposite the hinges.

The angle metal which is employed in forming the frame of the improved door is effective in preventing the same from becoming warped or swollen, as frequently occurs in the case of wooden doors. Furthermore, the improved door of this invention is light, strong, simple, inexpensive, and durable in



construction and use, the durability of the door as a whole being increased greatly by the fact that the filling material 2 can be readily replaced whenever the same becomes worn or broken. Furthermore, the construction of the improved door is such that the same may fit outside of the door-casing instead of inside thereof, as usual in door constructions. For this reason the hinge-brackets 12 and the latch-bracket 20 may be disposed some distance away from the door-opening, so that when the screen-door is removed in winter the hinge and latch brackets may remain undisturbed in proximity to the door-frame, so that the screen-door can be readily replaced without difficulty whenever desired.

Changes in the precise embodiment of invention illustrated and described may be made within the scope of the following claims without departing from the spirit of

the invention or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new is—

A door comprising a frame made of angle metal, said frame having perforations in both of its sides, filling material in said frame, removable strips secured to the frame for holding the filling material in position, removable hinge-bolts fitted in the perforations on one side of said frame, hinges connected with said hinge-bolts, and a removable latch-pin fitted into one of the perforations in the opposite side of said frame.

In testimony whereof we affix our signatures in presence of two witnesses.

FLOYD K. EASTMAN.

ARTHUR M. EASTMAN.

Witnesses:

WM. E. NEEELAND,

WM. A. BROOKS.