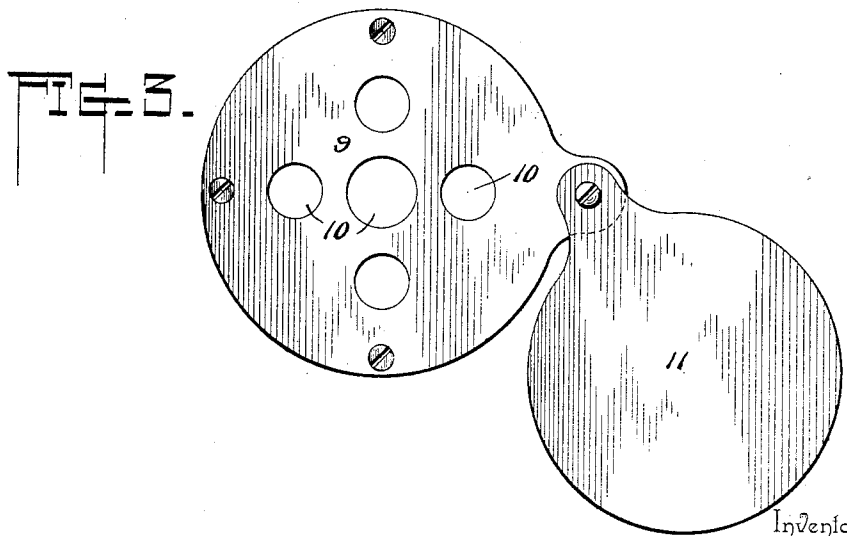
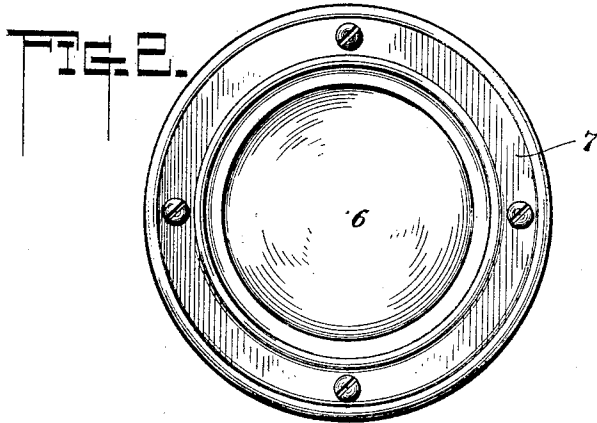
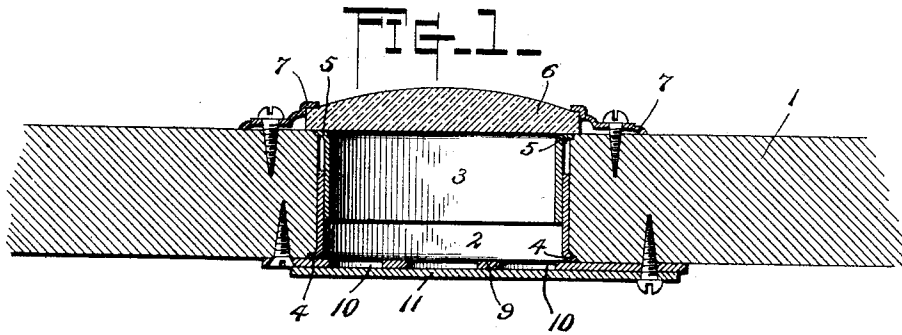


(No Model.)

J. ELWOOD.
OBSERVATION OPENING FOR DOORS.

No. 593,993.

Patented Nov. 23, 1897.



Witnesses

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UNITED STATES PATENT OFFICE.

JONATHAN ELWOOD, OF SANGER, CALIFORNIA.

OBSERVATION-OPENING FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 593,993, dated November 23, 1897.

Application filed July 29, 1896. Serial No. 600,941. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN ELWOOD, a citizen of the United States, residing at Sanger, in the county of Fresno and State of California, have invented a new and useful Observation-Opening for Doors, of which the following is a specification.

The invention relates to improvements in observation-openings for doors.

10 The object of the present invention is to provide a simple and inexpensive device adapted to be readily applied to a door and adjusted to the thickness thereof and capable of enabling a person on the inside to see outside
15 without being seen, so that objectionable persons can be readily excluded.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated
20 in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a sectional view of a door provided with a device constructed in accordance with this invention. Fig. 2 is
25 a front elevation of the same. Fig. 3 is a rear elevation, the shield being swung back to expose the openings of the inner plate.

Like numerals of reference designate corresponding parts in all the figures of the drawings.
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1 designates a door provided with a circular opening, in which is arranged a telescoping lining composed of inner and outer tubular sections 2 and 3, capable of moving inward and outward on each other to adjust themselves to the varying thickness of doors, and the outer ends of the sections are enlarged or flared to form flanges 4 and 5 to engage the inner and outer faces of the door, around the
35 opening thereof, to prevent them from passing entirely through the opening.

A transparent plate, preferably a lens 6, is mounted on the outer face of the door, over the opening thereof, and is provided with a flat inner face and a convex outer face, and it is secured in place by an annular band or ring 7. The annular band or ring is fastened to the door by screws or other suitable fastening devices, and it is angularly bent and
45 outwardly offset at its inner periphery to provide a groove for the reception of the periphery of the lens.

A plate 9 is secured to the inner face of the door and extends over the opening thereof, being provided with a series of openings or perforations 10 of a smaller diameter than the opening of the door, and these openings will enable a person on the interior to have an extensive view outside without being seen from the exterior. The lens and the inner plate
55 fit against the inner and outer faces of the door and engage the flanges of the tubular telescoping sections of the adjustable lining.

When the device is not in use, the openings or perforations 10 are covered by a pivoted shield 11, which also serves to exclude dust from the interior of the device. The shield 11 is pivoted to the inner plate 9, at one side thereof, and it is adapted to swing readily on its pivot to cover and uncover the openings of the inner plate.
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In my improved observation-opening for doors the clamping-ring 7 for holding the lens in place is of such diameter and is so arranged with relation to the lens as to be entirely out of the range of view through the observation-opening, and the parts are thus arranged and combined as to afford a comparatively wide range of view and obviate to a considerable degree the necessity of the multiplication of the observation-openings. In this part of my invention the clamping-ring 7 is made so as to have an internal diameter greater than the internal diameter of the two-part lining for the opening bored in the door, and when the parts are assembled in proper relation to each other, as shown in Fig. 1, the clamping-ring is entirely out of the range of view through the observation-opening, so as to prevent it from restricting the view obtained through the opening. In addition to this function the flanged plate 7 forms a seat for the peripheral edge and face of the lens, so as to hold the latter securely in place, and the lens and the flanged clamping-plate also serve to confine the flanged edge of the section 3 of the telescopic lining in position.
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In my observation-opening for doors the parts 2 3 constitute a lining pure and simple for the hole bored in the door, so as to impart a finished appearance thereto and to conceal the rough edges formed by boring the hole, and this telescopic lining does not sustain or carry any of the parts by which the
100

hole is protected from dust, &c. On the other hand, the protecting devices are adapted to be applied separately to the respective faces of the door, and they serve as the means for

5 clamping the telescopic lining in position.

The telescopic lining employed in my improvement has its members fitted one within the other to slide freely, and said inner adjacent edges of the lining-sections overlap
10 each other to a considerable extent to enable the lining to be lengthened or shortened in order to apply the lining to doors of different thicknesses without requiring any change or adjustment of the other parts of the device.

15 The employment of the perforated plate 9 on the inside of the door enables the occupant of the dwelling or apartment to view the person demanding admittance without being seen and obviates the necessity for an inside
20 glass within an observation tube or lining.

The entrance of dust, &c., is effectually excluded by the lens and by employing the inside movable shutter 11, which is attached to the perforated plate and is applicable to a
25 door therewith, one of the attaching-screws being common to the plate and the shutter.

It will be seen that the device is exceedingly simple and inexpensive in construction, that it is adapted for private residences, offices, and other places of business, and that
30 it will enable a person on the interior to see outside and examine a person on the exterior without the latter being aware of such inspection, thereby enabling admittance to be
35 refused to objectionable persons.

What I claim is—

1. The combination with a door having a

hole bored therein, of a lens applied against the outside of the door over the hole, a clamping-plate attached directly to the door outside of the lens and flanged to embrace the
40 lens to hold the latter in place but without obstructing the view through said opening and lens, a plate provided with a plurality of minor perforations and fastened to the inside
45 of the door over the hole therein, and a shutter attached to the inside perforated plate to close the openings therein or to expose the plate, as and for the purposes described.

2. The combination with a door having a
50 hole bored therein, of a telescopic lining having its members adjustable and slidable freely one within the other and flanged at their ends to embrace the edges of the door-opening, a lens applied directly against the outer face
55 of the door and the flanged edge of one member of the lining, a clamping-plate whose internal diameter is less than that of the telescopic lining and which is attached to the outside of the door to embrace the lens to
60 hold the latter in place without obstructing the view through the lining and lens, a perforated plate fastened to the door, over the hole therein, and bearing against the flanged edge of the other member of said lining, and a
65 shutter pivoted to the perforated plate, substantially as and for the purposes described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JONATHAN ELWOOD.

Witnesses:

J. D. JACOBIE,
MAX FRANKENAU.