April 5, 1932. J. METZ 1,852,253

OBSERVATION AND SPEAKING DEVICE

Filed May 6, 1931

Fig. 1.

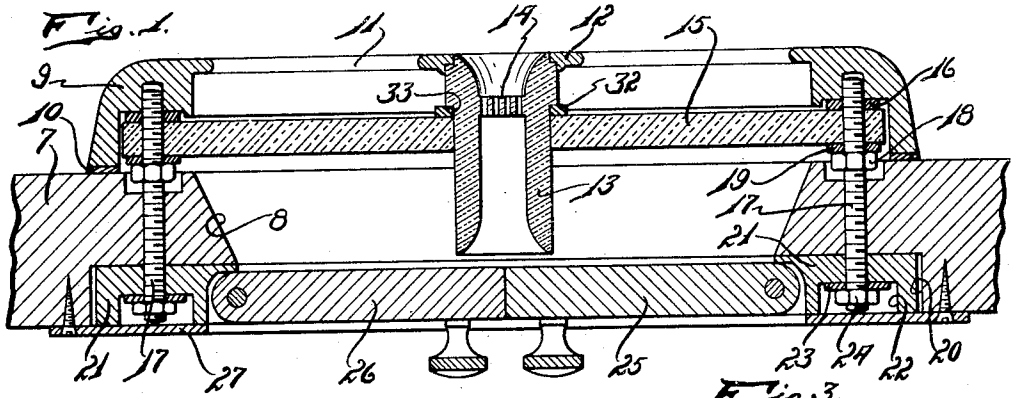


Fig. 2.

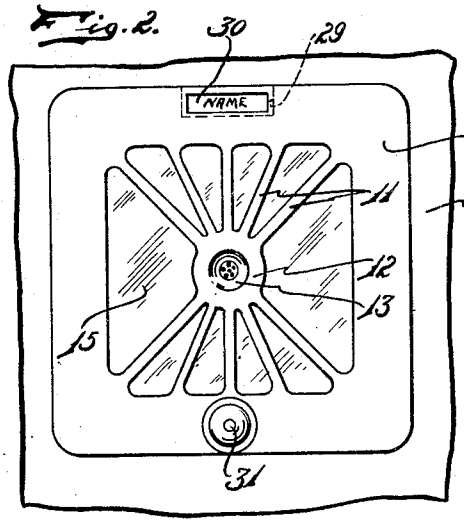


Fig. 3.

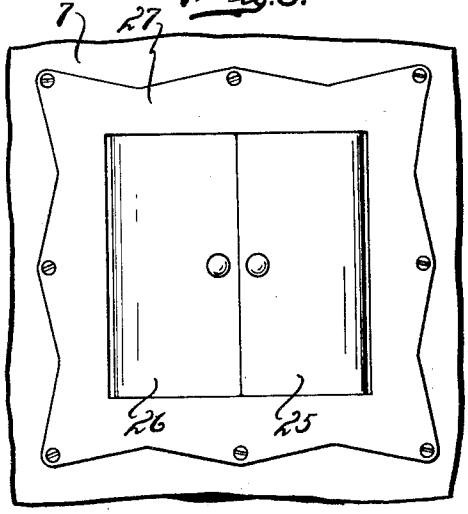


Fig. 4.

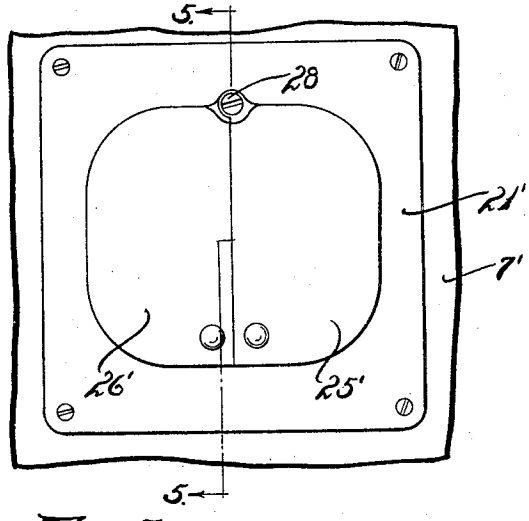
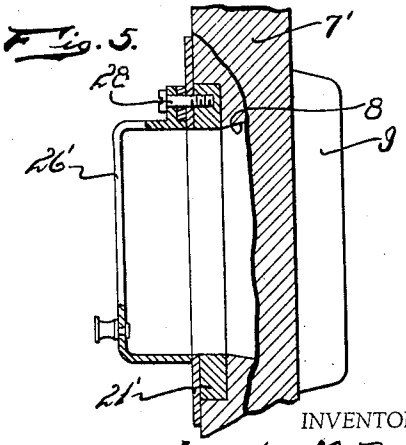


Fig. 5.



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UNITED STATES PATENT OFFICE

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OBSERVATION AND SPEAKING DEVICE

Application filed May 6, 1931. Serial No. 535,515.

My invention relates to a new and useful improvement in an observation and speaking device adapted for mounting in doors, walls and similar structures whereby a person at one side may observe and speak to a person at the other side of the structure without being in danger from bullets and the like, and without permitting passage of a person from one side of the supporting structure to the other.

It is an object of the present invention to provide a device of this kind which will be simple in structure, economical of manufacture, durable, highly efficient in use, easily and quickly installed, and ornamental in appearance.

Another object of the invention is the provision of a frame provided with a speaking tube and means for supporting a transparent closure.

Another object of the invention is the combination of a pair of frames, one being provided with movable opaque closures, and stationary transparent closures.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings which form a part of this specification, and in which,

Fig. 1 is a transverse central sectional view of the invention.

Fig. 2 is a front elevational view of the invention.

Fig. 3 is a rear elevational view of the invention.

Fig. 4 is a rear elevational view of a modified form of the invention.

Fig. 5 is a fragmentary sectional view taken on line 5—5 of Fig. 4.

The invention is intended for mounting in a wall, door or other suitable supporting structure 7 in which there is formed an opening 8. Mounted on the supporting structure 7 so as to surround the opening 8 and press a gasket 10 against one face of the supporting structure 7, is a suitable frame 9. This frame is provided with a plurality of inwardly extending ribs 11 which connect to a central yoke or frame 12, in which is mounted a speaking tube 13 having a perforated partition 14 mounted intermediate its ends. A transparent closure 15 is used as a closure for the spaces between the ribs 11 and this closure 15 is preferably formed from bullet-proof, non-shatterable glass. The transparent closure 15 of the frame 9 is held in engagement with the yieldable gasket 16 by means of the screw 17 on which is threaded a nut 18 to clamp the yieldable gasket 19 against the closure. A yieldable gasket 32 engages a shoulder 33 formed on the tube 13 so that the closure is held against rattling and securely mounted on the frame. These screws 17 project through the supporting structure 7. In the opposite face of the supporting structure 7 is formed a recess 20 in which is positioned a closure frame 21 having a recess 22 formed therein to accommodate the yieldable gasket 23 and the nut 24 which are on the screw 17.

Swingably mounted on the closure frame 21 are the non-transparent doors 25 and 26. The frame 21 is held in position on the structure 7 by means of the retaining plate 27.

In use, should anyone by sounding the door bell 31 announce his presence, the occupant may, by opening the doors 25 and 26, talk to the person at the opposite side of the structure 7 and also observe this person with complete safety to his own person. A recess 29 is formed in the frame 9 for reception of a name plate 30.

In the modified form shown in Fig. 4 and Fig. 5, a pair of doors 25′ and 26′ are mounted on the closure frame 21′ and these doors are swingable on the screw 28. With a device constructed in this manner, it is believed obvious that the advantages sought have been obtained, and while I have illustrated and described the preferred forms of construction of my invention, I do not wish to limit myself to the precise details of structure shown, but desire to avail myself of such modifications and variations as may come within the scope of the appended claims.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent is:

1. In a device of the class described, adapted for mounting on a supporting structure having an opening formed therein, a frame surrounding said opening and positioned at one side of said supporting structure; a transparent closure for said frame; a speaking tube carried by said frame and projecting inwardly of said opening; a closure frame positioned on the opposite side of said supporting structure; and movable closures for said closure frame.

2. In a device of the class described, adapted for mounting on a supporting structure having an opening formed therein, a frame surrounding said opening and positioned at one side of said supporting structure; a transparent closure for said frame; a speaking tube carried by said frame and projecting inwardly of said opening; a closure frame positioned on the opposite side of said supporting structure; movable closures for said closure frame; and common means projected through said supporting structure for mounting said frames thereon.

3. In a device of the class described, adapted for use on a supporting structure having an opening formed therein, a frame mounted at one side of said structure and surrounding said opening; a transparent closure for said frame; a speaking tube carried by said frame and projecting inwardly of said opening; a closure bearing frame positioned at the opposite side of said supporting structure and engaging in a recess formed in the face of said supporting structure; and securing means projected through said supporting structure and engaging each of said frames for mounting the same on said supporting structure, said closure bearing frame having recesses formed on its inner side in which said securing means terminate.

In testimony whereof I have signed the foregoing specification.

JOSEPH METZ.