R. C. MITCHELL.

CLOSURE MEANS FOR TRANSOM PASSAGES AND THE LIKE.

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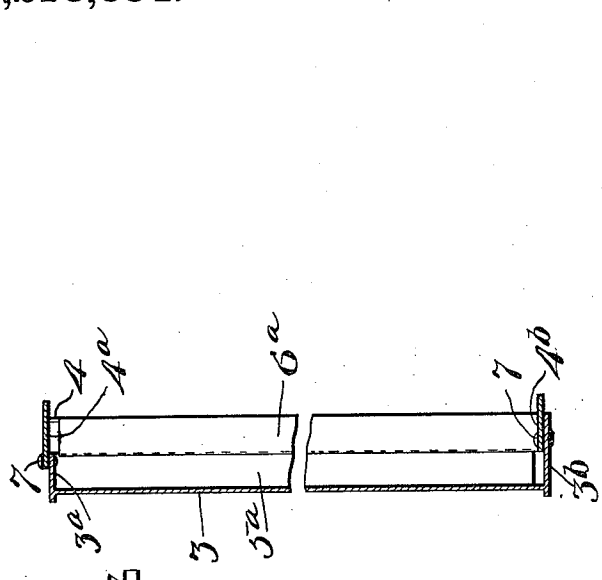


Fig. 3.

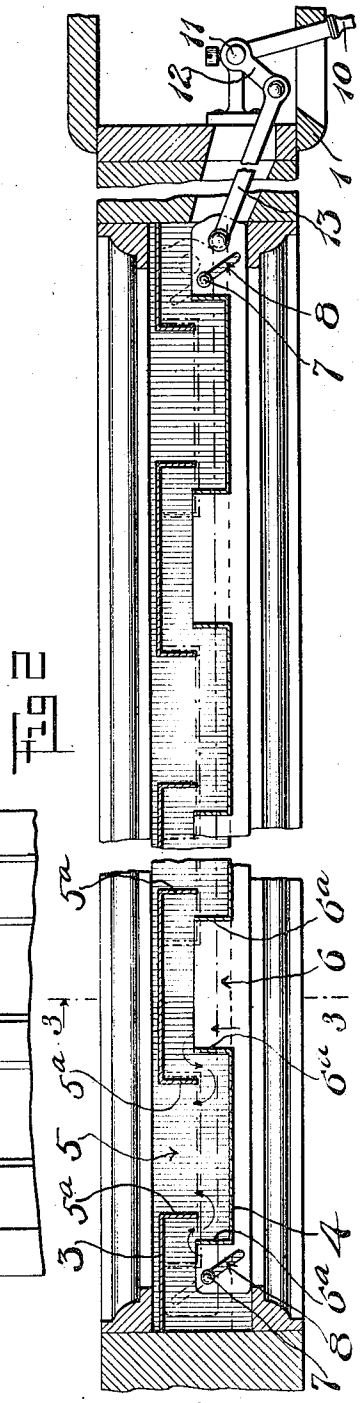


Fig. 2.

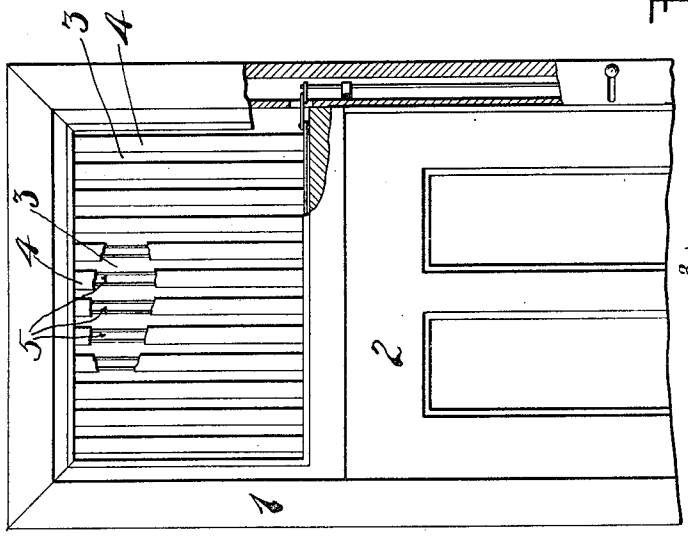


Fig. 1.

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UNITED STATES PATENT OFFICE.

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CLOSURE MEANS FOR TRANSOM-PASSAGES AND THE LIKE.

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To all whom it may concern:

Be it known that I, ROBERT C. MITCHELL, a citizen of the United States, residing at Mount Vernon, Westchester county, New York State, have invented certain new and useful Improvements in Closure Means for Transom-Passages and the like, of which the following is a full, clear, and exact description.

My invention relates to closures for doorways, windows, transom passages and the like, the main object being to provide an attractive, simple and effective means for controlling such passage-ways for the purpose of ventilation, the construction of the device being such that when it is open for the purpose of ventilation it will still obstruct the line of vision through the passage. Obviously for use in connection with transoms for bed rooms, it is desirable to provide a closure means which may be opened and closed for ventilation, and yet when open will obstruct the line of vision.

In the accompanying drawings:

Figure 1 is a view of the inside of a door casing and door with a transom passage above the door in which my improved closure is located, said view being partly broken away and in section.

Fig. 2 is a relatively enlarged horizontal sectional view of the closure means.

Fig. 3 is a cross-section on the line 3—3, of Fig. 2.

1 represents a door casing. 2 represents a door therein. Above the door is the usual transom passage-way, such as ordinarily closed by a solid wood panel or a glass sash. By my invention I substitute in lieu of such closure means, a novel construction of closure comprising in its simplest and preferred form, only two slotted plates 3—4, the solid part of one plate standing in front of the slotted part of an adjacent plate, the plates being moved toward and from each other to open and close the ventilating passage through the slots. I also provide between the plates what I term guards, preferably formed integrally with the plates, for example, the slots for the passage-way 5 are provided with guard flanges 5^a—5^a, while the slots for the passage-ways 6 are provided with guard flanges 6^a—6^a. When the plates 3—4 are moved apart as shown in solid lines Fig. 2, currents of air may pass through the closure, following the direction of the arrows. When, however, the plates are moved to a second position indicated by dotted lines in Fig. 2, the passage-ways for the air will be closed.

Various means may be provided for causing the plates 3—4 to move toward and away from each other. One simple means may comprise pins 7—7 carried by the flanges of one plate and standing in oblique slots 8—8 in the other plate, so that when either plate is given a longitudinal or sliding movement relatively to the other, it will move obliquely toward or from the other plate. In the drawings the plate 4 is illustrated as the movable plate. To move the same, I may provide an operating handle 10 mounted on an upright shaft 11 located within the door casing 1 and carrying a crank 12, which is connected by a link 13, which passes through a slot in the door casing and engages the plate 4 thus constituting practically a concealed operating device.

The plate 3—4 may have respectively, flanges 3^a—3^b and 4^a—4^b at their upper and lower edges, and the guard flanges 5^a and 6^a may be cut away to afford clearance therefor. For example, the flange 5^a may be cut away at its lower end (Fig. 3) to afford clearance for the edge flange 4^b, while the flange 6^a may be cut away at its upper end to afford clearance for the edge flange 3^a. By this simple expedient the plates 3 and 4 may be made to correspond thus saving in manufacture.

It should be understood that I have shown and described my improved closure only in one preferred form, and that various modifications in construction, design and arrangement of parts may be made with the departure from the scope of the invention. Any means for effecting a relative movement of the slotted plates or guard flanges may be substituted for the means shown, namely, the pin and slot, that means being shown herein merely as illustrative of one very simple expedient for effecting the desired movement between the parts.

What I claim is:

1. In a closure of the character described, two plates having air passages therein, the solid parts of one plate standing in front of the air passages in the other plate, said plates being relatively movable to open and close said air passages, with guard means to interrupt all lines of vision through said

air passages when the plates are so placed as to open said passages.

2. In a closure of the character described, two plates having air passages therein, the solid parts of one plate extending in front of the air passages in the other plate, said plates being relatively movable to open and close said air passages, with guard means to interrupt all lines of vision through said air passages when the plates are so placed as to open said passages, said guard means being formed integrally with one of said plates.

3. In a closure of the character described, two plates having air passages therein, the solid parts of one plate extending in front of the air passages in the other plate, said plates being relatively movable to open and close said air passages, with guard means to interrupt all lines of vision through said air passages when the plates are so placed as to open said passages, said guard means being formed integrally with one of said plates and comprising flanges adjacent the edges of said air passages.

4. In a closure of the character described, two plates having air passages therein, the solid parts of one plate standing in front of the air passages in the other plate, said plates being relatively movable to open and close said air passages, with guard means on both plates to interrupt all lines of vision through said air passages when the plates are so placed as to open said passages, with means to move said plates toward and from each other.

5. In a closure of the character described, two plates having air passages therein, the solid parts of one plate standing in front of the air passages in the other plate, said plates being relatively movable to open and close said air passages, with guard means to interrupt all lines of vision through said air passages when the plates are so placed as to open said passages, with means to move said plates toward and from each other in a relatively oblique direction.

6. In a closure of the character described, two plates having slotted air passages therein, the solid parts of one plate overstanding the slotted parts of the other plate, guard means for interrupting all lines of vision through the slots of said closure when said slots are open for ventilation.

7. In a closure of the character described, two plates having slotted air passages therein, guard means adjacent to said passages for interrupting all lines of vision through the slotted parts of said plates which would otherwise be afforded when said slots are opened for ventilation, one of said plates being slidable relatively to the other to open and close the passages therethrough formed by said slots.

8. In a closure of the character described, two plates having a plurality of air passages therethrough adapted to be opened and closed, guard means adjacent to said passages for interrupting all lines of vision through said passages which would otherwise be afforded when said passages are opened for the purposes of ventilation.

9. In a closure of the character described, two plates having a plurality of air passages therethrough adapted to be opened and closed, guard means carried by both of said plates and adjacent to said passages which would otherwise be afforded for interrupting all lines of vision through said passages when the passages are opened for the purposes of ventilation.

10. In a closure of the character described, two plates having air passages therein, the solid parts of one plate standing in front of the air passages in the other plate, said plates being relatively movable to open and close said air passages, with guard means to interrupt the lines of vision through said air passages in substantially all directions when the plates are so positioned as to open said passages, with manually operable means for effecting a relative movement of said plates to open and close said passages.

11. In a closure of the character described, two plates having air passages therein, the solid parts of one plate standing in front of the air passages in the other plate at all times, said plates being relatively movable to open and close said air passages for ventilating purposes, with guard means to interrupt the lines of vision through said air passages in substantially all directions when the plates are so positioned as to open said passages, with manually operable means for effecting a relative movement of said plates to open and close said passages.

12. In a closure of the character described, two plates having elongated air passages therein, the solid parts of one plate overstanding at all times the air passages in the other plate, said plates being relatively movable toward and from each other for opening and closing the air passages for ventilating purposes, guard means carried by said plates to interrupt the lines of vision through said air passages in substantially all directions when said plates are so positioned as to open said passages, with manually operable means connected with one of said plates so as to move the same relatively to the other for the purpose of opening and closing said passages and for the purpose of varying the degree of opening of said passages.

13. In a closure of the character described, two plates slidably engaged at their edges to be moved to and from each other, a plurality of longitudinal air passages in each of

said plates, the solid parts of each plate overstanding the slotted parts of the other plate at all times to interrupt the lines of vision therethrough whether said passages are opened or closed, with guard means co-operating to assist in interrupting said lines of vision and with manually operable means for moving one of said plates relatively to the other to open and close said passages.

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Witnesses:
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