J. E. ALLING.

DOOR.

APPLICATION FILED NOV. 14, 1913.

1,183,842.

Patented May 23, 1916.

2 SHEETS—SHEET 1.

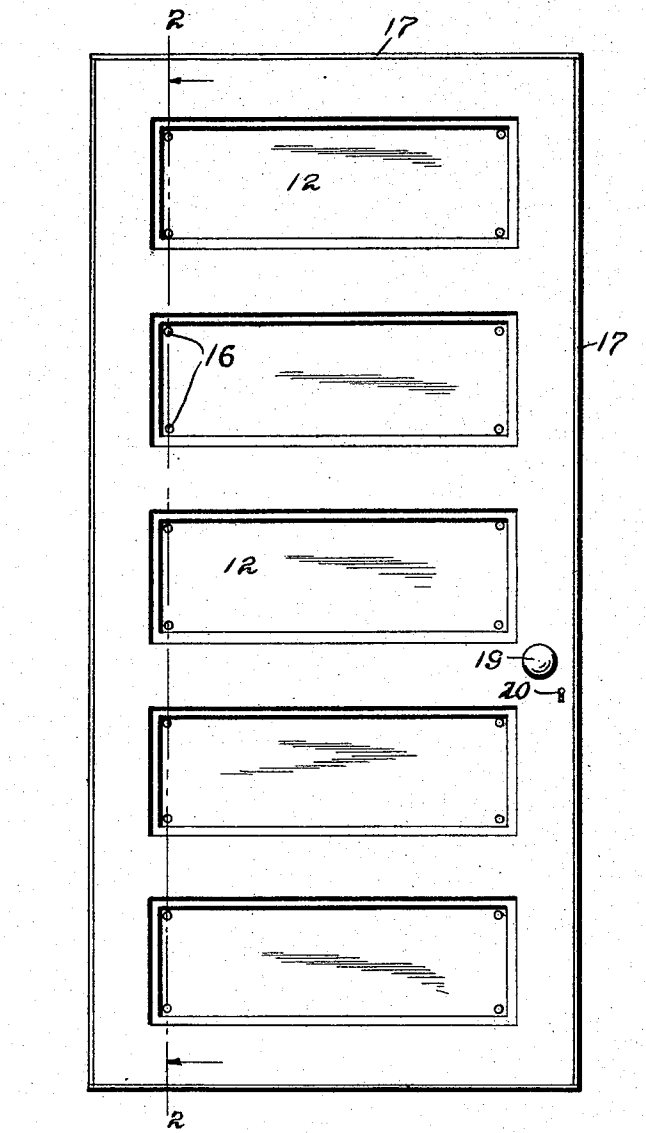

Fig. 1.

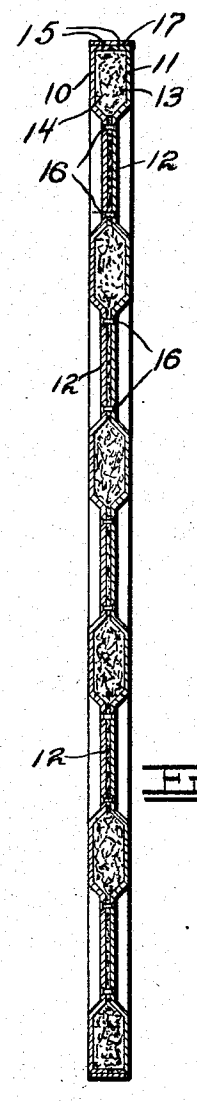

Fig. 2.

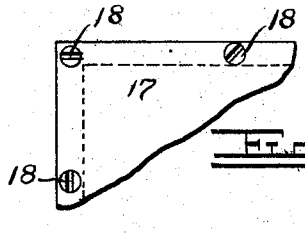

Fig. 3.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 4.

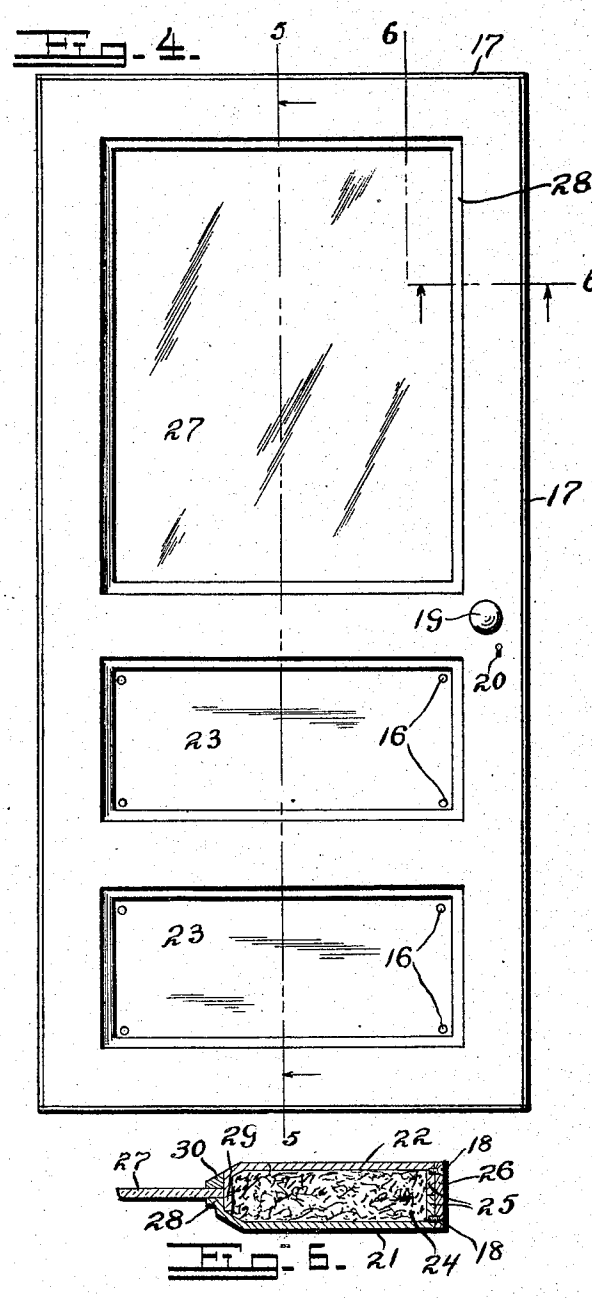

Fig. 6.

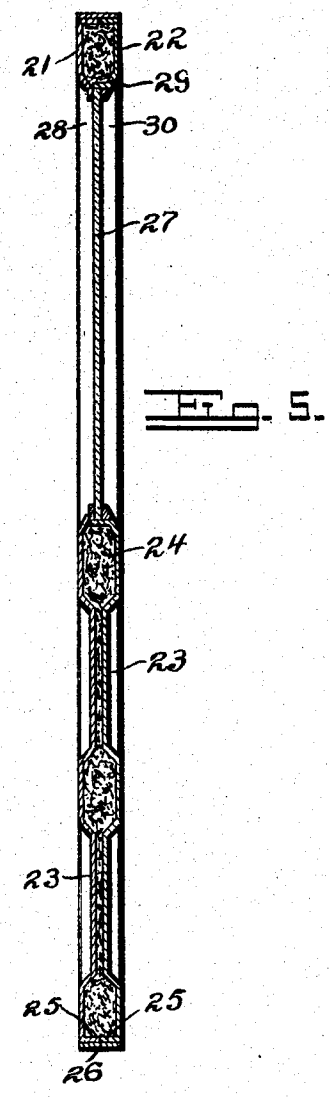

Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

JARED E. ALLING, OF MILWAUKEE, WISCONSIN.

DOOR.

1,183,842. Specification of Letters Patent. Patented May 23, 1916.

Application filed November 14, 1913. Serial No. 801,062.

To all whom it may concern:

Be it known that I, JARED E. ALLING, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Doors, of which the following is a specification.

This invention relates to an improved door and the principal object of the invention is to provide a door which will be fireproof and sound proof.

Another object of the invention is to provide a door of the sheet-metal type which can be cheaply manufactured and securely put together.

Another object of the invention is to provide a sheet-metal door of the type described which is formed from two sections having improved means for holding the same in a set-up position.

This invention is illustrated in the accompanying drawings wherein—

Figure 1 is an elevation of the improved door; Fig. 2 is a vertical sectional view through the door taken along the line 2—2 of Fig. 1; Fig. 3 is an enlarged fragmentary view of the binding which extends about the edges of the door; Fig. 4 is an elevation of a modified form of the door in which there is provided a glass panel; Fig. 5 is a vertical sectional view through the door shown in Fig. 4 and taken along the line 5—5; Fig. 6 is a sectional view through one corner of the door shown in Fig. 4 and taken along the line 6—6.

The door shown in Figs. 1 and 2 is formed from two sheets of metal 10 and 11 which are stamped by a suitable die to form the panels 12. The space 13 which extends around the panels and between the same forms a receptacle for a packing 14, such as asbestos or any other suitable material which will not conduct heat or sound. The edge portions of the two plates 10 and 11 are bent inwardly to form flanges 15 which contact, as shown in Fig. 2, the flanges being of such width that the two plates will be held in spaced relation excepting where the flanges touch. Rivets 16 are passed through the panels to securely hold the plates 10 and 11 together and to tightly compress the packing 14. Metal binding strips 17 extend along the edges of the door and are secured by screws 18 which have their heads countersunk so that the door will be provided with smooth edge faces. The usual lock is carried by the door and is provided with the door knob 19 and key hole 20. It will be noted that this door can be very cheaply manufactured since it is only necessary to place the metal blanks in a suitable die and stamp the same into the proper shape so that they can be connected with the rivets and form the door having the construction as shown in section in Fig. 2.

In the form shown in Figs. 4, 5, and 6 the door is formed from the plates 21 and 22 which are placed in suitable dies and stamped to form the lower panels 23 and to provide space for packing 24 which is similar to the packing 14. This form of door is also provided with the flanges 25 which are similar to the flanges 15 and carry the binding strips 26. It should be noted, however, that this door is provided with a glass panel 27 and that the door must therefore have a suitable construction so that the panel can be removed and a new one put in place in case it becomes broken. The plates 21 and 22 are provided with openings and are stamped inwardly at the edges of the openings to form the inwardly extending flanges 28 and 29. The flange 28 is bent as shown in Fig. 5 to form an abutment for the edge portions of the glass 27 and the flange 29 is bent to form the side walls for the opening in which the glass is placed. After the glass has been put in place, as shown in Fig. 5, the beading 30 is put in place and this holds the glass in its seat. It should also be noted that the flange 28 overhangs the edge of the flange 29 and thus securely holds the flange 29 in place and prevents it spreading a sufficient distance to interfere with the placing of the glass. From a comparison of Figs. 2 and 5 it will be readily seen that these doors are constructed in similar manner with the exception of the glass seat which is provided in Fig. 5. It should also be noted that these doors will prevent the spread of fire from one room to another, due to the fact that the two plates are separated by the packing. Therefore if fire heats one plate, the second plate will be kept from becoming heated, and therefore if a piece of wooden furniture is placed against the door, there is no danger of the furniture catching fire from the heat.

What is claimed is:

A door of the character described formed from plates provided with cutouts forming

an opening through the door, the inner edge portion of one of said plates being bent to form an inwardly extending flange forming a side wall for the opening in the door and the inner edge portion of the other of said plates being bent inwardly to overlap the edge portion of said flange and being then bent to form an abutment flange extending from the side wall around the opening in the door to engage the edge portions of a panel placed in the opening of the door, the outer edge portions of said plates being bent to provide inwardly extending flanges, and strips secured to said flanges to releasably connect the outer edge portions of said plates.

In testimony whereof I affix my signature in presence of two witnesses.

JARED E. ALLING.

Witnesses:

HIRAM E. ALLING,

FRANK ALLING.