July 11, 1944. J. V. LINDSLEY 2,353,573

WOODEN DOOR STRUCTURE

Filed Oct. 15, 1941

Fig. 1

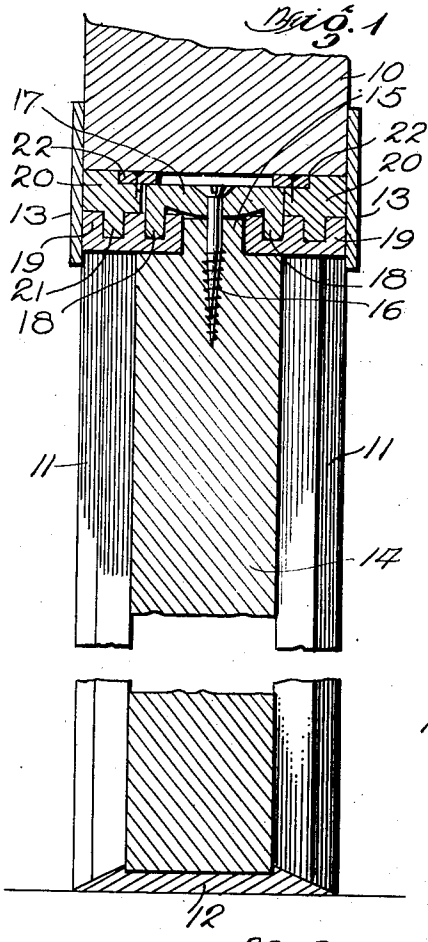


Fig. 2

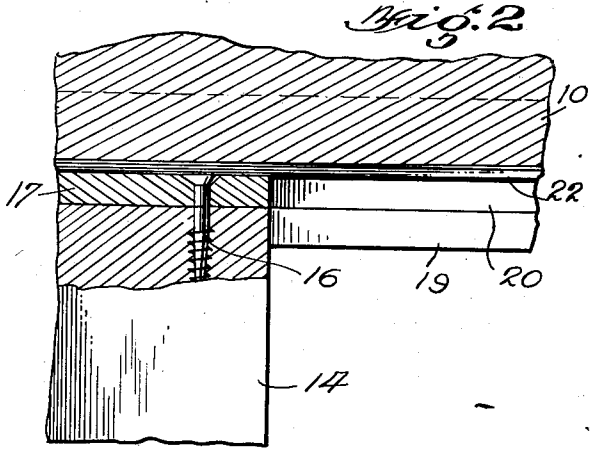


Fig. 3

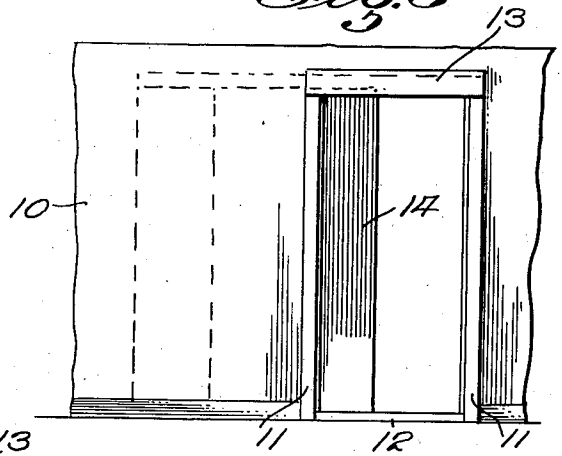
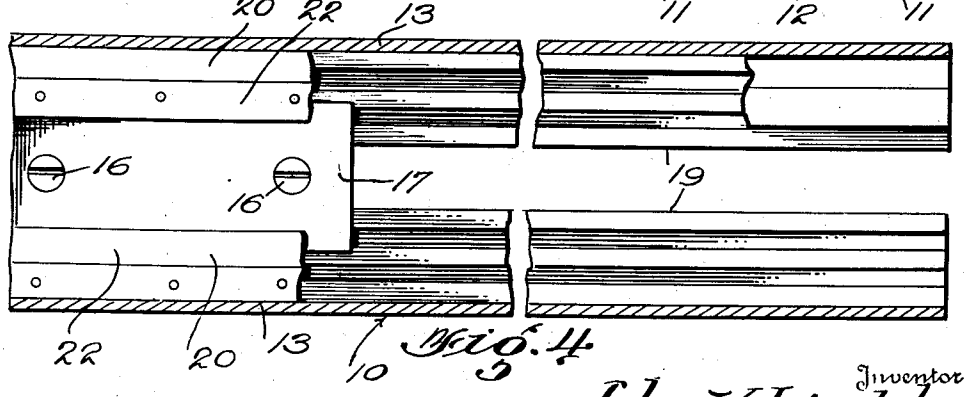


Fig. 4



Inventor

John V. Lindsley

By R. W. Dickey

Attorney

Patented July 11, 1944 2,353,573

UNITED STATES PATENT OFFICE

2,353,573

WOODEN DOOR STRUCTURE

John V. Lindsley, Miami, Fla.

Application October 15, 1941, Serial No. 415,127

5 Claims. (Cl. 20—19)

My invention relates to a door structure and it is an object of the same to provide improved means for suspending a sliding door, which means shall be of simple and inexpensive character and capable of installation by an ordinary carpenter.

A further object of my invention is to do away with all metallic parts, except possibly for a few nails or brads. In the usual practice there are required metallic runways, wheels, roller bearings, etc., all of which add to the cost of the structure. Such parts tend to become rusty in damp weather, and particularly at the seashore or near it, by reason of the salt in the air. In my construction all of the parts having relative movement and having contact with each other are made of wood, and consequently the movements of the door are noiseless and easy and there is no occurrence of rust to mar the appearance of the woodwork.

Other objects and advantages of my invention will appear from consideration of the following specification, in connection with the annexed drawing, which is made a part of this application and in which similar reference characters indicate similar parts.

Referring to the drawing:

Fig. 1 is a vertical section of a door structure embodying my invention,

Fig. 2, an elevation at right angles to Fig. 1, partly in section,

Fig. 3, a side elevation of a wall, showing my door partly open, and

Fig. 4, a top plan with parts omitted.

In the drawing, reference character 10 indicates a portion of a wall in which a door frame is positioned, said wall being of any suitable or desirable character. The door frame, as here shown, has uprights 11, a sill 12, and upper cleats 13 for holding it in place, all of which may be of any suitable character.

The door proper consists of a slidable member 14, having at its upper end a narrow neck 15, to which is secured, as by means of screws 16, a head 17, formed at its opposite side edges with depending flanges 18, 18 running parallel to the plane of the door.

The flanges 18 engage respectively in grooves in guide members 19, 19 located at opposite sides of the door frame and secured thereto in any suitable manner, the flanges fitting loosely enough to permit the door to be slid readily to open and closed positions, or to intermediate positions, one of which is indicated in Fig. 3, while the fully open position is also indicated therein in dotted lines. The door may slide into a recess in the wall, as indicated, or may be exposed at one side of the wall if desired.

The door frame includes a pair of side members at its upper end, as shown at 20, 20, and these members are preferably provided with tongues 21 engaging in grooves in the guide member 19, 19, to which the parts 20, 20 may be fastened by nails or glue to form a strong and permanent construction. The parts 20, 20 are each provided with a groove at the inner upper corner to provide for positioning cleats 22, 22 that are located over the head 17 and spaced therefrom sufficiently so as not to interfere with free movement of the door, but which serve to prevent any considerable swaying or tilting of the door in its frame.

For further insurance against swaying of the door I may provide a groove in the sill, as shown in Fig. 1, said groove or other like means serving to guide the lower end of the door.

It will be obvious to those skilled in the art that many changes may be made in the door and in other parts of my invention, all without departing from the spirit of my invention, and therefore I do not limit myself to what is shown in the drawing and described in the specification, but only as indicated in the appended claims.

Having thus fully described my said invention, what I claim is:

1. In a wooden door structure, a frame, a slidable door including a body portion reduced in width at opposite sides at its upper end to produce a neck portion, a unitary wooden head secured directly to said neck portion, said head having integral depending flanges at opposite sides thereof and spaced from said neck portion, and wooden guide members at each side of the door for supporting the door, said guide members extending closely alongside the adjacent faces of the neck portion to aid in guiding the door and having grooves for receiving the respective flanges of the head.

2. A wooden door structure comprising a door frame with laterally spaced upper members each having a bottom tongue of wood, spaced-apart wooden guide members on said frame each having a groove to receive and fit over one of said tongues and another groove parallel to the plane of the door, a door having a wooden body portion, a wooden head fixed directly to the upper end of said body portion and a depending flange at each side of said head positioned to fit in the last-named groove of a guide member, the side faces of all the grooves lying in parallel planes.

3. A door structure as in claim 2, each of said

spaced upper members having a slot at its upper inner corner, and wooden cleats in said slots overlying the head of the door to limit swinging movement thereof.

4. A door structure as in claim 2, each of said spaced upper members having a slot at its upper inner corner, and wooden cleats in said slots overlying the head of the door, and a lower sill having a groove to receive the lower end of the door, said cleats and said last-named groove aiding in preventing swing of the door.

5. A door structure comprising a wooden door frame having laterally spaced upper members each having a tongue at the bottom and each provided with a slot at the top to provide an inwardly facing shoulder, spaced wooden guide members on said frame each having a groove to engage the tongue on one of said upper frame members and also having another groove spaced inwardly from said first-named groove, a sliding door of wood having a unitary wooden head portion fixed directly on the upper end of the door with depending side flanges each engaging in one of the second-mentioned grooves of a guide member, and strips secured in the slots of said upper members and projecting over the door to limit tilting movement of the door.

JOHN V. LINDSLEY.