This invention relates to a door and frame assembly and more particularly to such an assembly of the ready hung door type made of wood. Because of the difficulty in placing door frames in the door openings and then hanging the door in the frame it has been proposed to assemble the door and frame as a unit at the factory or mill and ship the assembly to the building site. However, such assemblies of which I have knowledge have various drawbacks and disadvantages. When assembled for shipping the assembly may not have the door frame square with the door or even if the door frame is originally square with the door when shipped it does not remain so during shipping and when removed from its supporting structure at the building site. Even though time may be saved in placing a prehung door and frame assembly in place as compared to the usual manner of placing doors in position, labor cost is still high for installation of prior art ready hung door assemblies. The weight and cost of manufacture of such ready hung door assemblies are also relatively great. Another disadvantage of such ready hung door assemblies is that two entirely different assemblies must be manufactured one for use with plastered walls and the other for use with dry walls.

It is therefore an object of this invention to provide a ready hung door and frame assembly in which the frame remains square with the door during shipping and when being installed in the door opening.

Another object is to provide such an assembly which is relatively light in weight and relatively inexpensive to manufacture.

Still another object is to provide such an assembly which is easy to install in the door opening.

A further object is to provide such an assembly which may be adapted for use with walls of different thicknesses by a very minor or no change and other objects will be more apparent after referring to the following specifications and attached drawings, in which:

FIGURE 1 is a perspective view, with parts broken away, showing the door and frame assembly ready for shipment;

FIGURE 2 is a horizontal sectional view showing the door and frame assembled in an opening in a wall;

FIGURE 3 is a vertical sectional view of FIGURE 2 looking toward the left side thereof;

FIGURE 4 is a perspective view, with parts broken away, showing the door and frame assembly with the outer shipping, strapping and corner protectors removed;

and

FIGURE 5 is a perspective view of the main frame members.

Referring more particularly to FIGURES 2 and 3 of the drawings reference numeral 2 indicates an opening in wall 4 in which the door and frame are to be assembled. The wall 4 is shown as including wood framing 6, lath 8 and plaster 10. The door frame of my invention consists of two essentially identical units 12 and 14 connected by spines 16. Unit 12 consists of two vertical unitary L-shaped members 18 and 20 connected by and fastened to a top L-shaped member 22. In like manner unit 14 consists of two vertical unitary L-shaped members 24 and 26 connected by and fastened to a top L-shaped member 28. The L-shaped members, as best shown in FIGURE 5, are identical in cross section. It will be noted that the long legs of members 18, 20 and 22 are in alignment with the long legs of members 24, 26 and 28, respectively. A slot 30 is provided in the long leg of each of the members 18, 20, 22, 24, 26 and 28 with the slots in members 18, 20 and 22 being aligned with and facing the slots in members 24, 26 and 28, respectively. Splines 16, which are preferably made of tempered hardboard, are arranged in aligned slots 30 and extend between and connect the units 12 and 14. A door 34 is mounted on the unit 14 by means of hinges 36 and extends to within a short distance of floor 38. Vertical wood stops 40 and 42 and a horizontal wood stop 44 extend between and are fastened to the inside of the long legs of members 18, 20, 23, 24, 26 and 28. Predrilled nail holes are preferably provided in the units 12 and 14 to aid in fastening the frame in position. It will be seen that the short legs of the L-shaped members form the door trim or casing and the long legs the door jamb. The unitary structure of each of the members 18 to 25 makes for a stronger and more rigid unit. If the assembly is to be used with a dry wall, which is about ¾" thinner than a plaster wall, it is only necessary to use narrower splines.

In making up an assembly for shipping, the units 12 and 14 are assembled as shown in FIGURE 1 and a steel strap 46 is wrapped around the outside of the slotted legs of members 24, 26 and 28 completely around the periphery of unit 14 and between the bottom of members 24 and 26, drawn up tight and the ends fastened together. A spacer board 48 extending between the bottom of members 24 and 26 on top of strap 46 prevents inward movement of members 24 and 26. An L-shaped corner piece 50 is then placed at each corner of the assembled units and a steel strap 52 is passed around the pieces 50 and around the periphery of the assembly and its ends fastened together. The corner pieces 50 are preferably of the same shape as members 18 to 23 with the waste pieces formed when making these members being used for this purpose. A wooden cross member or spacer board 54 extending between the bottom of members 18 and 20 prevents inward movement of members 18 and 20.

When the assembly of FIGURE 1 reaches the building site and is ready to be installed in door opening 2 the strap 52 is cut and the corner pieces 50 removed. The units 12 and 14 are then separated and the unit 14 installed. During this time the strap 46 keeps unit 14 rigid and square with the door. The unit 12 is then nailed into position with the splines 16 being positioned in slots 30. After the installation the spacer boards 48 and 54 are removed and the horizontal portion of the strap 46 cut out. Stops 40, 42 and 44 are then nailed or screwed in place. One of the bottom spacer boards can be used as the stop 44 and the stops 49 and 42 can be placed in the assembled frame for shipping.

It will be seen that the assembly is made up of only a few pieces with only one special shape being necessary. This makes for easy and inexpensive manufacture. Since the unit carrying the door is kept rigid and square at all times the labor time necessary for installation is only about one half of that required for prior assemblies.

While one embodiment of my invention has been shown and described, it will be apparent that other adaptations and modifications may be made without departing from the scope of the following claim.

I claim:

1. A door and frame assembly comprising two opposed units, each of said units including two vertical members connected by a top member, each member being unitary and generally L-shaped in cross section with one leg of the L of the members of one unit being aligned with and extending toward the corresponding leg of the other units, no other legs of said members facing outwardly with the
said other legs of one unit being substantially parallel to the said other legs of the unit, means supported in the ends of said aligned legs extending between said units, a door hung in one of said units, a bottom cross piece extending between the bottoms of the vertical members of said last named unit to hold them in spaced apart relationship, a metal strap on the outside of the said aligned legs of said L-shaped members of said last named unit extending around the periphery of said last named unit and between the bottoms of its vertical members to hold the bottoms of said last named vertical members in engagement with said bottom cross piece, said other legs of said last named unit limiting movement of said strap away from the other unit, an L-shaped corner piece at each corner of the assembled units on the outside thereof with one leg of each corner piece extending on the outside of the vertical members of both units and the other leg extending generally horizontal, and a metal strap extending around the corner pieces and around the periphery of said assembly.

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