April 3, 1962 R. F. OATES 3,027,686

DOOR FRAME SETTING AND HOLDING MEANS

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Fig.1

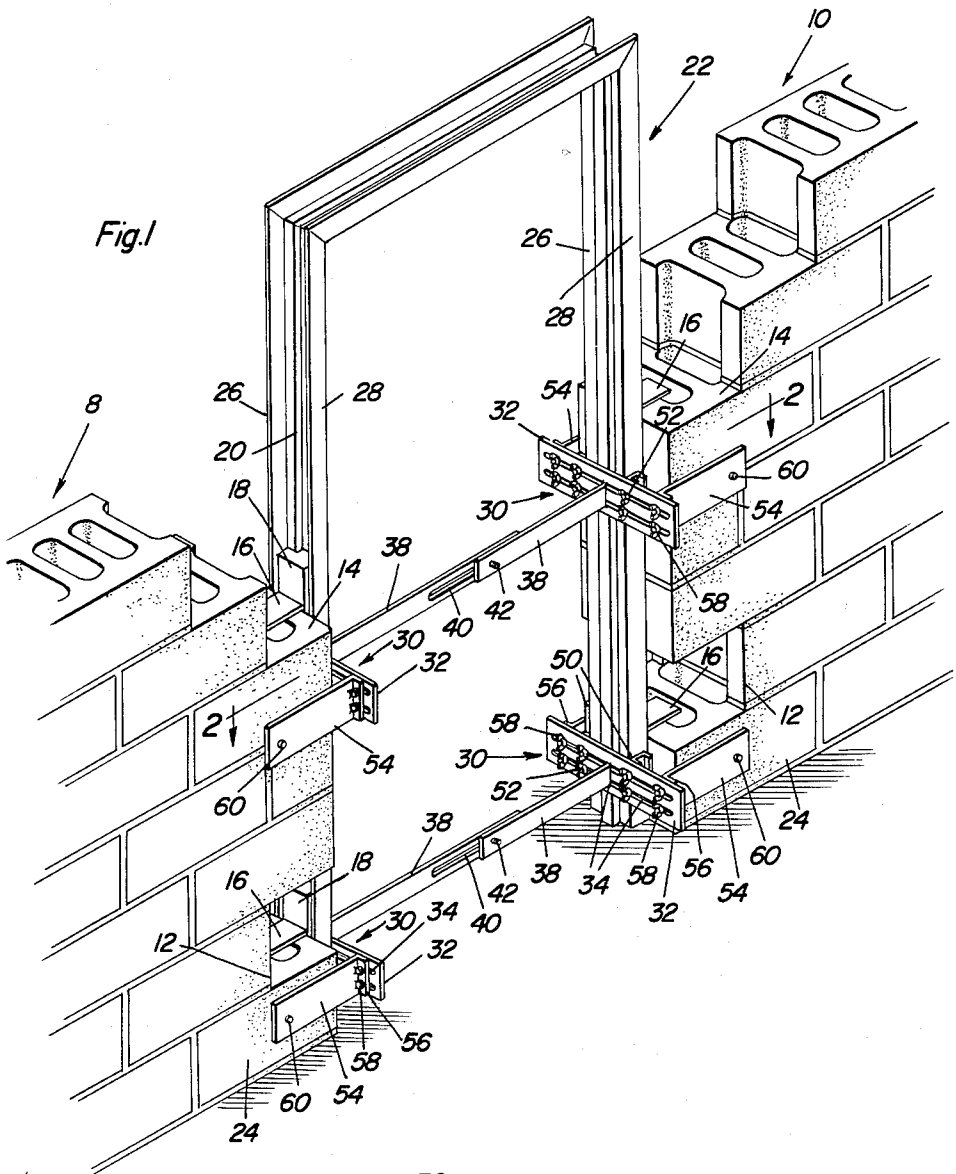
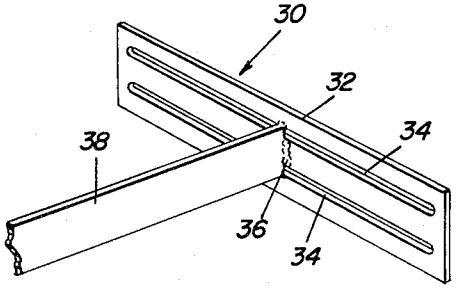


Fig.4



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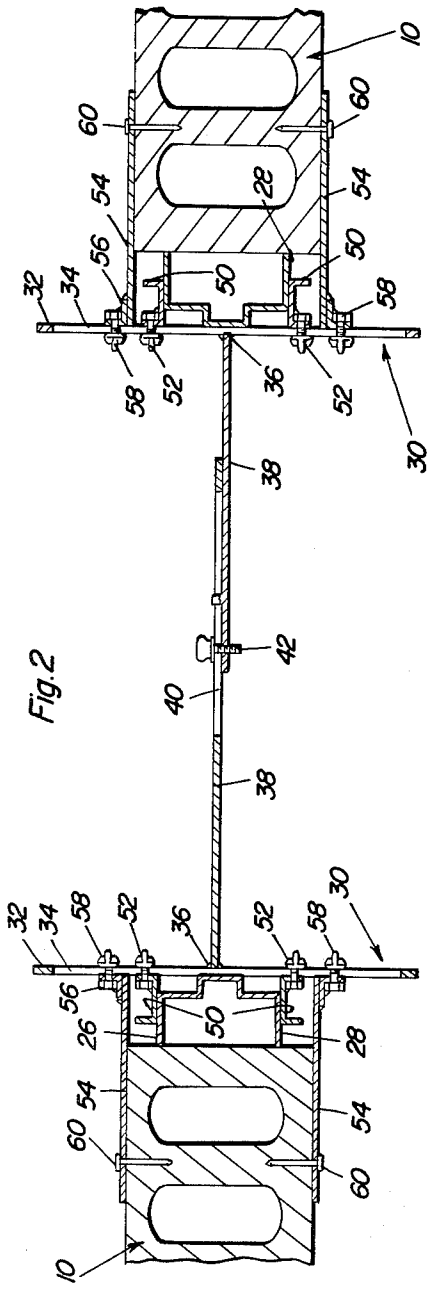


Fig. 2

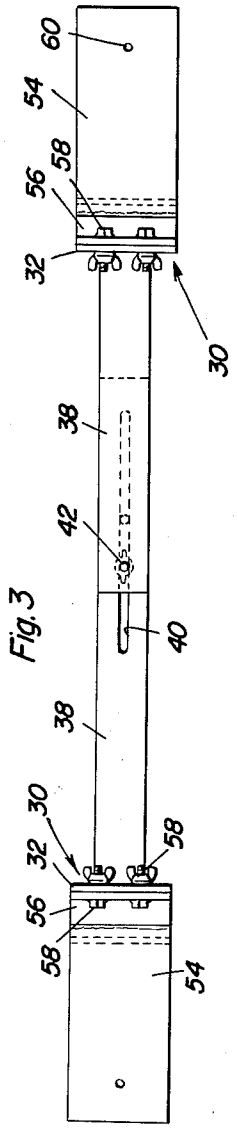


Fig. 3

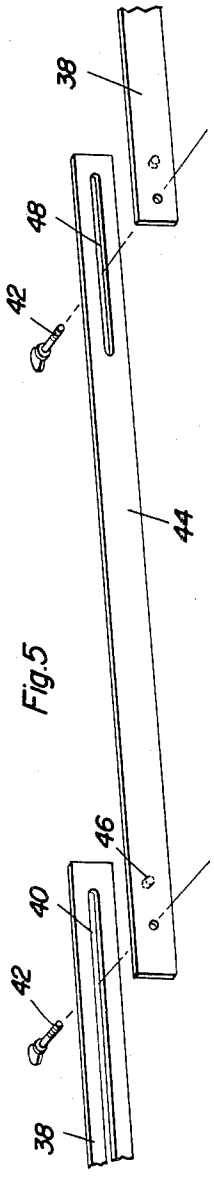


Fig. 5

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DOOR FRAME SETTING AND HOLDING MEANS

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3 Claims. (Cl. 50—83)

This invention relates to certain new and useful improvements in simple mechanical devices expressly constructed and designed to enable a user thereof to properly set and temporarily hold a door or a windor frame, in an opening provided therefor in a building wall which is under construction until said frame is anchored and fixed in its intended place.

In carrying out the present invention, structurally novel portable jigs have been adopted, as will be hereinafter evident. These jigs, when properly used, permit a builder to proceed expeditiously and unhampered with a wall which is being erected without waiting until permanent door frames in sufficient number arrive on the job for installation. It follows that these correctly made door setting and holding jigs, usually employed as a pair, permit reliable placing and holding of the door frame in the required position in a manner to complete the construction without undue adjustments and alterations, thus saving time and labor. Being readily removable, the jigs may be successfully and reliably used over and over.

An object of the invention is to structurally, functionally and otherwise improve upon similarly used and constructed prior art door frame setting and retaining devices and to provide simplified easy-to-use devices or jigs which are such in construction that they should meet with widespread approval by builders and other users, that should, for practical reasons, appeal to manufacturers and retailers and justify their endorsement.

More specifically, novelty is predicated on a device herein referred to unitarily as a readily applicable and removable jig. This jig embodies a first head plate adapted to bear against an interior surface of one vertical member of the door frame, a second complemental duplicate head plate adapted to bear firmly against the interior surface of an opposite vertical member of said door frame, said head plates being in spaced parallel relationship, rigid means secured to and interposed between said head plates and joining them to each other, end brackets carried by both of said head plates and extending laterally and outwardly therefrom and operative to contact and bear against interior and exterior surfaces of the adjacent marginal portions of the wall under construction, said brackets being such that they may be nailed or otherwise temporarily fastened to inner and outer portions of said wall, and means carried by said head plates whereby the latter may be releasably clamped to the respective vertical members of said door frame.

Novelty is also predicated on the above featured jig wherein the same is of a size that it may be utilized in a limited areal portion, the lower part for example, of the confines of the door frame close to a floor or foundation and also for the purpose of allowing the use of a second similar jig at a level near the median portion of the door frame, whereby using two such jigs, one at the bottom level with the first tier or course of wall blocks, and a second jig, say at about one-half the height of the door frame. These two jigs, without other supports, assume accurate and erect position in the wall opening ready for permanent anchorage.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings wherein like numerals are employed to designate like parts throughout the views:

FIG. 1 is a view in perspective showing a fragmentary portion of a building wall in the process of being erected, showing a door frame in the opening provided therefor in the wall and showing upper and lower insertable and removable frame setting and holding jigs and how they are constructed and used.

FIG. 2 is a section taken on the plane of the line 2—2 of FIG. 1, looking in the direction of the arrows.

FIG. 3 is a view in side elevation of the jig removed from the set position.

FIG. 4 is a fragmentary perspective view of an end portion of one of the T-shaped members or units.

FIG. 5 is a view in perspective with portions broken away showing an added extension bar or strip which is used in case the frame is of a width to require its use.

Referring now to the drawings and particularly to FIGS. 1 and 2, it will be seen that the wall sections of the wall under construction are denoted at 8 and 10 respectively. Blocks or tiles are omitted at the places designated at 12 and 14 respectively in order to accommodate the lateral anchoring lugs 16 of the anchor blocks 18 here shown fitting into the channel portions 20 of the vertical members of the permanent door frame 22. Also as seen in FIG. 1 and as before touched upon the jigs are preferably used in pairs that is one jig adjacent to the floor line and in general alignment with the first course 24 of the wall under construction. The upper jig is about midway the height of the door frame. The numeral 26 designates an inward or interior face of the uprights of the door frame and the numeral 28 designates the outer face.

The jigs are the same in construction and the description of one will suffice for both. Each jig is preferably made up of a pair of substantially duplicate T-shaped members referred to as first and second T-shaped members. Each T-shaped member comprises a substantially flat faced elongated plate which constitutes a crosshead in the T construction. This head 30 (FIG. 4) comprises a rectangular plate 32 having upper and lower spaced parallel slots or keyways 34 therein. Integrally joined at an outer end to the intermediate inward side of the plate as at 36 is the complemental part of the T which is here referred to as a leg or arm 38. The two legs have their inner end portions overlapped and one leg has a slot 40 to accommodate a bolt or an equivalent fastener 42 whereby the legs may be adjustably and extensibly connected. Where the door is extra wide it may be necessary as seen in FIG. 5 to use an insertable extension strip or bar 44 having bolt holes 46 and a slot 48 to facilitate assembling of the parts. This part 44 is of course optional. As perhaps best shown in FIG. 2 the numeral 50 designates U-shaped clips here described as door frame clamps. These clamps engage the inner and outer surfaces 26 and 28 in the manner illustrated and they are bolted or otherwise removably and adjustably fastened to the slotted head plate as at 52. Other means than shown may be employed for adjustably mounting these clips or clamps on the plates. The aforementioned end brackets are elongated strip members and these are denoted by the numerial 54. They have cleats 56 carrying bolt and nut fasteners 58 which are also adjustably mounted on the head plate 32. These end brackets 54 are disposed outwardly of the clamping clips or clamps 50. They are preferably provided with nail holes to accommodate attaching nails 60 as clearly shown in FIG. 2. As is evident the end brackets are adjusted toward and from each other according to the thickness or dimension of the wall and they are nailed in place to hold the T-shaped members and T-shaped members are further held by the clamps 50 embracing the surfaces 26 and 28 of the vertical members of the door frame 22.

After the door frame 22 is set in the opening provided therefor and suitably plumbed and after the upper and

lower jigs are applied in the positions depicted in FIG. 1 it will be evident that the door frame will be correctly set and held pending permanent installation in the wall.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact constructon and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. Means to assist a user in placing and securely holding a door frame in an intended set position in an opening provided therefor in a building under construction comprising a readily applicable and removable jig embodying a first member T-shaped embodying an elongated plate providing cross-head, said plate having spaced lengthwise slots, and an elongated leg fixed at an outer end to a median portion of an inward side of said plate and disposed at a right angle to the plate, a second T-shaped member of the same construction as said first T-shaped member, the legs of said T-shaped members being overlapped and separably and adjustably joined together, a pair of spaced parallel clamps situated at the central portion of an outward side of each plate and adjustably bolted to said plate by way of the cooperatively associated slots in said plate, said clamps being lateral to the plate and designed and adapted to clampingly engage the inner and outer face portions of one upright member of the door frame, and a pair of spaced parallel end-brackets extending laterally beyond the outward side of each plate, said end-brackets designed and adapted to straddle inner and outer surfaces of the wall and having nail holes by way of which said brackets may be temporarily nailed to wall surfaces which they bear against.

2. The structure defined in claim 1, and in combination, and wherein the elongated plates and also the legs are rectangular in cross-section and flat faced, said plates

being of predetermined length relative to the cross-sectional thickness of the wall so that in use the end portions thereof extend beyond the interior and exterior surfaces of the wall in a manner to locate the brackets in positions to cooperate with the wall surfaces.

3. In combination, a masonry wall having interior and exterior vertical surfaces and also having a prepared opening for a door construction, a door frame temporarily located in said opening and embodying vertical members, a first readily insertable and removable jig located in a plane close to the bottom of the door frame and in alignment with the first course of wall blocks embodied in said masonry wall, a second jig located above the plane of the first-named jig and at a level near the median portion of said door frame, each jig being of knockdown construction and embodying a pair of duplicate T-shaped members each having a plate and a lateral leg connected to and projecting at right angles from the median portion of the plate, the legs being overlapped and separately connected together, said plates being in spaced apart parallelism and abutting cooperating portions of the vertical members of said door frame, said plates being at right angles to the vertical members and of a length that their inner and outer ends extend beyond the interior and exterior surfaces of adjacent cooperating walls, a pair of spaced parallel end brackets for each plate, the brackets of each pair being adjustably mounted on the opposite ends of their respective plates, and straddling the wall and being separably connected to the wall, and a pair of clamps on the median portion of each plate, said clamps abutting and clampingly engaging the inner and outer surfaces of the vertical member of the door frame.

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