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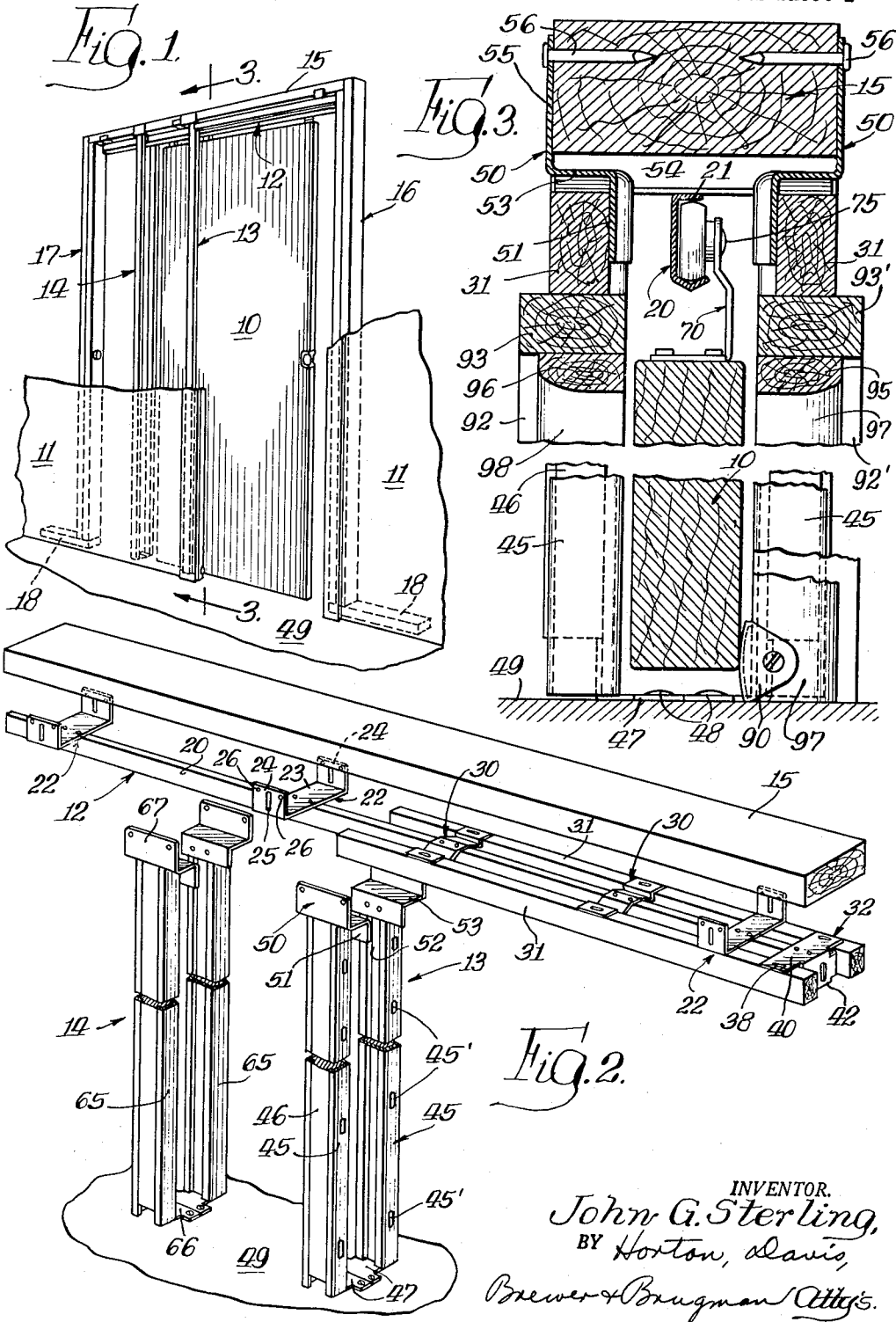
J. G. STERLING

3,058,174

POCKET DOOR FRAME ASSEMBLY

Filed March 27, 1961

3 Sheets-Sheet 1



INVENTOR.  
*John G. Sterling,*  
 BY *Horton, Davis,*  
*Brewer & Brugman Attys.*

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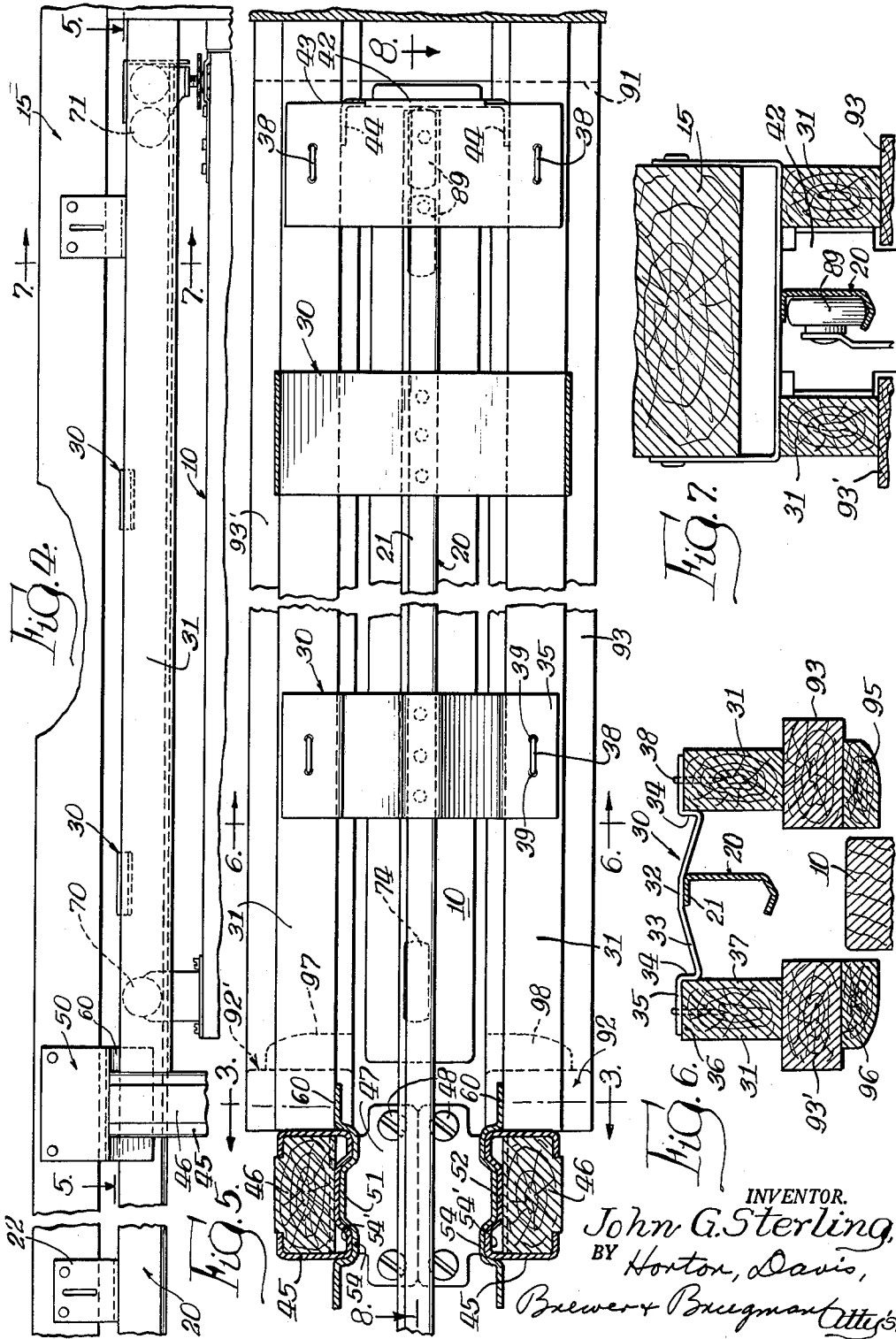
J. G. STERLING

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POCKET DOOR FRAME ASSEMBLY

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3 Sheets-Sheet 2



INVENTOR.  
 John G. Sterling  
 BY Horton, Davis,  
 Brewer & Bruegmann, Attys.

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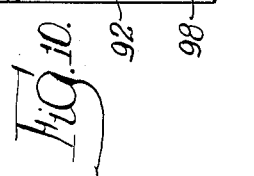
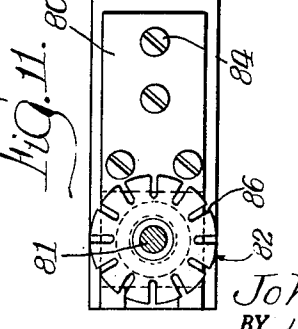
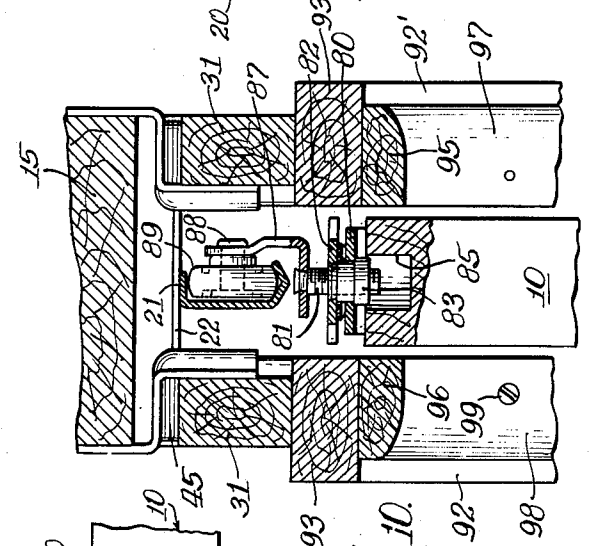
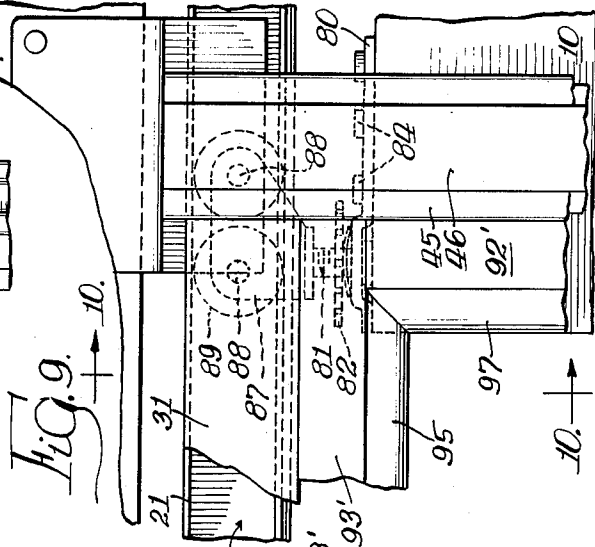
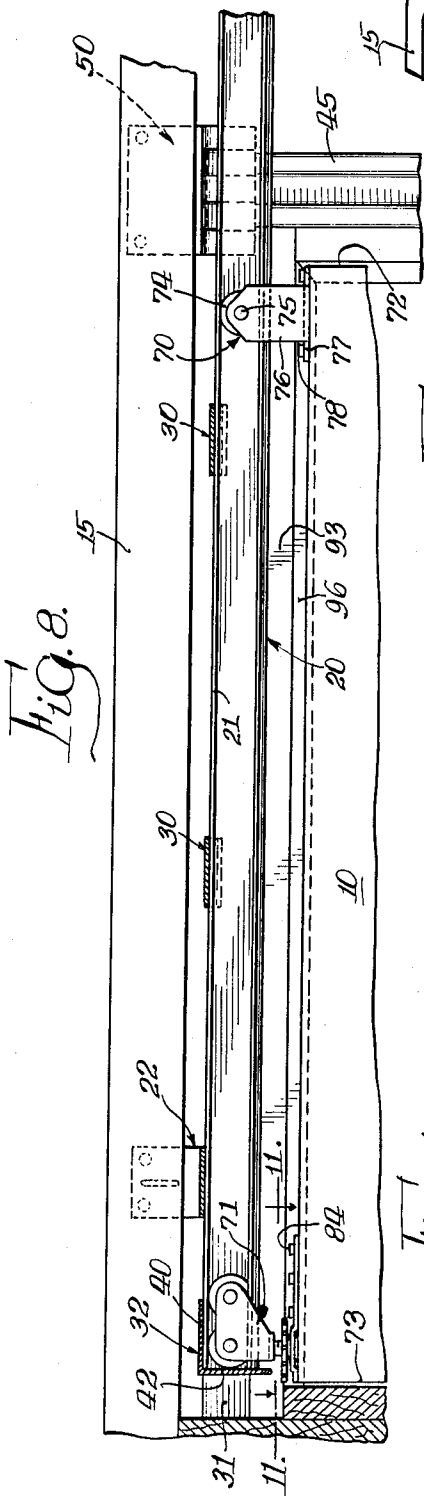
J. G. STERLING

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POCKET DOOR FRAME ASSEMBLY

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3 Sheets-Sheet 3



INVENTOR.  
*John G. Sterling,*  
 BY *Horton, Davis,*  
*Brewer & Brugman Attys.*

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3,058,174

**POCKET DOOR FRAME ASSEMBLY**

John G. Sterling, Crystal Lake, Ill., assignor to John Sterling Corporation, Richmond, Ill., a corporation of Illinois

Filed Mar. 27, 1961, Ser. No. 98,626

5 Claims. (Cl. 20—19)

This invention relates generally to improvements in supporting frame structures and related hardware for sliding doors.

Recent residential and institutional building practices have favored architectural designs in which the major vertical loads are carried by the outside or exterior wall structures, leaving the interior partitioning of the building substantially free of vertical load. With the advent of such architectural designs there has come about an ever increasing and popular use of sliding doors.

Sliding pocket doors and supporting framework therefor are well known. In essence the framework defines a recessed or hidden pocket spacing between opposing wall faces into which the sliding door is moved when it is desired to open the doorway. Typical of such past pocket door frames are those built on the job or prefabricated in mill shops comprising wooden horizontal and vertical members rigidly intertied to form a substantially rigid boxlike unit adapted to fit into a rough frame opening. Such wood frames are heavy, bulky, difficult to warehouse and handle, and are especially unsatisfactory in wet wall construction where wet plaster causes the wooden members of the pocket frame to deform and warp and thereby obstruct the pocket. This of course hampers operation of the sliding door.

More recently the art has developed pocket frames in which the structural frame members comprise rigid metal reinforced wood elements receptive of nail fasteners for the attachment of wall covering materials. This development substantially avoids objectionable pocket deformation formerly experienced with all wood frames. Other niceties and features of the more recent combined wood and metal frames appear in the flexible interconnection of their frame members so as to accommodate irregularities in the rough frame openings in which they are fitted. Added advantage is also found in the practice of prefabricating the metal and wood frames in a factory and shipping the frame in knocked-down condition for assembly on the job. Such frames, however, require pre-assembly and interconnection of elements prior to installation in the rough frame opening which often results in mistaken assembly, and is objectionably time-consuming.

Briefly, the present invention comprises a unitary track assembly including a roller supporting track for guiding the door along a rectilinear path and which unitary assembly is normally mounted as an independent unit horizontally across the upper end of a substantially rectangular rough frame opening in a wall or partition. One or more pairs of vertical or upright frame members, comprising metal channel members carrying wooden fastener receptive cores, are associated generally transversely of the track assembly and define supports for parallel spaced wall portions between which lies the recessed pocket for storing the sliding door. Whereas similar pocket door frames of the prior art generally have required positive interconnecting means between the vertical or upright frame elements and the horizontal track carrying means, the present invention departs materially from such concept by eliminating all interconnecting devices between the horizontal track assembly and the vertical uprights. Nevertheless functional cooperation and interdependence are maintained between the track assembly and such upright elements. This separ-

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ture over prior art structures leads to greater simplicity of construction and direct assembly in the rough frame opening to provide marked economy of manufacture and installation.

Added advantage and novelty are found in the frame assembly of this invention by reason of an improved hanger combination for suspending the sliding door from the overhead track of the frame assembly. This improvement affords greatly simplified and efficient means for adjusting the alignment of the sliding door in the doorway. Briefly, this is accomplished by combining a vertically adjustable hanger element with a nonadjustable hanger element so as to provide a hanger system in which the angular position of a door attached thereto is easily and quickly altered by the simple manipulation of a single adjustable hanger element adjacent one edge of the door and the responsive pivoting of the door about a fixed axis adjacent the opposite door edges provided by the non-adjustable hanger assembly.

The main object of the present invention is to provide a new, improved and simplified frame assembly for sliding pocket doors.

Another object of this invention is to provide a new and improved frame for sliding pocket doors embodying a simplified arrangement of horizontal and vertical elements which eliminates all need for pre-assembly such elements prior to their installation and erection as a frame in a rough frame opening.

A still further object of this invention is to provide a new and improved pocket door frame assembly comprising a horizontal track assembly and a plurality of vertical split jamb or stud members having fastener receptive means and in which certain of said vertical members include means for properly aligning and locating the horizontal track assembly.

A still further and more important object of this invention is to provide a new and improved door frame for sliding doors definitive of a recessed pocket in a structural partition or wall and comprising horizontal and vertical support members all of which are supported directly on and by rough frame elements of the partition.

Still another important object of this invention is to provide a new and improved sliding door frame assembly in which improved means are provided for adjusting the alignment of the door supported thereby.

The above and further objects, features and advantages of the present invention will be recognized by those familiar with the art from the following description thereof taken in conjunction with the illustration of its preferred embodiment set out in the accompanying drawing.

In the drawings:

FIGURE 1 is a perspective view illustrating a typical pocket door installation embodying the improved features of this invention;

FIG. 2 is an exploded perspective view of the frame assembly set forth in FIGURE 1, showing the relation of the vertical and horizontal elemental portions thereof when aligned for assembly in a rough frame opening;

FIG. 3 is a cross-sectional view taken substantially along line 3—3 of FIGURE 1 and looking in the direction of the arrows thereon, but on an enlarged scale over FIGURE 1;

FIG. 4 is a side elevational view of the track assembly used in the improved frame assembly of this invention and illustrating its relationship to the door and improved hanger means employed therewith;

FIG. 5 is a foreshortened top plan view of the track assembly seen in FIG. 4, but at an enlarged scale thereover;

FIG. 6 is a cross-sectional view taken through the track assembly substantially at line 6—6 of FIG. 5 to

show the relation of the improved track assembly and the door opening trim elements;

FIG. 7 is another cross-sectional view taken substantially at line 7—7 of FIG. 4 and looking in the direction of the arrows thereon to show the means for fastening the track assembly to the header member of the rough door frame;

FIG. 8 is a cross-sectional view taken substantially along line 8—8 of FIG. 5 and looking in the direction of the arrows thereon, to show the door member closed across the door opening;

FIG. 9 is an enlarged partial view with parts broken away, of the upper end of the door and the track assembly to illustrate the adjustable hanger used in suspending the door from the track assembly;

FIG. 10 is a cross-sectional view taken at line 10—10 of FIG. 9, looking in the direction of the arrows thereon, to show details of the adjustable door hanger assembly; and

FIG. 11 is a cross-sectional view, looking downwardly at the adjustable hanger assembly as viewed from line 11—11 of FIG. 8.

Turning now to the features of the present invention found in the preferred embodiment illustrated in the drawings, as shown in FIGS. 1 and 2, the improved pocket frame assembly is adapted to support and house a sliding door or panel member 10 for rectilinear movement across a doorway and into and out of a pocket recess formed between the exterior covering wall portions 11, 11 of a structural wall or partition. In the main, the improved frame assembly of this invention essentially comprises a horizontal track assembly, indicated generally at 12 in FIG. 2, an upright split jamb assembly 13, and an optional similar split stud assembly 14. The three assemblies 12—14 are adapted to be mounted, in a manner to be described hereinafter, across a rough frame opening formed in a wall and defined by wooden stud and header members familiar to the building art. Typical, such a rough frame opening is defined by a horizontally disposed 2 x 4 header frame member 15 mounted across and extending between the upper ends of a first pair of vertical 2 x 4 wooden stud members 16 and a second set of like stud members 17, as shown in FIGURE 1 of the drawing. The stud frame members 16 and 17 typically are doubled up and nailed together, as shown, to comprise a rigid vertical support between a 2 x 4 floor plate member 18 and the horizontal header 15.

As shown particularly in FIGURE 1, the wooden frame members 15, 16 and 17 are aligned to define a substantially rectangular rough frame opening in the partition wall, into which the frame assembly of this invention is adapted to be mounted. In that respect the rough frame opening is slightly wider than twice the width of the door 10 which is to move thereacross, so as to provide a recessed pocket and doorway area in the partition wall; each area occupying essentially one-half of the area bounded by the rough frame opening.

With special reference to FIG. 2, it will be seen therein that the track assembly 12 comprises an elongated track member 20, made of metal such as rolled steel or extruded aluminum, having a substantially C-shaped cross-section, as set out best in FIG. 3. The track element 20 is preferably of a length adapted to extend horizontally across the rough frame opening or the dimension defined between the upper ends of the vertical upright frame members 16 and 17. Spot welded or otherwise rigidly affixed to the upper wall 21 of the track element, and at spaced locations intermediate the ends thereof, are two or more suspension hangers 22, 22 comprising U-shaped metal straps; there being three such hangers 22 in the particular track assembly 12 illustrated. Each of the hangers 22 is formed of metal with a main rectangular planar body portion 23 fastened centrally to the track and having the opposite ends thereof turned upwardly to form

mounting arm portions 24, 24 which are spaced apart essentially equivalent to the width of the horizontal 2 x 4 header frame member 15 of the rough frame. Each of the arm portions 24 further bears an elongated central vertical slot or opening 25 and two or more openings 26 and 26 adjacent its upper corners for receiving nail fasteners or the like. With this arrangement the track assembly 12 is easily leveled, adjusted and suspended from the 2 x 4 rough frame horizontal header member 15, as will be described more fully presently.

In addition to the one or more suspension hangers 22, 22 as above described, track assembly 12 may also include one or more spacer straps 30, the features of which will now be set forth in conjunction particularly with the showing thereof seen in FIGS. 2 and 6 of the drawing.

As shown in FIG. 2, the spacer straps 30, 30 therein are disposed between one end of the track member 20 substantially its midpoint; such being provided for the purpose of carrying a pair of nailing or fastener receptive members 31, 31 comprising elongated wooden nailing rails disposed in parallel spaced relation on opposite sides of the track element 20 to extend essentially along that portion of the track which overhangs the open doorway area of the rough frame opening. The spacer straps 30, 30 cooperate with a combined spacer and end stop bracket 32 to support the two nailing strips 31 as will now be described.

Essentially each spacer strap 30 comprises a rectangular metal plate which is welded or otherwise rigidly fastened at its midpoint to the upper wall 21 of the track element so as to extend symmetrically from opposite sides of the latter and at right angles to its longitudinal axis. As shown in FIG. 6 particularly, each spacer bracket 30 is symmetrically formed and bent intermediate its ends to provide a central planar mounting portion at which it is fastened to the underlying upper wall of the track element. Extending angularly downward from opposite ends of the central mounting portion are planar leg portions 33, each of which terminates in an upwardly turned stop portion 34 extending between the same and a mounting foot portion 35 aligned substantially in the plane of the central mounting portion. This symmetrical formation of each spacer strap 30 serves to locate the two stop portions 34 thereof equidistant and on opposite sides of the track element 20. Corresponding parallel spaced alignment of the wooden nailing strips 31 on opposite sides of the track is then accomplished easily by placing each such strip so that its upper wall 36 is in underlying contact with the mounting portions 35 on one side of the track 20 and its side wall 37 is abutting the related stop portions 34 which serve as a backing support therefor. Fastener means, such as staples 38, are then used to secure the nailing strips to the spacer straps; the same passing through suitable openings 39 provided in the mounting portions 35 of spacer straps 30.

In order to give proper stability to the nailing strips 31, 31, two or more straps 30 are used to locate and hold them in place along opposite sides of the central track element 20. Also, as shown in FIG. 2, a combination spacer and end stop bracket 32 is positioned across one edge of the track 20 to maintain the desired parallel spacing of the nailing strips 31 and to support the same when wallboard or like covering materials are nailed thereto.

In brief, the combined spacer and stop bracket or member 32, as illustrated in FIGS. 2 and 5, comprises an elongated platform portion 40 welded or otherwise fastened transversely to the upper wall 21 of the track element 20 so as to extend symmetrically from opposite sides of the latter. Like the spacer straps 30, the combined spacer and stop bracket 32 is suitably apertured near its ends for the reception and passage of staples or other fasteners 38 in joining the nailing strips thereto. Bracket 32 also includes an end stop portion 42 depending from one lateral edge 43 of its platform portion 40, which stop portion is

adapted to extend in between the nailing strips 31, 31 substantially at their ends and immediately adjacent and across the end of the track element 20 so as to provide a barrier preventing the rolling disengagement of the door hanger assemblies from the track element 20. To assist in supporting the two nailing strips 31, 31 in spaced relation, the stop wall portion 42 includes parallel spaced ear portions 44, 44 at its opposite ends (see FIG. 5) which lie transversely to the plane of the stop portion 42 and equidistant from the midpoint of the platform portion 40 thereof. The ear portions 44 are abutted by the nailing strips in assembly and thus assist in locating the latter in symmetrical parallelism on opposite sides of the track element as well as giving the same support when nailing wall covering material thereto.

The nailing strips 31, 31, as shown, normally project beyond the plane of the stop wall portion 42 on bracket 32. This projection may be cut off in those installations where two frame assemblies 20 are disposed end-to-end to accommodate a bi-parting door installation. Otherwise the projecting portion of the nailing strips 31 past the stop wall 42 provide a desired overlapping relationship with the door jamb and trim elements in typical single pocket door installation.

Having thus described the features of the track assembly 12, it will be appreciated and recognized particularly from FIGS. 1 and 2 of the drawings, that the same is adapted to be suspended beneath and from the horizontal 2 x 4 header 15 of the rough frame opening by means of nails driven through the openings 26 in the mounting portions 24 of each of the suspension brackets 22. Preliminary to final attachment, the slotted openings 25 in the mounting ear portions of the suspension brackets are employed to align the track assembly in a horizontal condition across the upper end of the rough frame opening. This is accomplished conveniently by driving nails into opposite sides of the header member 15 through any two opposing slotted openings 25 of any one of the three suspension brackets; thereby defining an axis about which the track assembly may pivot. Thereafter the track assembly is pivotally adjusted thereabout and held in place by driving additional nails through the slotted openings 25 in one of the other brackets 22. Limited vertical adjustment of the track assembly is also permitted by the length of openings 25. When properly positioned, the track assembly is fixed in place by driving additional nails into header 15 via the openings 26, 26 of each suspension bracket. Thus the elongated openings 25 provide for adjustable alignment of the track assembly horizontally across the upper end of the rough frame opening and at a desired level from the floor to accommodate the vertical dimension of the door 10.

Once the track assembly 12 is installed the split jamb assembly 13 is ready for installation substantially at the midpoint of the rough frame opening. Jamb assembly 13 comprises a pair of metal members 45, 45, each formed as a rolled or otherwise formed metal channel of substantially C-shaped cross-section surrounding a wooden core 46 which forms one face of the jamb member and is adapted to receive nails or like fastening means for attaching wall covering materials thereto. Several elongated openings 45' in one edge of the channel also permit the fastening of finish door jamb members to one leading edge thereof, as will be described later. The core member 46 also preferably extends substantially the full length of its associated reinforcing metal channel member 45, as shown in FIG. 2.

The lower end in each channel member 45 is fitted with a right-angled foot spacer plate 47 having openings for the passage of fastening devices 48, such as screws, nails and the like, for attaching the same securely to an underlying floor 49. Each foot plate 47 is mounted to extend substantially transversely from the channel member 45 with which it is associated and on the opposite side thereof from the wooden insert 46. It will be further

understood that with two members 45 disposed back-to-back in spaced parallel upright relation (as shown in FIG. 2 for example), the two related and then opposite plates 47, 47 abuttingly engage one another and define fixed lateral spacing for the lower ends of the upright members 45, 45 sufficient for passage of the sliding door 10.

Located at the upper end of each jamb member 45 is a metal connector bracket 50 for joining the same to the overlying rough frame header member 15 (see FIGS. 2 and 3). Each bracket 50 is formed with a first back plate portion 51 which is welded or otherwise rigidly affixed to the rear metal wall portion 52 of its respectively associated jamb member. Formed integrally with and extending transversely to plate portion 51 is an intermediate platform portion 53 which extends across the upper end of the related jamb member 45, as seen best from FIG. 3 of the drawings. Portions 51 may be suitably reinforced by bending and shaping to include spaced reinforcing ribs, as indicated at 54 in FIG. 3. Similar rib sections 54' are formed in the rear wall 52 of the jamb members 45 to match ribs 54 in assembly (see FIG. 5). Such ribbing reinforcement, however, is not required even though it is often desirable to give added strength and rigidity to the structure.

Formed at right angles to the intermediate platform portion 53 and on the opposite edge thereof from its junction with the mounting plate portion 51, is an upwardly turned nailing plate portion 55, having suitable spaced openings for the passage of nails 56; portion 55 being coplanar with the outside face of the wooden insert 46 on the related upright member 45. Fasteners 56, along with fasteners 48, and the foot plates 47, thus serve to lock the split jamb assembly 13 in vertical position between the floor 49 and the horizontal header 15. By properly maintaining the distance between the floor and the header 15, the intermediate platform portion 53 of the several brackets 50 may, if desired, abuttingly under-support the header member 15. This abutting relationship however is not necessary, since the rigid split jamb members 45 in fact serve as vertical loadbearing members for the header member, due to their fixed inter-connection by the nail fasteners 56.

While a sliding door will not work freely in a wall that has too much curvature, it is desirable that the pocket frame and sliding door conform to and follow reasonable limits of curvature for the walls in which it is installed. Since both the aforedescribed track and vertical jamb assemblies are attached directly to the rough frame header member, the pocket frame of this invention satisfies this desirable objective. Thus if header 15 is slightly bowed transversely of its length, the elongated track 20 will conform readily to such bowing when attached to the header as above described. The more rigid nailing strips 31, however, are more likely to defy the header curvature. This would be objectionable since under such circumstances the strips 31 would not lie flush with the lateral edges of the curved rough header and might objectionably project outwardly of the wall face, on one side of the door opening, or recess inwardly of the wall face on the opposite side of the door opening. Aside from the poor wall appearance produced by such an installation, such is to be avoided to prevent interference of the nailing strips with free movement and passage of the door along the track means.

To insure desired alignment and location of the track assembly, each suspension bracket 50, as shown in FIG. 5, includes a guide and back support portion 60, comprising an extension of the back plate portion 51 thereof. When the two split jamb members 45 are aligned in back-to-back parallelism to formulate the split jamb assembly 13 as above described, the two portions 60, 60 of the then oppositely aligned brackets 50, 50 provide a fixed spacing and guide means for maintaining and aligning the track assembly and nailing strips 31 in desired positions. That is to say, portions 60 extend behind and en-

gage the adjacent ends of the nailing strips 31, forcing the same and the track assembly to which they are attached centrally between the split jamb members and thus centrally of the rough frame header member 15. This also aligns the nailing strips flush with the outside or lateral edges of the rough header, which function is recognizedly important when the rough frame header has a slight bow to which the track assembly must conform as above discussed. Portions 60 also serve to back up the adjacent ends of the nailing strips 31 and support and rigidify the same for nailing trim and wall covering materials thereto.

To provide added support to the pocket walls between the upright split jamb members 45, 45 and the rough frame member 17, a second set of upright elements 65, 65 comprising a split stud assembly 14 is utilized substantially midway between the split jamb assembly 13 and the rough frame member 17. In this respect the location of the split jamb assembly 13 is substantially midway the length of the rough header member 15 with the distance between the split jamb assembly 13 and the rough frame member 17 being sufficient to accommodate the width of the door 10. The addition of the split stud assembly 14 gives the pocket or recess into which the door 10 must move, added rigidity and means for supporting wall covering materials which enclose the pocket walls. While the use of the split stud assembly 14 is optional, it is desirably employed whenever the span between the split jamb assembly and the rough frame studs 17 become excessive, according to recognized building standards.

The split stud members 65, 65 comprise metal channel members carrying wooden nailing cores and are in most respects substantially identical to the split jamb elements 45 described hereinbefore, including floor engaging spacer bracket 66 fastened to the lower ends thereof, and fastener brackets 67 at their upper ends. However they do not normally include the elongated openings in one edge corresponding to openings 45' of the split jamb members. Thus the split stud members are adapted to be mounted upright in spaced parallel relation between the rough header member 15 and the floor and held in place by nail fasteners, screws, or the like, according to the installations of the split jamb assembly previously described. In this regard, normally the split stud members are located substantially midway of the width for the door pocket space.

It will also be recognized and understood by those familiar with the art that the members of the split jamb and split stud assemblies have a direct vertical load-bearing relationship with the rough header member and are movable relative to the track assembly so as to be readily plumbed in vertical relation independently of the adjusted positioning of such track assembly. Further, such upright split jamb and stud assemblies are not connected directly to the track assembly by any type of positive fastener means, but are fixed in position by direct connection to the floor and the overhead rough frame header member 15. This relationship of elements has marked advantage in saving time and in providing versatility of adjustment alignment and ease of assembly for the several elements of the frame. Equally important, this feature gives improved structural support to the rough frame header and wall than has been afforded by previous frame assemblies of this general class.

From the foregoing it will be recognized that the improved frame of this invention basically comprises the track assembly 12 which is adapted to be horizontally suspended from the over-disposed 2 x 4 header member of the rough frame opening and at least one set of parallel spaced vertical upright members which define the door openings for the pocket or vacancy into which the sliding door recesses. Such required single pair of vertical upright members is typically embodied in the split jamb assembly 13, while optionally a second set of vertical

upright members, embodied in the split stud assembly 14, further defines the pocket recess and supports the wall covering materials utilized for enclosing the pocket walls.

To accomplish a full sliding door pocket installation, however, it is also necessary to furnish means for attaching the door 10 to the track assembly so that the same may move freely therealong. To this end the present invention further embodies a novel departure over previous door hanger assemblies of the prior art as will now be related.

As best seen from FIGS. 4, 5 and 8 of the drawings, the door 10 is adapted to be suspended vertically in a depending attitude from the track element 20. Such suspension is accomplished according to the present invention by means of a pair of interrelated hanger assemblies indicated generally at 70 and 71 (see FIG. 8). Assembly 70 is disposed adjacent the trailing edge 72 of the door 10 while hanger assembly 71 is disposed adjacent the leading edge 73 thereof. While conventionally the suspension of a sliding door for rolling movement along an overhead track is carried out by a pair of adjustable hanger assemblies having suitable rollers or wheels engageable with the track means, hanger assembly 70 in the present invention is nonadjustable so that the axis of the single wheel 74 thereof is fixed at a given distance with respect to the upper end of the door 10. This fixed relationship of the wheel 70 is accomplished by mounting the same for rotation on an axle 75 projecting inwardly or to one side of an upstanding hanger body portion 76 having a lower foot portion 77 disposed at right angles thereto. Suitable fasteners 78, such as screw means or the like, pass through the foot portion 77 to secure the hanger assembly 70 to the upper end of the door 10, and the single wheel 74 is adapted to engage the lower track portion of the track means 20 according to conventional practice.

While numerous hanger devices are shown in the art, the essential requirement for hanger assembly 70, according to the present invention, is that the distance between the rotational axis of the wheel 74 to the top of the door be fixed rather than adjustable.

Contrasting with the fixed or nonadjustable hanger assembly 70, is the second hanger assembly 71 disposed adjacent the leading edge 73 of the door 10. The hanger assembly 71 is necessarily adjustable to regulate the distance between the upper end of the door and the rotational axis of the roller wheel or wheels associated therewith. Thus, as illustrated, the second hanger assembly 71 may comprise a mounting plate (see FIGS. 9-11) to which is mounted an assembly including an adjustment bolt 81 having threaded engagement with a positioner wheel 82 and an associated adjustment collar 83. The bracket 80 is fixed to the upper end of the door 10 by a plurality of fastening screws 84, and the adjustment collar 83 extends into a recessed bore 85 made in the upper end of the door to accommodate the vertical movement of the adjustment bolt 81 therethrough. With this arrangement, rotational manipulation of the adjustment wheel 82 serves to thread the collar portion 83 along the threaded bolt 81 so as to move the latter axially and relative to the upper end of the door 10. For convenience, wheel 82 is provided with a plurality of radially disposed slotted openings 86 readily engageable as by the blade of a screwdriver or like instrument; the wheel 82 being readily accessible for such adjustment when the door 10 is assembled in the improved frame assembly of this invention.

Mounted to the upper end of the adjustment bolt 81 is a wheel mounting bracket 87 (FIGS. 9 and 10) which carries one or more transversely extending axle members 88, 88 on which roller wheels 89, 89 are mounted to engage the lower track portion of track means 20.

With the foregoing described hanger arrangement of one adjustable hanger assembly and one nonadjustable hanger assembly, it will be readily understood that a novel

means is provided for aligning and plumbing the door in the doorway opening. To amplify this, vertical adjustment of the hanger assembly 71, through manipulation of adjustment wheel 82, serves to move the adjacent end of the door 10 about the fixed or nonadjustable axis of the rearwardly disposed hanger assembly 70, particularly about the rotational axis of wheel 74 thereof. Thus a simple adjustment of the one hanger assembly provides an easy and convenient means for aligning the door with respect to the door opening, and particularly the jamb framing thereof.

Once the door 10 is suspended from a track 20 by engaging the wheels of the two hanger assemblies 70 and 71 therewith, the same is ready for movement along the track and into and out of the space or pocket recess defined between the vertical upright members of the split jamb and split stud assemblies 13 and 14, as previously related. In order to maintain proper alignment and clearance of the door with respect to such split jamb and stud elements, however, it is preferable to provide some type of guide means, and to this end floor guide members 90 (illustrated in FIG. 3) are provided adjacent the lower edge of the door, the same being attached to the finished door framing according to known practice.

When fully trimmed, the finished door opening is bounded by typical finished jamb members, such as the vertical jamb member 91 and split jamb members 92 and 92'. Split horizontal upper jamb members 93 and 93' are likewise provided, attached to the nailing strips 31 in a conventional manner.

With regard to such finished frame jamb members, according to the preferred practice, the same define a rectangular opening just slightly larger than the door 10. Finish stops 95, 96 are mounted on opposite sides of the door and fastened to the horizontal finished jamb members 93, 93' so as to overlap the upper edge of the door 10. Similar stops 97 and 98 are also included, extending vertically from the overhead trip stops 95, 96 respectively to the floor level along opposite sides of the pocket entrance as defined by the split jamb members 92 and 92'. It will be noted in particular that the trim stops 96 and 98 preferably are attached to their respectively underlying finish jamb members by removable fastening devices, as for example screws 99 illustrated. This arrangement permits the easy removal of the trim stops 96 and 98 so that the door 10 may be removed from the frame, by removing stops 96 and 98; this making the size of the finish door opening just slightly larger than door 10. Thereupon the door may be disengaged from the track by merely swinging the same outwardly about the hangers 70 and 71 until the roller wheels thereon disengage from the track. Thus a convenient and easy means is provided for the removal of the door as occasion may require.

From the foregoing it is believed that those familiar with the art will recognize the novel and inventive features herein disclosed, particularly as found in the unique knocked-down frame assembly comprising the separable individual elements which are unified by attachment to the header member 15 of the rough frame and the underlying floor of the wall structure in which the installation is made. Additionally the improved combination of adjustable and nonadjustable hanger means for suspending the door from the overhead track provides a unique and most convenient means for adjusting the alignment and plumb of the door in the door opening. It will also be understood that while the invention has been described herein as it appears in the preferred embodiment thereof illustrated in the accompanying drawings, numerous changes, modifications and substitutions may be made in the described structure without necessarily departing from the spirit and scope of the present invention. As a consequence it is not intended that this invention be limited by the particulars of the foregoing description except as may appear in the following appended claims.

I claim:

1. A knockdown pocket frame for a sliding pocket door adapted to move laterally between a door opening formed in a wall and a protective recessed pocket space located between opposite sides of the wall, the pocket door frame being adapted for mounting in a rectangular rough frame formed by interconnected structural wall members comprising a pair of laterally spaced vertical stud members, a header member extending horizontally between the upper ends of said stud members and an undersupporting floor extending between the lower ends of said stud members, said pocket frame comprising, an overhead track means from which the door is adapted to be suspended, bracket means suspending said track means directly from and horizontally beneath the horizontal header member of the rough frame, a plurality of parallel spaced upright frame members extending vertically along opposite sides of said track means, between the horizontal header member of the rough frame and the undersupporting floor thereof, said upright frame members being positioned and connected to said rough frame header member independently of and without connection to said track means; the upright frame members on opposite sides of said track means being aligned back-to-back in registering paired relationship with the spacing between the members of such pairs defining the door receptive spacing between walls of the pocket recess, there being one pair of said upright members intersecting said track means substantially at the latter's midpoint and forming therebetween the entrance of the pocket recess, each said upright member comprising a vertical loadbearing member connected independently to and directly receptive of vertical load from the rough frame header member, and spaced hanger means movable along said track means including means for attaching the same to the upper end of the door to suspend the latter beneath said track means.

2. The combination set forth in claim 1 including a pair of elongated members adapted to receive nails or like fastening devices, mounted laterally outwardly of and parallel to said track means to extend horizontally between the upper ends of said one pair of vertical members and one end of said track means, and means associated with the upper ends of said one pair of upright members for supporting the adjacent ends of said elongated fastener receptive members to maintain the same spaced symmetrically outward of said track means; the said pair of elongated members being supported by bracket means fixed to and extending laterally outward of said track means.

3. In a sliding pocket door frame assembly adapted to be mounted in a rough frame of a building partition and defining a pocket recess for storing the door and a doorway through the partition and across which the door is adapted to move, an improved overhead track assembly for supporting and guiding the door, comprising an elongated metal track adapted to be mounted across the upper end of the rough frame and including an upper planar wall portion and a lower wheel-engaging track portion spaced beneath said upper wall portion, a plurality of suspension hangers fixed at spaced intervals to said track, each suspension hanger extending transversely of said track and having a planar body portion fixed centrally to the said track's upper wall portion and turned upwardly at its ends to provide parallel spaced planar mounting arm portions adapted to embrace a horizontal header of the rough frame, each said mounting arm portion having suitable apertures receptive of fastener means for attaching the suspension hangers to the rough frame header, with at least one aperture in each said arm portion being elongated and oriented to provide for vertical adjustment of the track assembly relative to the rough frame header thereby to align the track assembly horizontally; a plurality of spacer straps connected to the track's upper wall portion and extending generally transversely to and laterally outwardly of the track, each said spacer strap being

suitably formed to define planar stop portions located in parallel planes spaced symmetrically outward of opposite sides of said track, and a pair of elongated wooden fastener strips abutting said stop portions and fixed to the ends of said spacer straps, one on each side of said track so to lie parallel thereto.

4. In a knockdown frame for supporting a sliding door for movement across a doorway in a wall and adapted to be mounted in a rough frame opening formed by structural elements of the wall comprising laterally spaced vertical stud members interconnected at their upper ends by a horizontal header member and at their lower ends by an underlying support floor, the combination comprising an elongated unitary track assembly mounted as an independent unit horizontally across the upper end of the rough frame opening and including an elongated door supporting track means, plural U-shaped hanger bracket means fixed at spaced intervals along said track means and having laterally spaced arm portions extending upwardly to engage opposite side faces of said rough frame header member, said arm portions including openings receptive of fastener means whereby said track assembly is connected to and suspended directly from and horizontally beneath the rough frame header member, and a pair of elongated fastener receptive members supported laterally outwardly and along opposite sides of said track means and extending from adjacent one end of the latter to substantially mid-way along the length thereof; a split jamb assembly disposed upright between the rough frame header member and the underlying support floor, said split jamb assembly comprising a pair of elongated metal frame members registering aligned in spaced parallelism outwardly of opposite sides of said track means and operatively disposed at substantially right angles to the latter, first bracket means fixed to the upper end of each said metal frame member and having means receptive of fasteners connecting the same directly to the rough frame header member independently of said track means, additional bracket means fastened to the lower end of each said metal frame member receptive of fastener means anchoring the same directly to the underlying support floor and including means for maintaining the lower ends of said metal frame members in predetermined spaced relation; and a portion on said first bracket means extending from adjacent the upper end of each of said metal frame members and operatively engaging an adjacent end of one of said elongated fastener receptive members whereby to support and align

the same substantially coplanar with the side faces of the header member.

5. In a knockdown frame adapted to support a sliding door for lateral movement across a rough frame opening in a partition, said rough frame opening being bounded by an overhead horizontal header and spaced vertical stud members extending between opposite ends of the header and an underlying support floor, the combination comprising a track assembly suspended from the rough frame header and disposed horizontally across the upper end of the rough frame opening between the spaced stud members thereof and including an elongated door supporting metal track means, hanger bracket means attached transversely to said track means and having parallel spaced arm portions secured to opposite lateral faces of the rough frame header thereby to suspend said track assembly horizontally beneath the latter, additional bracket means fixed transversely to said track means, a pair of elongated nailing members supported by said additional bracket means in parallel spaced relation along opposite sides of said track means, an outer face of each of said nailing members being aligned substantially coplanar with a corresponding lateral face of the rough frame header; and at least one pair of elongated upright frame members disposed in parallel spaced registration on opposite sides of said track assembly and secured, vertically between the rough frame header and the underlying support floor for operative cooperation with said track means and header; each said upright frame member having first bracket means fixed to its upper end and receptive of means attaching the same directly to the rough frame header and additional foot bracket means fixed to its opposite end receptive of means anchoring the latter to the underlying support floor, the mounting of said upright frame members being freely independent of and without connection of said track assembly except for portions of said first bracket means thereon which operatively engage and support adjacent end portions of said elongated nailing members and support.

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UNITED STATES PATENT OFFICE  
CERTIFICATE OF CORRECTION

Patent No. 3,058,174

October 16, 1962

John G. Sterling

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 2, line 26, for "pre-assembly" read -- pre-assembling --; column 4, line 6, for "26 and 26" read -- 26, 26 --; line 18, after "20" insert -- and --; same column 4, line 73, after "strips" insert -- 31 --; column 5, line 23, after "in" insert -- a --; column 12, line 35, for "of", second occurrence, read -- to --; lines 38 and 39, strike out "and support".

Signed and sealed this 19th day of March 1963.

(SEAL)

Attest:

ESTON G. JOHNSON  
Attesting Officer

DAVID L. LADD  
Commissioner of Patents