

Feb. 28, 1939.

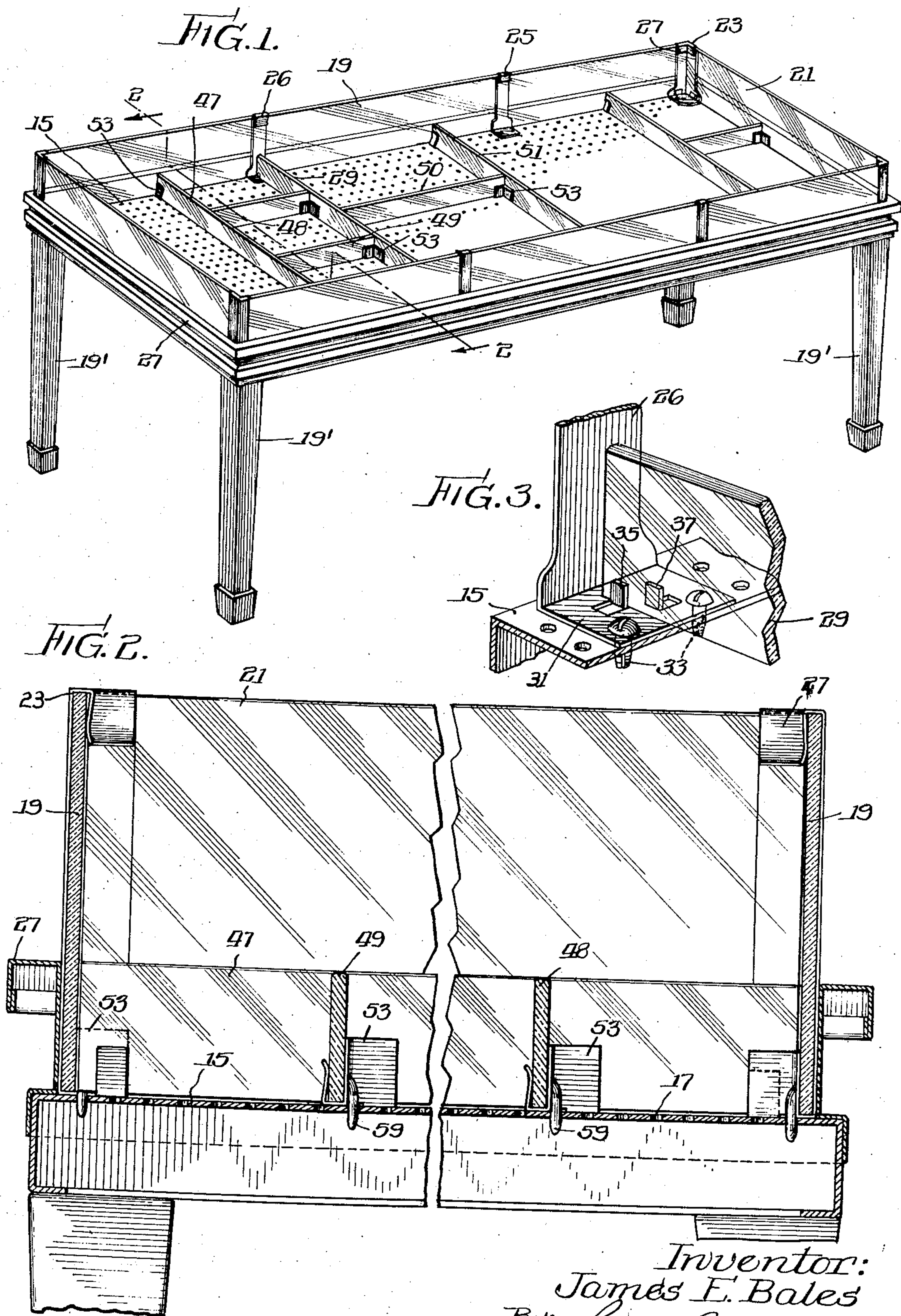
J. E. BALES

2,148,892

PERFORATED TOP FOR MERCHANDISING TABLES

Filed Aug. 2, 1934

2 Sheets-Sheet 1



Feb. 28, 1939.

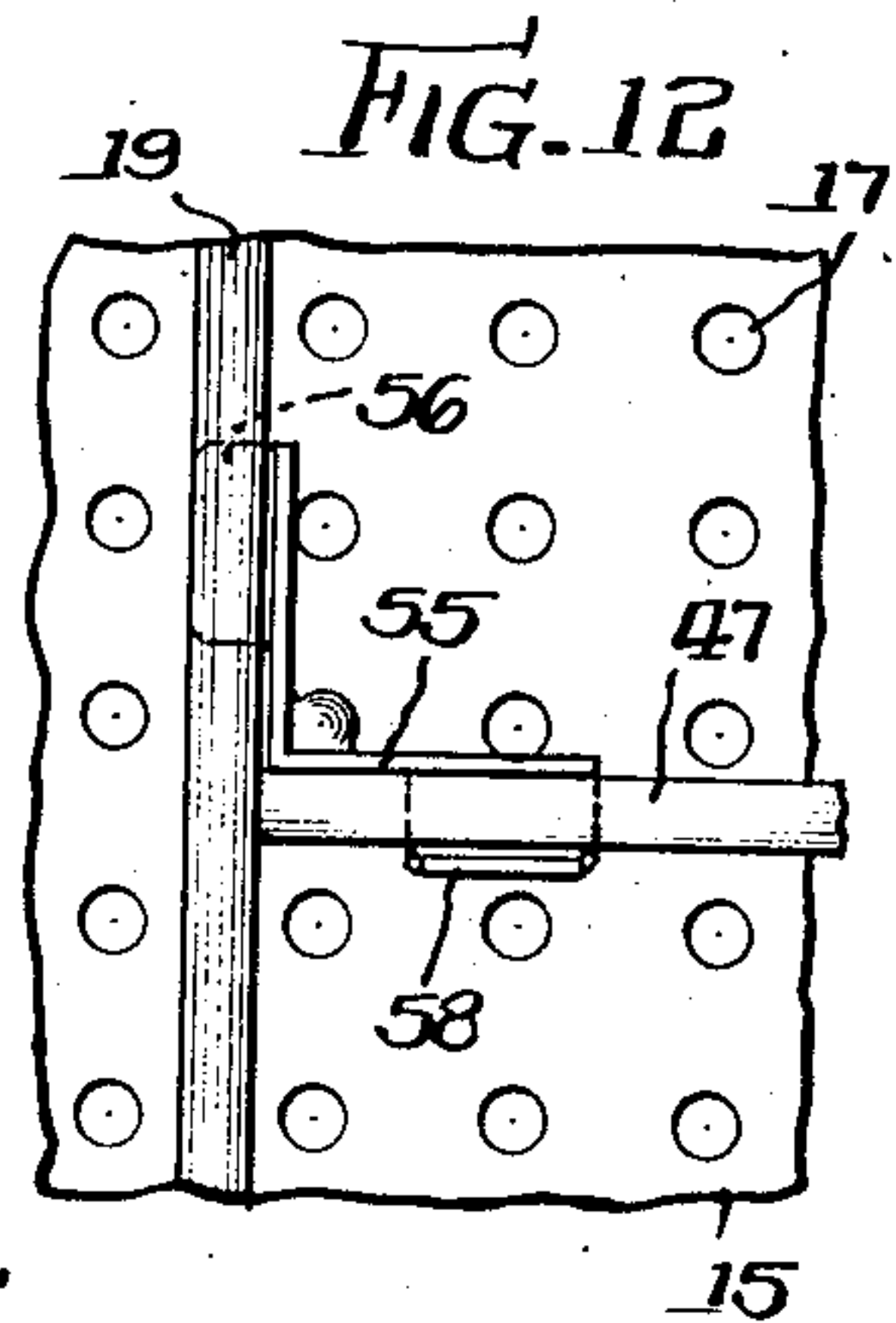
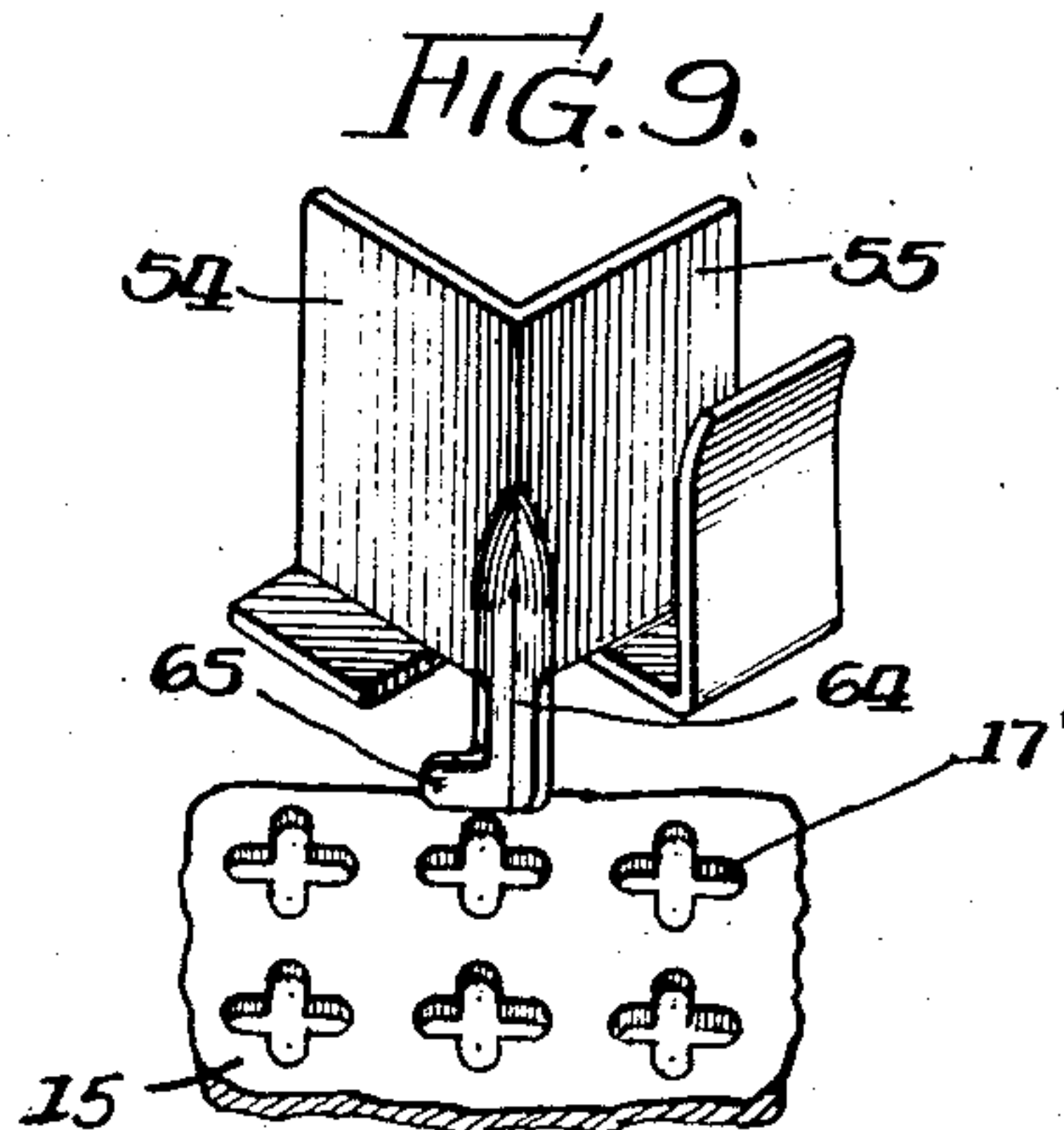
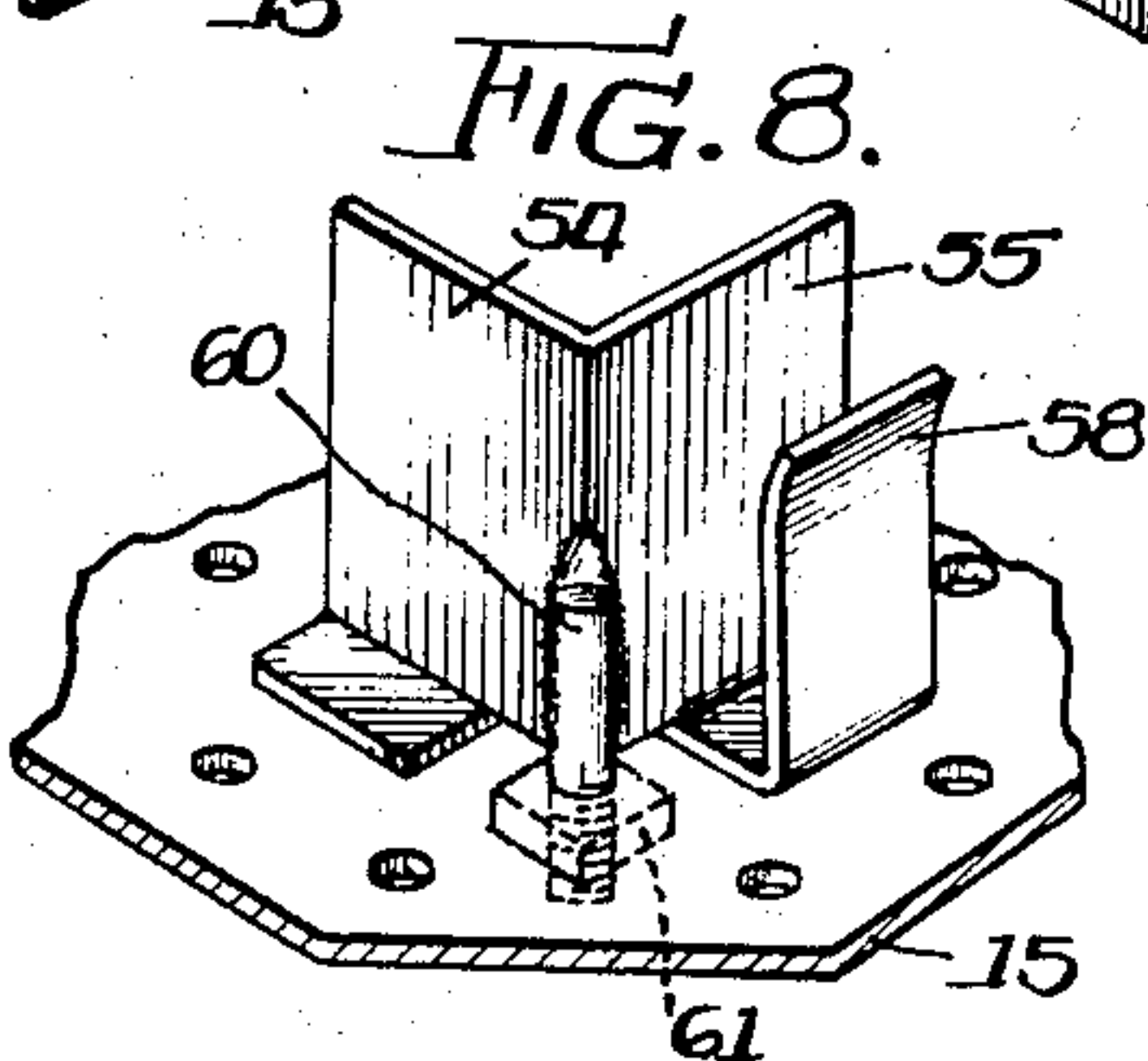
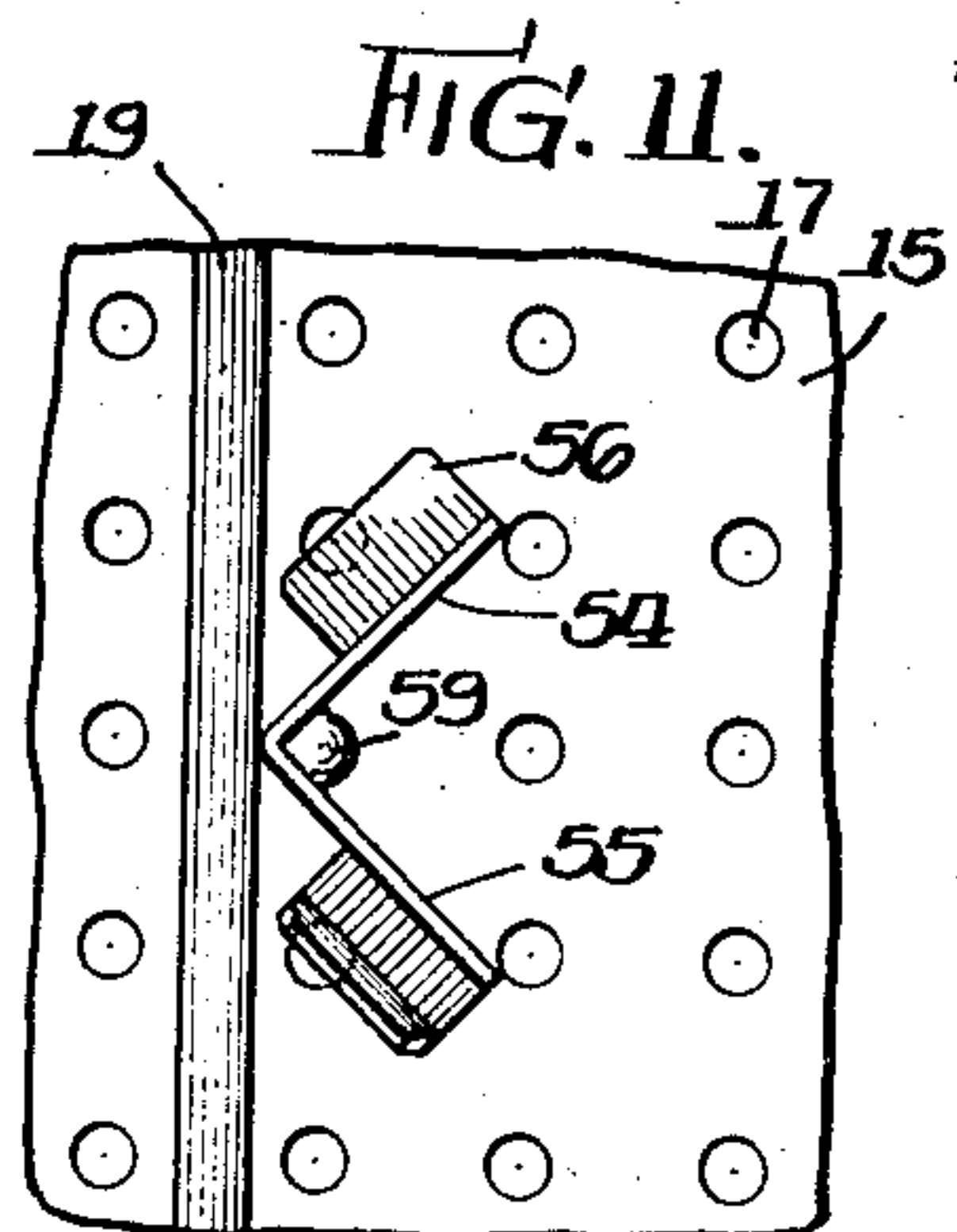
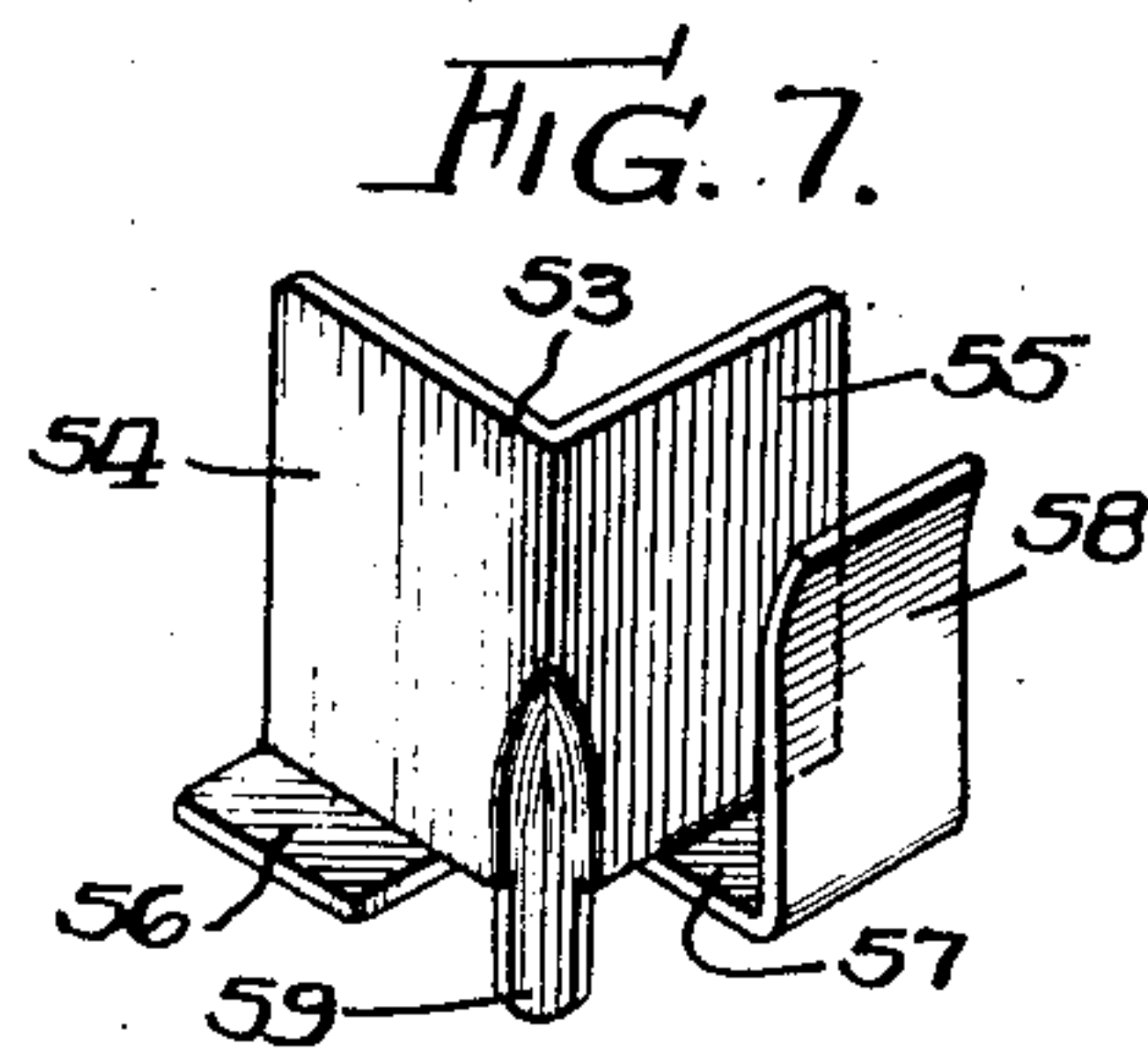
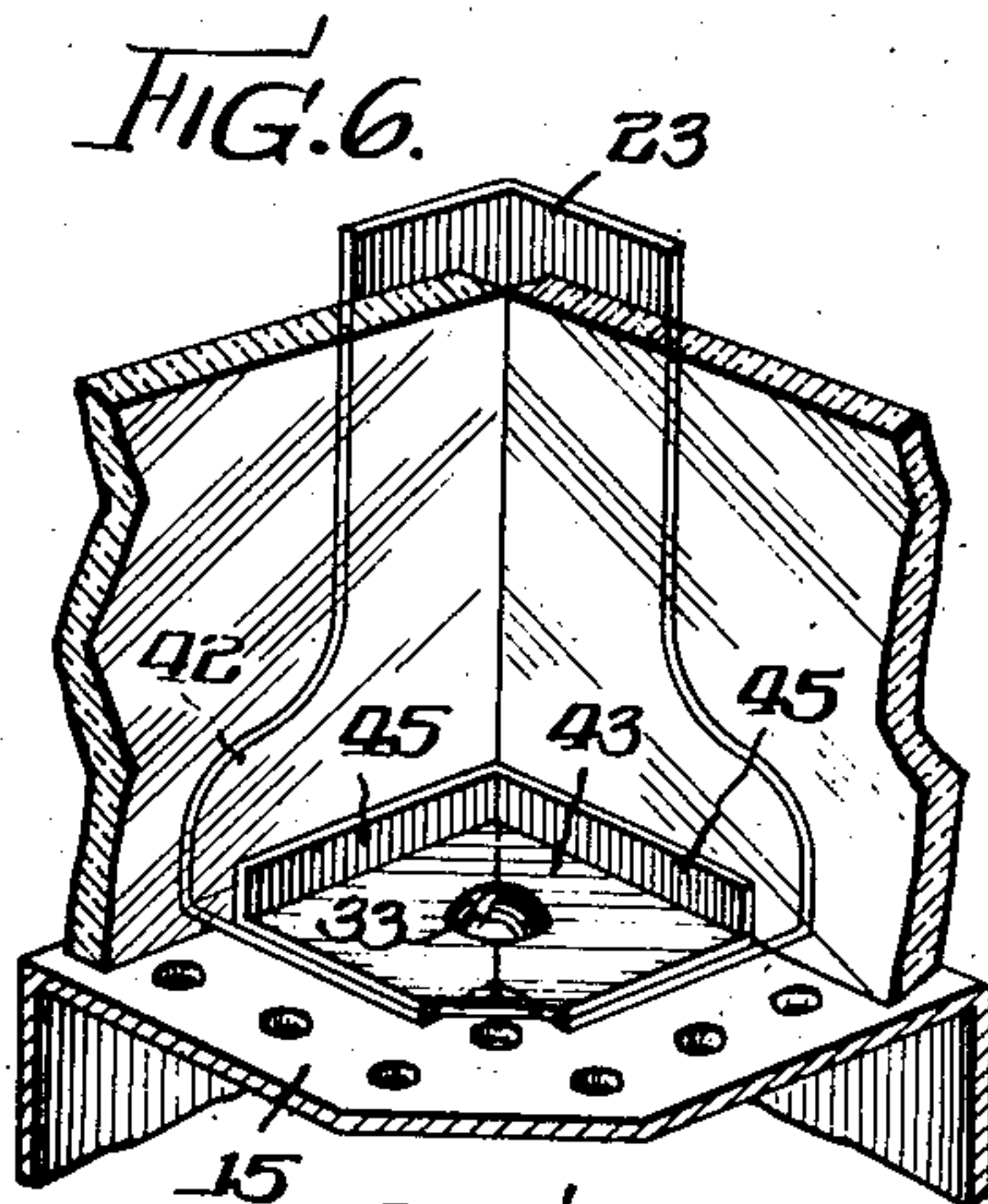
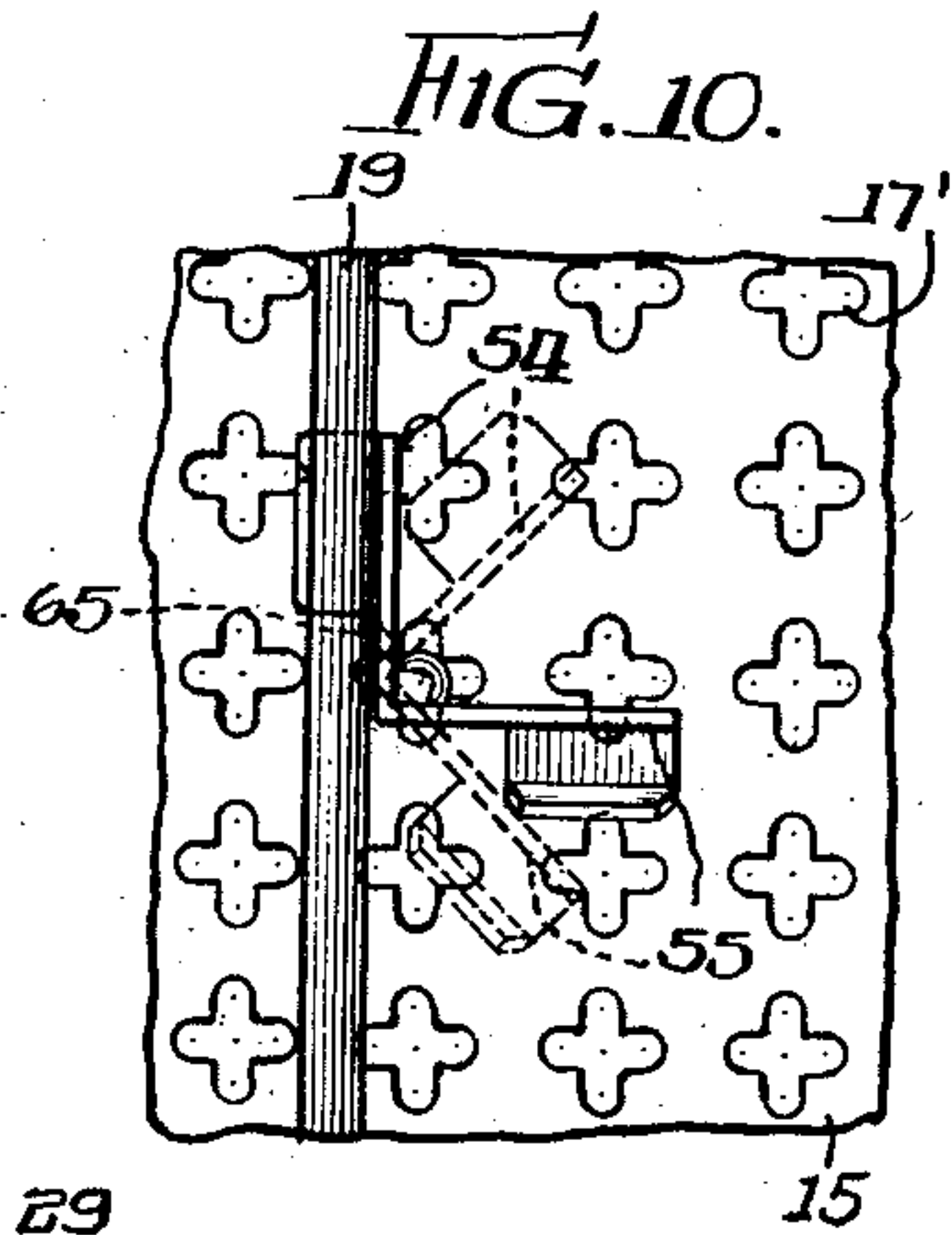
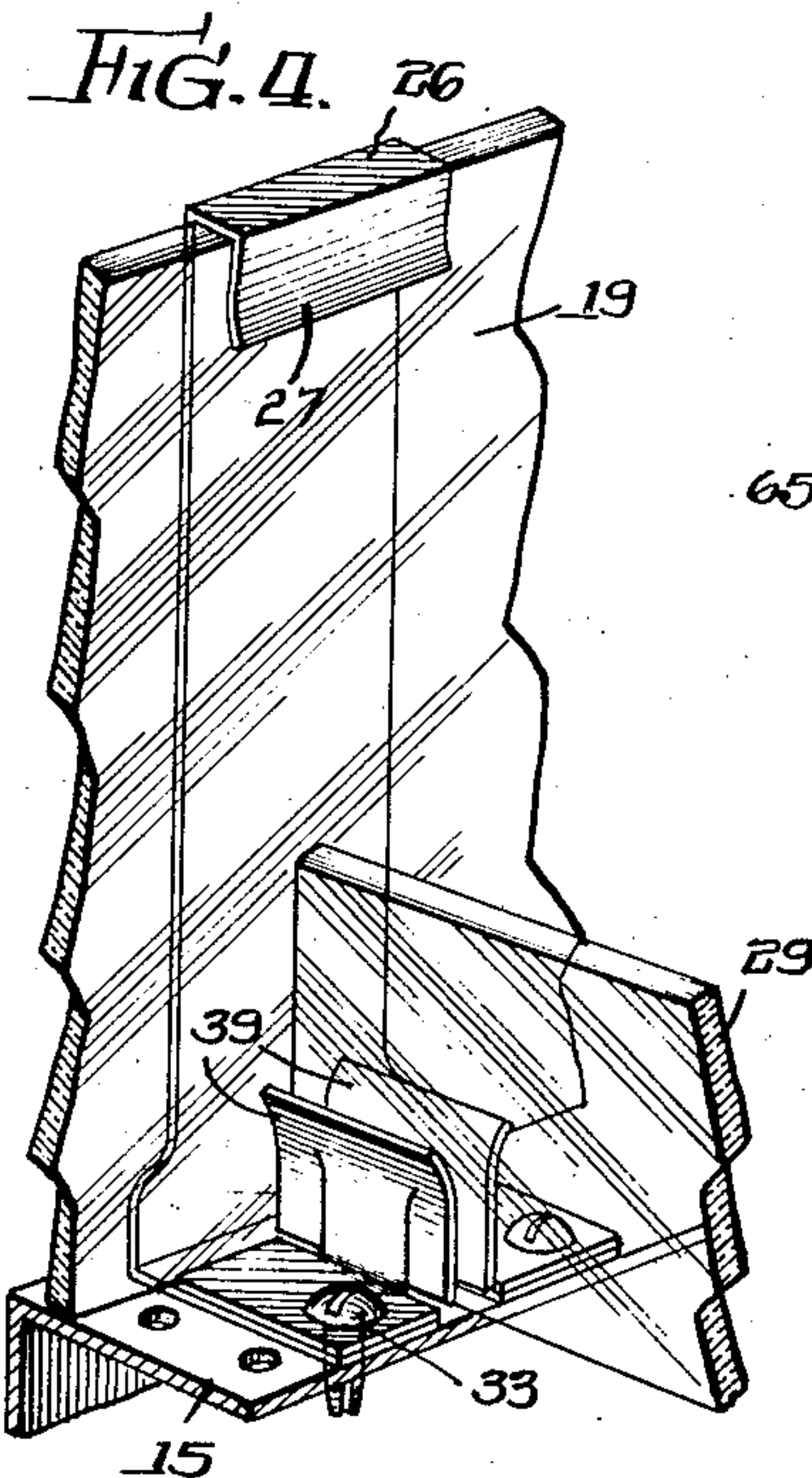
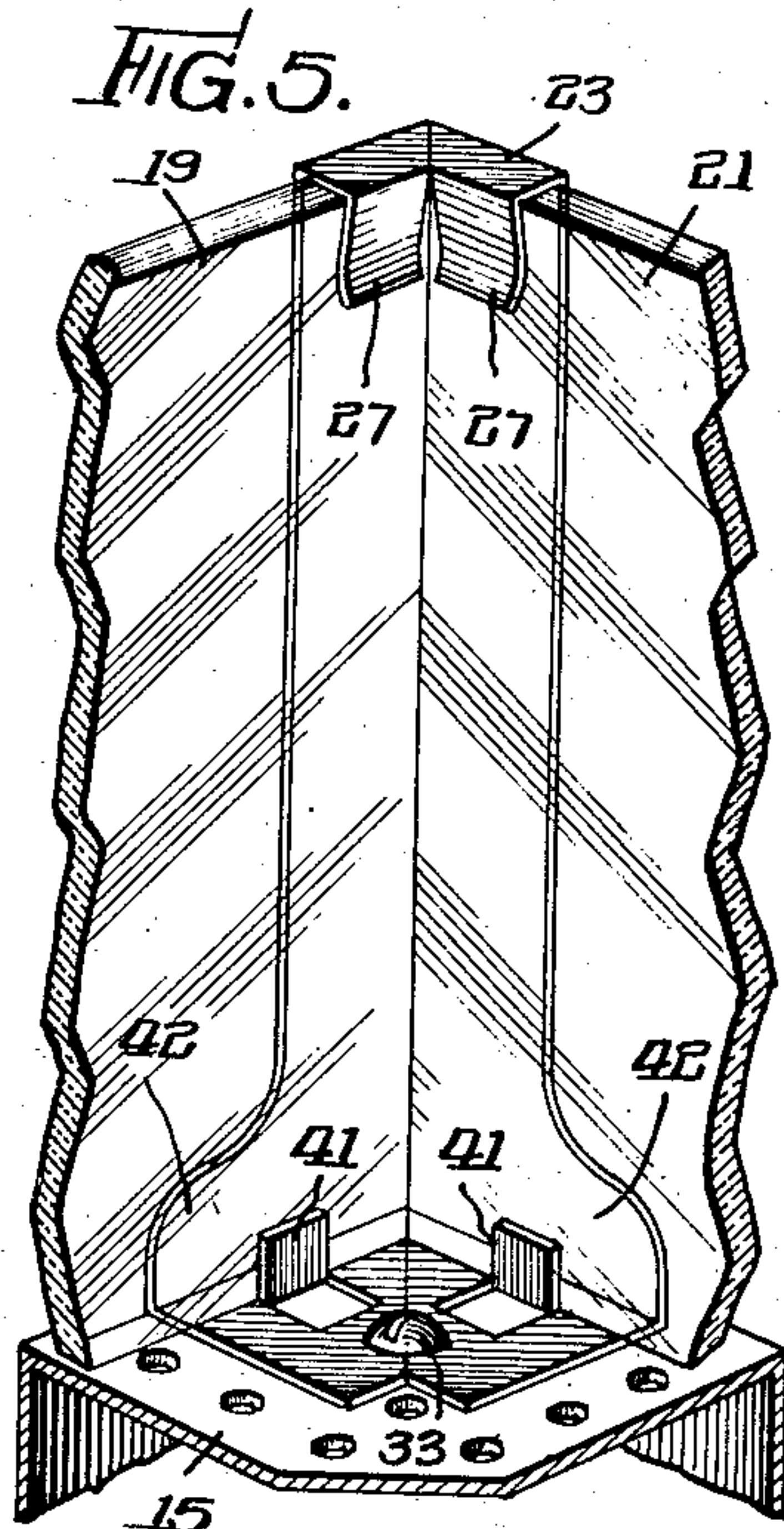
J. E. BALES

2,148,892

PERFORATED TOP FOR MERCHANDISING TABLES

Filed Aug. 2, 1934

2 Sheets-Sheet 2



Inventor
James E. Bales
By: Cox & Moore, attys.

UNITED STATES PATENT OFFICE

2,148,892

PERFORATED TOP FOR MERCHANDISING
TABLESJames E. Bales, Aurora, Ill., assignor to Lyon
Metal Products, Incorporated, Aurora, Ill., a
corporation of Illinois

Application August 2, 1934, Serial No. 738,164

18 Claims. (Cl. 312—140.3)

This invention relates to a merchandising or display table or the like, and it is an object of the invention to provide such a device which may be cheaply and readily constructed, and which is durable and wholly efficient in use for its intended purpose.

It is a further object of the invention to provide a merchandising or display table or counter in which the partitions for articles being displayed or carried thereon are readily adjustable to accommodate the table to the particular articles being displayed.

It is a further object of the invention to provide in such a table or counter means whereby the partitions for the merchandise may be adjusted by manipulation only of those partitions which are to be moved to a new position.

A further object of my invention resides in providing partition retaining clips so constructed that they may be inserted at variant, predetermined positions in the table top and by angular movement may be locked in such position to receive and hold a partition member relatively to an abutting partition which is already in place and without disturbing the position of or lifting the abutting partition member.

Yet another object of my invention resides in providing a partition holding clip having a portion adapted to be inserted at variant, predetermined positions in the table top and having another portion adapted by angular movement lockingly to engage beneath the underedge of a partition member already in place and having a portion adapted to receive and hold a second partition member in locked position relative to said first partition member and without disturbing the position of said first partition member.

Yet another object of my invention resides in providing a partition supporting and receiving clip having portions, one of which is adapted to be inserted in a recess in the table and another of which, when the clip is turned angularly about the axis of the first part, lockingly slides under the bottom edge of an adjacent partition already in place whereby said adjacent partition holds the clip in place, and whereby the clip holds the partition in place.

It is a still further object of the invention to provide in a merchandising or display table or the like having merchandise compartment partitions, readily movable means for supporting the partitions, said means comprising clip members which may be applied to any part of the table top and which may be placed in position by a simple manipulation thereof, the clip and the partition

supported thereby being mutually interlocked by each other.

It is a further object of the invention to provide a merchandising table or counter which can be readily cleaned.

It is another object to provide in such a table or the like, a single plate perforated top construction to facilitate cleaning, the perforations being evenly spaced to facilitate flexibility of adjustment of the merchandise compartments.

It is a further object to provide in a merchandising table having side and end rails, means for readily adjusting the position of the posts which support said rails.

Numerous other objects and advantages of this invention will be apparent from the following description, taken in connection with the accompanying drawings, wherein there is set forth certain preferred embodiments of the invention.

In the drawings, wherein like reference numerals refer to like parts throughout,

Figure 1 is a perspective view of a complete merchandise display table embodying my invention.

Figure 2 is a sectional view of the table taken substantially along the line 2—2 of Fig. 1, looking in the direction of the arrows.

Figure 3 is a perspective detail of one form of side post for supporting the rail glass.

Figure 4 is a perspective view of a modified form of side post support.

Figure 5 is a perspective view of an end or corner post for supporting the rail glasses.

Figure 6 is a view of a modified form of end post.

Figure 7 is a perspective detail of a removable clip for supporting a partition.

Figure 8 shows a modified form of clip.

Figure 9 shows a further modified form of clip, together with a special type perforated base member.

Figure 10 is a top view showing the method of applying the clip of Fig. 9 to its base member, and

Figures 11 and 12 are top views showing the method of applying the clip of Fig. 8 to support a partition.

In the drawings the invention has been shown applied to a merchandising or display table supported upon spaced legs. However, it is to be understood that the invention is equally applicable to counters or the like, wherein the top on which the merchandise is carried is supported upon a box-like support enclosing the space beneath the top. Further, it is to be understood that the invention is applicable to tables or coun-

ters having tiltable tops, as well as to a table or counter of the flat type shown.

As indicated in the drawings in the embodiment illustrated, the table top 15 or support member on which the merchandise to be displayed is carried, is perforated. As seen more particularly in Figs. 11 and 12, the perforations 17 are evenly and symmetrically spaced laterally and longitudinally of the table top. The perforations are of uniform size and may be conveniently formed by the drilling of the table top which may be either metal, wood or other desirable material. The table top may be supported in any convenient or well-known manner upon the legs 19' of the table.

The side rail pieces 19 and the end rail pieces 21, which in the embodiment shown are indicated as being constructed of glass, are held in vertical position peripherally of the table top by means of corner supporting posts 23 and side posts 25 and 26 forming supplemental supporting means for the relatively long side rail glasses. Preferably arranged around the outside of the rail glasses is a rail guard member 27, which may be of metal. The guard member gives an ornamental appearance to the table assembly and protects the rail glasses. It may be of any suitable construction; in the preferred embodiment I have shown it as constructed to be slipped downwardly into position around the outside of the rail glasses and supported on the table top, as shown in Fig. 2. Alternatively it may be formed as a part of the table top. The corner posts 23 and the supplemental side posts 25 and 26 are formed at their upper ends with reversely bent spring clip portions 27 which hold the glass in position. At the bottom, these members are supported upon the perforated table top in any desirable manner, preferably by self-tapping screws which pass through horizontal flanges formed on the bottoms of the support posts and through the perforations in the table top. An ordinary nut and bolt could be used as a securing means, but I prefer to use a self-tapping screw, various forms of which are well-known. By reason of the fact that the table top is perforated throughout its length the side rail support members 25 and 26 may be located at substantially any point longitudinally of the table where support is desired. This is a material advantage for it will be seen that it secures a desirable flexibility of adjustment. The side rail support member 26, unlike side support member 25, not only supports the side rail glass 19, but also forms the support for a merchandise cross divider or partition 29. The side glasses 19 and various partitions may be formed of glass, metal, composition, wood or any desirable material. One preferred form of side rail support post 26 is shown in Fig. 3. In this embodiment the horizontal base flange 31 of the post is secured to the table top by means of self-tapping screws 33 which pass through drilled openings in the flange base and in the table top. A tab 35 is struck from the base and turned vertically upwardly and forms the support for one side of the partition glass 29. A similar tab 37 is struck away from the metal of the horizontal base and bent vertically upward in the opposite direction, forming the support for the other side of the partition glass 29. In Fig. 4 a modified form of base for the side support post 26 is shown. In this form two spring bracket members 39, one for supporting each side of the glass partition 29, are arranged with their horizontal lower portions secured to the horizontal flange of the post 26 and with their upstanding vertical por-

tions in parallel alignment for engagement with the glass. The lower horizontal portions of the brackets may be secured to the base flange of the post by any suitable means, such as by welding. The horizontal portions of the brackets are perforated for the reception of the self-tapping screws 33.

One preferred form of corner post 23 is shown in Fig. 5. In this embodiment the horizontal supporting flange of the post is perforated for the reception of the self-tapping screw 33 by which it is secured to the table top, and portions 41, similar to the portions 35 and 37 of the post 26, shown in Fig. 3, are struck from the base flange and are bent vertically upwardly so that they lie parallel with but spaced from the vertical wall portions 42 of the post with which they are associated. The rail glasses are received between the tabs 41 and the upstanding wall portions in the post, being thus held in position at their lower edges. The upper edges of the rail glasses are held by the reversely bent portions 27 previously described which, in the case of the corner posts, as shown in Fig. 5, are formed into two substantially individual spring clips. A modified form of base for the corner post support is shown in Fig. 6. In this embodiment a separate plate member 43, having vertical upstanding walls 45 arranged at right angles with respect to each other, is perforated for the reception of the self-tapping screw 33 by which it is secured to the horizontal base flange of the corner post and to the table top. The rail glasses are secured in this case at their lower edges between the portions 45 of the member 43 and the upstanding walls 42 of the corner post. Member 43 may be secured as by welding, to the horizontal base flange of the corner post, or it may be held in position merely by the self-tapping screw 33. Means is provided in the form of clips adapted to be detachably inserted in the table top at desired points, for locking in position certain partitions in abutting relation to other partitions previously located in place and in such a manner that such partitions already in place need not be removed nor lifted out of position. These clips are constructed so that when a portion is inserted in one of a plurality of symmetrically spaced openings in the table top and turned angularly, another portion thereof engages under a partition already in place and in such turned position receives or seats another or cross partition whereby the clip and partition are mutually and detachably held in position; the clip being locked in position by the portion underlying the partition already in place and the second or cross partition seated in the clip being held from displacement longitudinally of the first mentioned partition by means of that clip portion which is lockingly inserted in the opening in the table top.

The preferred form of clip or support member by which the several partitions such as indicated at 47, 48, 49, 50 and 51, as shown in Fig. 1, may be removably held in position, is shown in detail perspective in Fig. 7. The clip member 53 may be stamped from a single sheet of metal and formed into vertical upstanding walls 54 and 55, arranged at right angles to each other, a horizontally extending tab 56 extending from the lower edge of wall 54, and a tab 57 extending horizontally from the bottom of wall 55 and then upwardly parallel to wall 55, as indicated at 58, to form a spring bracket portion. Extending downwardly at the juncture between walls 54 and 55 is an extension 59.

The manner of application of the clip is best shown by reference to Figs. 11 and 12. The extension 59 of the clip is first inserted through a perforation 17 in the table top along side of a rail or partition which may be already in position such as side rail 19, as indicated, at the point where the new partition is to be located. The initial position of the clip member is as shown in Fig. 11, wherein the walls 54 and 55 are vertically extending and are arranged at angles of 45 degrees with respect to the rail member 19 with which the clip is to be associated. After the clip has been moved downwardly so that the bottom portions of walls 54 and 55 rest upon the table top, the clip is rotated counter-clockwise by reference to Fig. 11 to slide the horizontal flange 56 beneath the wall member 19, as indicated in Fig. 12. The clip is now in such position that the new partition 47 to be inserted may be forced between wall 55 and spring clip 58, and thus securely held in position. It will be noted that during the application of the clip the fixed rail member 19 is not disturbed, it being unnecessary to raise or adjust the rail already in position during the applying operation. After the clip has been rotated to the position of Fig. 12 and the partition 47 inserted, the entire assembly is locked in position. The clip member and the new partition 47 are mutually interlocked, it being understood that a similar clip supporting means is to be arranged at the other end of the wall 47 to hold it from rotation. The partition 47 then locks the clip from rotation so that flange 56 cannot escape wall 19, and the clip in turn locks the partition 47 in place by virtue of the engagement of its walls 55 and 58 with the partition. By referring to Figures 2 and 12, it will be noted that when the clip is positioned as in Figure 12, the extension or prong 59 of the clip by reason of its engagement in one of the holes of the table top, prevents the clip sliding longitudinally of the cross-related partition such as 47 as shown in Figure 2, whereby the partition which is seated or carried by the clip is locked in predetermined abutting relation with respect to its angularly disposed partition.

It will be seen that the clip 53 provides a ready means for the locating and adjusting of partitions. In locating a new partition with respect to a rail or a previously located partition it is merely necessary to insert the clip extension through the desired hole in the table top. The clip is then rotated to bring its horizontally extending tab under the already located wall member with which the new partition is to be associated after which the partition may be put into position and will be held firmly in place. Inasmuch as the table top is uniformly perforated over its entire surface partitions of varying lengths may be variously located over the entire table top surface to accommodate the table to the particular articles to be displayed. The adjustment or changing of partitions is a simple operation which any sales person can effect merely by manipulation of the clip members.

In Fig. 8 there is shown a modified form of clip similar to that shown in Fig. 7 except that the projection which is to extend through the perforation of the table top is a separate bar 60, which is secured to the juncture between the walls 54 and 55 of the clip, as by welding. The bar 60 may be threaded upon its lower end, if desired, to receive a nut 61, after the clip has been moved into partition holding position. The manner of

using the modified form of clip shown in Fig. 8 is otherwise substantially similar to that described with reference to the Fig. 7 embodiment.

In Fig. 9 a still further modified form of clip is shown. In this form the extension 64, which is to extend through the table top, has at its lower end a horizontally extending lip portion 65. The portion 65 extends horizontally from the vertically depending projection 64 at an angle of approximately 45 degrees with respect to the wall 54 of the clip. With this form of clip a table top member having cross-shaped, symmetrically spaced openings 17', as indicated, would be used, the openings having their longer dimensions running longitudinally and transversely of the table surface. The clip is initially applied to the table top as indicated in Fig. 10, with its walls 54 and 55 at angles of 45 degrees with respect to the fixed wall 19 with which it is to be associated, in the same manner as was described with reference to the application of the clip shown in Fig. 8. In this position of the clip the horizontally extending projection 65 slides through the opening in the table top along one of its long dimensions. On rotation of the clip from its dotted to its full line position, the horizontally extending projection 65 is rotated through an angle of 45 degrees until it is beneath a portion of the table top between the two long dimensions of the cross-shaped opening. On application of the partition the clip of Figs. 10 and 11 is not only locked in position by virtue of the weight of the partitions but also positively by reason of the engagement between the table top and the extending portion 65.

By reason of the perforations in the table top the table assembly may very easily be kept clean as dirt which tends to accumulate in the merchandise compartments can be readily sifted through the perforations and thus removed from the table surface. By reason of the readily removable clips, partitions may be easily inserted or removed, or changed from one position to the other to accommodate the size of the articles being displayed and the merchandising conditions under which the table is to be used. The table is thus readily adaptable to various types of uses. By reason of the multitudinous arrangement of the openings in the table top a very great number of adjustments and a wide flexibility is permitted. The partitions may be located or relocated by simple manipulation of the clips, and in several embodiments of the invention without the removal or manipulation of nuts or bolts or the like. The operation of adjusting the clips is one that any salesperson can readily perform. In inserting a partition it is not necessary to move or otherwise disturb the previously located wall such as a rail or partition with which the new partition is to be associated.

The clips and the partitions which they hold in place are mutually interlocking, that is, after the clip and partition have been located the partition prevents the clip from rotation and accidental removal and the clip holds the partition in place. The clips when in position are held in upright alignment by the supported rail or partition walls which permits the use of a table top constructed of but a single sheet of metal or the like, thus producing a construction which is cheap and yet efficient.

The multitudinous perforations in the table top, together with the use of self-tapping screws, provides a ready means for locating the corner support posts and more particularly the side rail

supporting posts in substantially any desired position.

It is obvious that numerous changes might be made in the specific forms of the invention shown for purposes of illustration. For example, rail guards 27 or the threads and nut 61 associated with the clip of Fig. 8 could be omitted without departing from the spirit of the invention. The invention contemplates the use of equivalents throughout. I therefore do not wish to be limited to the precise embodiments shown or described, but only as indicated in the following claims.

What I claim as new and desire to secure by Letters Patent is:

1. In a display table, a table top having spaced openings, and an upstanding wall adjacent an opening, means forming a wall seat, a second wall mounted in said seat, said means having a pivotal portion inserted in an adjacent opening to pivot said means to be turned toward said upstanding wall, said means including a portion adapted automatically to engage and interlock with said upstanding wall when said means is so turned whereby to lock said means relative to said upstanding wall.
2. In a display table, a table top having spaced openings, and an upstanding wall adjacent an opening, means forming a wall seat, a second wall mounted in said seat, said means having a portion interlocking with said upstanding wall to prevent upward movement of said means, and said means having a portion arranged pivotally in at least one of the openings of said table top to prevent lateral movement of said means.
3. In a display table, a table top having spaced openings, and an upstanding wall adjacent an opening, means forming a wall seat, a second wall mounted in said seat, said means having a portion adapted lockingly to engage and disengage from said upstanding wall, and said means having a portion pivotally engaging an opening whereby said means may be shifted to engaging and disengaging position.
4. In a display table, a table top having spaced openings, and an upstanding wall adjacent an opening, means forming a wall seat, a second wall mounted in said seat, said means having a portion inserted in an opening and arranged to permit the shifting of said means relatively to said upstanding wall, said means being a portion adapted in one shifted position to interlock with said upstanding wall and in another shifted position to be free of said upstanding wall to permit the detachment of said means.
5. In a display table having a perforated table top, a plurality of merchandise confining walls thereon, a support member for supporting a removable wall in position with respect to a relatively fixed wall comprising a projection adapted to extend through the table top to locate the support in position thereon, a horizontally extending flange adapted on rotation of the support to underlie the relatively fixed wall, and bracket means adapted to engage the sides of the removable wall to hold said wall in position, said wall in turn preventing rotation of said means to prevent withdrawal of said horizontal flange from beneath said relatively fixed wall.
6. A clip for a display table comprising a seat for removably supporting a merchandise confining wall in position upon a table top, which top is provided with spaced perforations, said clip including an extension adapted freely to be inserted in one of said openings and forming an

axis to permit the turning of said clip relatively to said table top, said clip including a lateral portion adapted to pass beneath the edge of an adjacent wall portion when said clip is turned on said axis.

7. A clip for a display table comprising a seat for removably supporting a merchandise confining wall in position upon a table top, which top is provided with spaced perforations, said clip including an extension adapted freely to be inserted in one of said openings and forming an axis to permit the turning of said clip relatively to said table top, said clip including means adapted to interlock with a relatively fixed member on said table top when said clip is turned on its axis.

8. A clip for a display table comprising a seat for removably supporting a merchandising confining wall in position upon a table top, which top is provided with spaced perforations, said clip including an extension adapted to engage one of said perforations and to be shiftable therein, and said clip including means adapted to interlock with a relatively fixed member on said table top when said clip is shifted, whereby to lock said clip in predetermined position on said table top.

9. In a table having a perforated top and a retaining wall, a clip, for supporting said wall in position upon said top, and having a projection adapted to extend through the table top, a support means for said wall, and a projection adapted to be moved beneath a relatively fixed object associated with the table top as the clip is moved to supporting position to prevent removal of said clip from said table top.

10. In a display table, a table top member having therein a plurality of cross-shaped perforations, a rotatable support member for removably supporting a merchandise confining wall in position upon said table top comprising a wall supporting bracket and an extension adapted to project through a perforation in the table top, said extension having an angularly formed lip thereon adapted to pass through one of the cross-shaped perforations, said extension being turnable to carry the lip out of registration with the opening.

11. The method of securing a removable wall upon a perforated table top with respect to a relatively fixed wall which comprises inserting a portion of a support member through said table top to locate said support member, rotating the support member to bring a horizontally extending flange thereon in position beneath the relatively fixed wall, and inserting the removable wall within a seat formed upon said support member.

12. In a display table having a perforated top and a merchandise confining wall arranged thereon, means for removably supporting said wall comprising a clip having a projection adapted to extend through a perforation in the table top for pivotal movement therein, a pair of angularly arranged substantially vertical portions, a horizontally extending flange secured to the base of each of said portions, and a vertical extension secured to one of said horizontal flanges and arranged in parallel spaced relation to the vertical portion with which said flange is associated, the other of said horizontal flanges having a free outer edge and being adapted to engage a member for holding the clip in position in the perforation.

13. In a display table having a perforated table top and upstanding merchandise confining

walls thereon, a clip member for removably securing a removable wall in position with respect to a relatively fixed wall comprising a clip having an extending portion adapted to project through the perforated table top for pivotal movement therein, a horizontally extending flange adapted to rest upon the table top and underlie the relatively fixed wall for retaining the clip in position, and spaced vertically extending portions for engaging the sides of the removable wall, the horizontally extending flange having a free outer edge.

14. A clip for supporting a partition on a display table, said clip including means forming a seat for the partition and having an extension adapted to be inserted in one of a plurality of spaced openings in the table top, said extension being formed to permit said clip to be turned axially about said extension as an axis, said clip having means adapted to interlock with an adjacent partition located on said top whereby to hold said clip in locked position when so turned.

15. In a display table, a table top having spaced openings, a wall member extending upwardly from said top, a clip having a wall seat, a second wall member mounted on said seat, said clip having a foot or extension inserted in one of the openings adjacent the first mentioned wall, said foot being shaped to permit said clip to be angularly moved about said foot as an axis, and said clip having a lateral extension adapted to engage the first mentioned wall member on the table top to retain the clip.

16. A clip for a display table, comprising means for removably engaging and positioning a merchandise confining wall upon a table top, which top is provided with spaced perforations, said clip including an extension adapted to be freely inserted in one of said openings and forming an axis to permit the turning of said clip relatively to said table top, said clip including means adapted to interlock with a relatively fixed member on said table top when said clip is turned on its axis.

17. In a display table, a table top having spaced openings, an upstanding wall adjacent an opening, a second wall mounted on the table top, and means to engage and position a portion of the second wall, said means having a portion adapted lockingly to engage and disengage from said upstanding wall, said means having a portion pivotally engaging an opening whereby said means may be shifted to engaging and disengaging position.

18. In a merchandising table, a table top member having substantially uniform perforations over substantially its entire surface, said perforations having a central portion adapted to support and position a pivot member for pivotal movement in the plane of the table top, said perforations being symmetrically configured in all directions and being extended longitudinally from said central portion to accommodate a corresponding angularly formed locking lip on a supporting bracket.

JAMES E. BALES.