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(71) Applicant: **SWEDOOR AB**
Box 550
S-265 01 Astorp (SE)

(72) Inventor: **Larsson, Arne**
Brittsommargatan 12
S-26035 Ödakra (SE)

Artman, Anders
Seglarvägen 2 Domsten
S-255 90 Helsingborg (SE)

Sandström, Lars-Erik
Adalsvägen 33
S-262 00 Ängelsholm (SE)

(74) Representative: **Graudums, Valdis et al**
Backers Patentbyrä AB Drottninggatan 15
S-411 14 Göteborg (SE)

(54) A door arrangement.

(57) A fitting for mounting a turnable door blade and arranged for journally mounting the door blade in a jamb mounted hinge.

The fitting has a recess (47) extending from door side to door side. In said recess there is arranged a flexible, resiliently returning tounge element (50) which has a lock shoulder (49) placed generally at the centre of the recess.

The lock shoulder locks an insert element of a jamb mounted hinge and said insert element mounts the door blade in the jamb in the desired mounting manner (13).

The invention also provides a unitary type of jamb long-piece (38) having easily removable covering devices (38, 39, 40) for hinge elements or lock elements (Figure 10) arranged symmetrically relative the centre of the jamb long-piece.

The placement of the recesses (112) is adapted to symmetrically arranged door mounted hinge elements and lock elements.

The recesses are identical as to contour - the depths thereof may be different - and the number of recesses is at least three.

The hinge element (114) and the lock element form parts of units of recess contour shape, each one having an attachment part (16) attachable to a respective one of the recesses.

The invention also relates to a door blade provided with a fitting of the type mentioned.

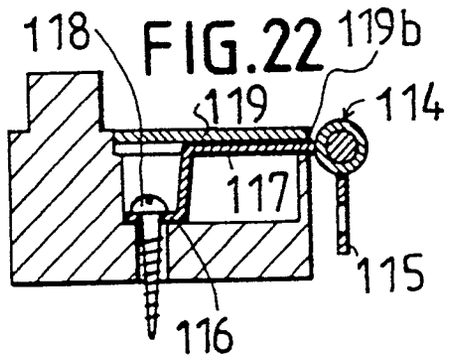

FIG.22

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Description

A DOOR ARRANGEMENT

The present invention relates to so called turnable doors i.e. a door set having a door blade arranged for arbitrarily left or right hand side mounting. The present invention also relates to a door jamb device preferably forming a part of the door set. More precisely the invention relates to a fitting for a door blade of the type mentioned, but also to a door blade and a specific door jamb device of a structure making the jamb especially well suited for in situ adapting the jamb to the actual type of mounting.

The problem of the present invention, basically, is to broaden the door turning concept. In that case where the door already is a turnable door, but merely in its own plane, i.e. such that one and the same door side always will be turned either outwards or inwards, the problem according to the invention i.a. resides in making this door also turnable around a vertical axis, meaning that an arbitrary side of the door blade may be turned in an arbitrary direction. Further on, the problem resides in making the door jambs adaptable in situ to the actual type of mounting when desired.

The door blades which are turnable in their own plane are well known for many years. The idea of symmetry - as to placing or possibility of placing active elements, i.e. a lock, a door handle and hinge elements realative the centre line perpencicular to the long edge sides - such turning possibility is based on basically is a good idea. The turnability, however, is not suited for door blades which do not have the said symmetric external design, for instance a door blade which has a glas therein placed unsymmetrically relative the centre line perpendicular to the long edge sides. Further on, the known turnability does not give the end user a possibility to determine which side of the door should be turned in a certain direction.

Additionally, such a limitation of known doors will be amplified due to the fact that the end user cannot decide in situ for a right hand side or left hand side mounted door, because the door jamb he already has bought has been prefabricated as a jamb for right hand side or left hand side mounting.

This means an expensive storage of different jamb types and a more expensive manufacturing.

According to the present invention the said limitations of known turnable doors are eliminated and there is offered a considerably more flexible system from a consumer point of view and a manufacturing alternative which is cheaper and more simple than the known systems.

The present invention provides i.a. a fitting for mounting on to a turnable, i.e. an arbitrarily left hand side or right hand side mountable door blade and arranged for a journalled mounting of the door blade in a jamb mounted hinge. The fitting is characterized by means for forming at least partially a passage from one door side to the other door side, and that a flexible resiliently returnable tounge element is arranged in the passage and comprises means for lock engagement with a journalled insert element of a jamb mounted hinge insertable into the passage from either side of the door.

In a practical embodiment the outer contour of the fitting, for instance the width and length, is substantially equal to the outer contour of a groove or recess arranged crosswise in the long edge side of the door blade and open at both door sides and arranged for fixing the position of the fitting in the door jamb.

In one embodiment a recess is formed in the fitting crosswise the width of the fitting and forms partially said passage, and the flexible tounge element is formed by through-going grooves generally at the centre of the recess, and a lock shoulder is formed on the tounge in the recess.

In order to conceal the fitting from the outside, when a certain mounting has been selected, the fitting arrangement preferably also comprises a cover plate having a shape corresponding to the cross-section at each end of the recess, and said plate has means for attachment of the plate on complementary shaped attachment means on the fitting in order to fully cover the passage from any door side. However, when so required the cover plate may be arranged for covering also the rest of the fitting in the recess.

In order to reduce the flexing distance of the tounge when inserting and withdrawing the insert element of the hinge, the side of the lock shoulder facing the passage preferably slopes towards the bottom of the tounge.

The flexing movement of the tounge may be accomplished by means of for instance a screw driver or "automatically" when inserting and withdrawing the insert element by giving the shoulder and/or the insert element a suitable shape, for instance a bevelled shoulder sloping in the insertion direction as well as the withdrawal direction.

The present invention also provides a turnable door blade comprising fitting elements on one long edge side of the door and lock elements on the opposite long egde side. The door blade is characterized in that each fitting element is shaped such that it allows insertion, from any side of the door blade, of a journalled insert element of a jamb mounted hinge.

In order to make the door blade turnable also according to the known turning principle, the door blade preferably is such that the operative elements of the fittings and locks, respectively, are placed symmetrically relative the centre line perpendicular to the long edge sides of the door blade, implying that the door blade will be turnable around a vertical axis as well as around a horizontal axis perpendicular to the plane of the door blade.

In a practical embodiment, the fitting has such an external shape and is dimensioned such that it will be accomodated in a groove or recess extending crosswise the long edge side and open at each door side, whereby the fitting at least partially forms a passage from one door side to the other door side, and a flexible tounge element is formed in the

passage of the fitting and comprises means for lock engagement with the jamb mounted insert element.

In order to allow an in situ choice of mounting, the present invention also provides a jamb for a turnable door blade. This jamb is characterized in that each long side of the jamb is premanufactured with recesses intended for in situ mounting of hinge elements and lock elements, the positioning of such recesses being adapted to symmetrically arranged, door mounted hinge elements and lock elements.

A common feature for the several embodiments of the door jamb is the existence of an identical number of recesses in the jamb long-pieces, the fact that the number of recesses is at least three, and the fact that the recesses are identically as to contour.

The term identically as to contour does not exclude for instance that case where recesses identical for the rest have different depths. For instance it might be unnecessary to make the recesses located at the ends of the jamb long-pieces as deep as the mid recess. The latter one necessarily has to be of a depth determined by the striker plate and the bolt and such depth generally is larger than the depth required for the hinge elements. If it will be necessary to use also the mid recess as an attachment place form the actual hinge element, a "dummy element" is placed very simply in the recess.

The arrangement may be further defined in that the hinge elements and lock elements are formed as individual units adapted to the recess contour and each one has an attachment part for attachment to a respective one of the recesses, possibly in combination with a "dummy".

In order to conceal the attachment to the jamb, the attachment part is covered by a cover plate in the plane of the jamb, possibly with a certain overlap. When so required, the plate may cover the entire attachment.

This plate preferably is arranged with a part covering a section of the recess which otherwise would be visible in a direction towards the plane of the jamb opening.

The depth of at least the mid recess corresponds to the necessary depth for the bevelled bolt and the striking plate.

Basically, each recess has two depth levels, one defining a bottom and the other a level breaking through the front side of the jamb at a level at a minor depth in the jamb.

In one embodiment the attachment part is anchored to the bottom of the recess.

Preferably, the arrangement is such that the recess at said, at a minor depth from the jamb surface existing level, acts as a support surface for the cover plate and/or a part of the hinge element or the lock element supplementing the attachment part. The said supplementing part comprises a joint device for a hinge element or a striking plate.

In another embodiment the attachment part is anchored at a level breaking through the jamb front side.

The invention will now be exemplified by reference to the accompanying drawings, where

Figure 1 shows the principle of turning a door blade in one and the same plane according to prior art,

Figure 2 shows a prior art symmetric door blade,

Figure 3 shows prior art fittings for the co-action with insert elements on a jamb mounted hinge,

Figure 4 shows the long edge side of the known door blade provided with locking elements,

Figure 5 shows the locking element from one side,

Figure 6 shows recesses for hinges of a known long side of a jamb provided with hinges,

Figure 7 shows a recess provided with a striking plate,

Figure 8 shows the complete prior art jamb,

Figure 9 shows a prior art insert hinge,

Figure 10 schematically shows a jamb long-piece of a unitary type according to the present invention for left hand side and right hand side, respectively, mounting,

Figure 11 shows a section of a long edge side of a door blade having fittings mounted therein according to one embodiment of the present invention,

Figure 12 shows a section of the the broad side of the door blade together with the fitting according to the present invention,

Figure 13 shows the fitting according to the invention seen from the side which should be turned against the bottom of the recess in the long edge side of the door blade,

Figure 14 is a section a long line XIV-XIV in Figure 13,

Figure 15 is a section a long line XV-XV in Figure 13,

Figure 16 shows a cover plate according to the present invention for use together with the fitting according to the present invention,

Figure 17 shows the cover plate in Figure 16 from one side.

Figure 18 in a front view shows the lap side of a jamb having a recess according to the present invention,

Figure 19 shows a hinge element and a cover plate mounted in the recess,

Figure 20 shows a striker plate mounted in the recess,

Figure 21 is a cross section through a recess according to Figure 18, but having a cover plate mounted,

Figure 22 is a cross section through the arrangement in Figure 19, but with a cover plate mounted,

Figure 23 is a cross section through the arrangement in Figure 20,

Figure 24 shows a second embodiment of a recess in the lap side of a jamb,

Figure 25 shows a hinge element mounted in the recess,

Figure 26 shows a striker plate mounted in the recess,

Figure 27 is a cross section through the recess in Figure 24, but with a cover plate

mounted,

Figure 28 is a cross section through the arrangement in Figure 25, but with a cover plate mounted,

Figure 29 is a cross section through the arrangement in Figure 26,

Figure 30 shows a further embodiment of a recess in a jamb lap side,

Figure 31 shows a hinge element mounted in the recess,

Figure 32 shows a striker plate in the recess,

Figure 33 is a section through the recess in Figure 30, but with a cover plate mounted,

Figure 34 is a cross section through the arrangement in Figure 31, but with a cover plate mounted,

Figure 35 is a cross section through the striker plate in Figure 32,

Figure 36 shows one more type of recess in the jamb lap side,

Figure 37 shows the recess with a hinge element mounted therein,

Figure 38 shows a striker plate mounted in the recess,

Figure 39 is a cross section of the door jamb side in Figure 36 with a cover plate placed over the recess,

Figure 40 is a section through the arrangement in Figure 37, but with a cover plate,

Figure 41 is a cross section through the arrangement in Figure 38, but with a cover plate,

Figure 42 shows a further type of recess in the jamb lap side,

Figure 43 shows a hinge element mounted in the recess,

Figure 44 shows a striker plate moounted in the recess,

Figure 45 is a cross section of the jamb in Figure 42, but with a cover plate mounted,

Figure 46 is a cross sectin of the arrangement in Figure 43, but with a cover plate mounted,

Figure 47 is a cross section of the arrangement in Figure 44, but with a cover plate mounted,

Figure 48 shows one more type of recess in the jamb lap side,

Figure 49 shows a hinge element mounted in the recess

Figure 50 shows a striker plate mounted in the recess,

Figure 51 is a section through the recess in Figure 48, but with a cover plate mounted,

Figure 52 is a section through the arrangement in Figure 49, but with a cover plate mounted,

Figure 53 is a cross section through the arrangement in Figure 50, but with a cover plate mounted,

Figure 54 shows one more embodiment of recess in the jamb lap side,

Figure 55 shows a hinge element mounted in the recess,

Figure 56 shows a striker plate mounted in the recess,

Figure 57 is a cross section of the recess in Figure 54, but with a cover plate mounted,

Figure 58 is a cross section of the arrangement in Figure 56, but with a cover plate mounted,

Figure 59 is a cross section of the arrangement in Figure 56, but with a cover plate mounted,

Figure 60 is a partial view showing the hinge element attachment at an overlapping door blade,

Figure 61 is a cross section of the door jamb and door in Figure 60,

Figure 62 is a partial view showing a cover plate with overlap mounted in a recess in a jamb lap side,

Figure 63 shows a further type of recess in a lap type of jamb,

Figure 64 shows a recess and a hinge element,

Figure 65 shows a recess with a striker plate arrangement,

Figure 66 shows the recess in cross section,

Figure 67 shows the recess in cross section and a hinge element, and

Figure 68 shows the recess and a striker plate.

The door blade 10 in Figure 1 is symmetric in the meaning that the operative hinge and lock elements of the blade are placed or placeable symmetric relative the centre line 11 perpendicular to the long edge sides of the door blade. The jamb 13 is either a left hand or a right hand mountable jamb (in Figure 1 both possibilities have been indicated) and is provided with hinges arranged symmetrically relative the centre line prependicular to the long sides.

This means that the structure of the door set makes the door blade turnable as indicated by the reference numerals 10, 10 , 10" 10" ..., i.e. the turnability means that one and the same side of the door blade always will be turned in a certain predetermend direction.

In Figure 2 the door blade 10 is shown separately and schematically and it may be seen that for instance the fittings 14 and 15 are placed at one and the same distance from the line 11. Further on, it is seen that the recesses 16,17 for the door handle and the key operated lock, repspectively, are identical and placed at one and the same distance from the line 11, meaning that such elements may be shifted when the door blade is turned around.

Figure 3 shows the long edge side 18 of the door blade and fittings 14, 15 of known type placed in recesses in the edge side 18. Said fittings are, as shown by the broken lines 19, accessable merely from one side 20 of the door blade 10.

The second long edge side 21 of the door blade is provided with a lock and bolt arrangement 22, the operative elements of which, a door handle and a key, are insertable through openings 23 and 24. Said openings are placed symmetrically relative the symmetry line 11, which extends centrally through the bevelled bolt 25. As shown by the double lines 26, the long edge sides 21 is bevelled or sloping for giving a smaller gap between the jamb and the bolt side of the door blade when the door is closed, but

still allowing free passage of the inner corner edge of the door blade relative the jamb when the door blade is opened and closed.

Figure 6 shows the long-piece of a jamb of plastics having recesses 27, 28 for hinges, and Figure 7 shows the long-piece of a wooden jamb provided with a striking plate 29.

For the sake of completeness Figure 8 shows a complete symmetric jamb which in this case is provide with three sets of hinges 30, 31, 32 in one long jamb piece and a striker plate 33 in the second long-piece. In Figure 9 the complete prior art hinge has been shown. Said hinge comprises a fitting element 34, identical to the fittings 14, 15 in Figure 3, and an insert element 35 for jamb mounting in recesses of the type 27, 28.

Figure 10 shows a unitary jamb piece 36 which preferably but of course not exclusively may be used together with the fitting according to the present invention. The jamb piece is symmetric in that it has been provided with premanufactured recesses 38, 39, 40 of the type previously mentioned arranged symmetrically relative the centre line 37. Said prefabricated recesses may for instance be prepared as weakened portions of the jamb material allowing an easy breaking away of the material for forming of the recesses in the jamb. From a manufacturing point of view a complete cutting of the recesses into an end shape is preferable. After the recesses have been cut they are covered by an easily demountable plate. For the total flexibility it is of importance that the recesses are contour-identical, which also means that the corresponding hinge and lock elements should have an identical outer contour. The depths of the recesses may differ and if required a compensation may be made by dummies.

The new fitting 41, according to one embodiment of the present invention, for the long edge side of the door blade has been shown schematically in Figures 11 and 12. In Figure 11 the fitting is screwed into a recess 43 in the long edge side 42 of a door blade 44. The recess 43 opens up at each side 45, 46 of the door blade and the outer contour thereof corresponds to the contour of the fitting 41.

In this particular case the recess has an "outer contour" which is rectangular and forms a straight, cut groove. Of course, the outer contour may be given any known shape different from a rectangular, for instance according to Figures 31 and 32 which show the shape or outer contour of recesses in the jamb. Such a design may be of advantage for a more efficient fixing of the actual element in the recess.

The fitting in Figures 11 and 12 has a through-going recess 47 accessable from both sides 45, 46 of the door blade. This access is such that an insert element 48, 49 (Figure 9) of a jamb-mounted hinge may be inserted from either side, such that the shoulder 49 on a flexible, resiliently returnable tounge 50 formed by through-going grooves 52 may be inserted in the opening 51 (Figure 9) of the insert element.

In Figure 13 there is a more detailed diagram of the fitting 41. Figure 13, which shows the side of the fitting which is to face the bottom of the recess, relates to one embodiment where the recess 47 is defined by walls 53, 54 having cut outs 55 - 58 formed therein acting as means for fixing a cover plate 59 (Figures 16, 17). The plate 59 is of a height corresponding to the groove which will be formed between the long edge side and the fitting and thus conceals the groove completely when it is mounted in a respective pair of recesses 55, 58 by means of shoulders 60, 61 after the door blade 44 has been mounted in the jamb in the desired manner.

As shown in Figure 15, the lock shoulder 49 is bevelled in a direction towards the "hinge" of the tounge 50. This means that the flexing out distance of the tounge may be reduced when inserting or removing the element 48.

This is carried out in a manner known per se by for instance inserting a screwdriver in a groove 52 for flexing out the flexible and resiliently returning tongue 50.

When so required the said bevelling may be such that entering facilitating surfaces exist on the lock shoulder and/or the element 48 which allows an "automatic" insertion or removal, i.e. there is no need for any tools.

As a material for the mounting it may for instance be used some acetal plastics or a plastics material of a corresponding strength.

In Figures 18 to 68 corresponding elements have been given the same reference numerals in order to simplify the description.

The reference numeral 110 in Figure 18 denotes a jamb long side of a door jamb seen from the side thereof where the lap 111 is arranged. In said lap there are in total three recesses 112 (only one has been shown) formed symmetrically relative the centre line perpendicular to the jamb long sides or jamb long-pieces. There are basically two levels in the recess 112, one bottom level 112a and a level 112b at a minor depth from the lap. The depth of the recess 112 is such that a bevelled bolt will be accomodated, and the extension of the recess 112 rightwards in Figure 18 is such that a correct placement of a striker plate will be possible. The extension of the recess leftwards preferably is at a maximum, i.e. the recess is formed as close to the lap corner as possible, in order to strengthen the attachment of the jamb to a door opening, but also for providing a strong and reliable attachment of the hinge elements.

There is a through-going hole 113 in the jamb lap side arranged for an attachment screw, which fixedly positions the jamb in a door opening, but also in a stable and reliable manner fixes the hinge element.

Figure 18 does also disclose that the recess, at the upper depth level 112b breakes through the side of the jamb visible in the direction towards the plane of the jamb opening.

In Figure 19 a hinge element 114 comprises an insert flap 115 and an attachment part 116 and a support 117 are mounted in the recess 112 and attached by a screw 118 in the jamb piece. In order to conceal the attachment by means of the screw, as shown in Figure 22, there is a cover plate 19 snapped into the upper recess 112b and shaped such that it also has an edge covering part 119b. This part guarantees that there will be no openings left which

could disturb the entire appearance when looking at the jamb in a direction towards the plane of the jamb opening.

In Figure 20 there is a striker plate 120 placed in the recess, and as in Figure 22 measures have been taken to fully cover the upper level 112b of the recess by a support part 121 which rests against the upper depth level plane 112b.

Also in that case where there is no hinge element or striker plate element in the recess 112, measures are taken for fully covering the recess by a cover plate 122 (Figure 21). The cover plates may be provided with some minor overlap (Figure 62) for concealing any cracks which may have been formed in the surface when working out the recess.

The embodiment according to Figures 24 to 29 differs from the one in Figures 18 to 23 merely in that the contours of the recesses at the two main levels 112a, 112b have been formed somewhat different. Additionally the striker plate 120 is of a stronger type.

The recesses in Figures 30-35 show a further example of cutting technique and a somewhat different type of geometry prevails. Below the attachment hole 113, in all embodiments, there is a pair of further holes 123 for attachment of the hinge element 114.

In Figures 36 to 41 there is shown a further embodiment of cutting in the jamb lap side. The hinge element 114 shown is intended for an overlapping door of the type shown in Figure 60, but with a somewhat different hinge element placement. The cover plate 127, actually two different plates 127, 127a are here of a more pronounced angle profile type than the previous plates.

The arrangement according to Figures 42 to 47 differs merely in that the striker plate is somewhat reinforced.

In Figures 48 to 57 there has been obtained a stronger attachment of the jamb by placing the opening 113 outside the actual recess 112.

In Figures 54 to 59 there is a more pronounced circular geometry but for the rest the prerequisites are basically the same.

In all embodiments the hinge element or the lock element is integral with recess size dimensioned units, i.e. the dimensioning of the attachment parts and the support parts of the element, possibly in combination with the cover plate and/or a dummy, do fill out the recess in the jamb and give an overall appearance basically corresponding to a "taylored fitting".

As previously mentioned the depths of the recesses may be different, i.e. the mid recess may be deeper than the recesses at the ends of the long-pieces of the jamb. In this manner more "wood" is left for attachment of the hinge elements. If a hinge element is required also in the mid recess, a level compensation is made very simply by using a "dummy".

Figure 62 merely shows an example of a cover plate 24 having an overlap edge 125 intended for concealing cracks and breake throughs in the edge of the recess.

Finally, Figures 63 to 68, show a complete system of details for the intended functions and the user flexibility aimed at. This system is particularly well suited for production and meets high end user demands.

Claims

1. A fitting for mounting onto a turnable, i.e. an arbitrarily left hand side or right hand side mountable door blade, and arranged for journally mounting the door blade in a jamb mounted hinge, **characterized** in that the fitting (41) has means for forming at least partially a passage from one door side to the other door side (41, 46), and that a flexible, resiliently returning tounge element (50) is arranged in the passage and comprises means (49) for locking engagement with a journalled insert element (48) of a jamb mounted hinge insertable into the passage from either door side.

2. A fitting according to claim 1, **characterized** in that the fitting (41) has an outer contour, for instance width and length, generally equal to the outer contour of a crosswise extending groove (43) or recess in a long edge side (42) of a door blade and open at each door side (41, 46) and arranged for fixing the fitting in the proper position in the edge side of the door.

3. A fitting according to claim 2, **characterized** in that a recess (47) is formed in the fitting crosswise the width of the fitting and forms partially said passage, that the flexible tounge element (50) is formed by a throughgoing groove (52) generally at the centre of the recess, and that a lock shoulder (49) is formed on the tounge in the recess, possibly provided with bevelled portions for maneouvring the tongue when inserting and withdrawing, respectively, the insert element.

4. A fitting according to claim 3, **characterized** in that a cover plate (49) having a shape equal to the cross section at each end of the recess (47) has means (60, 61) for attaching the plate onto complementary shaped attachment means (55 to 58) on the fitting in order to fully cover the passage from any door side.

5. A fitting according to claim 4, **characterized** in that the lock shoulder on the tounge has an upper side which is inclined downwards towards the bottom of the tounge.

6. A turnable door blade, comprising fitting elements on one long edge side of the door blade and lock elements on the opposite long edge side, **characterized** in that each fitting element is shaped such that it allows insertion, from any side (45, 46) of the door blade (44) of a journalled insert element (48) of a jamb mounted hinge (35).

7. A door blade according to claim 6, **characterized** in that the operative elements of the fittings and locks are placeable symmetricly relative the centre line perpendicular to the long egde sides of the door blade, whereby the door

blade will be turnable around a vertical axis as well as a horizontal axis perpendicular to the plane of the door blade.

8. A door blade according to claim 7, **characterized** in that the fitting element (41) has such an outer shape and dimension that the fitting element may be accommodated in a fixed position in a groove (43) crosswise the long edge side and opening up at each door side, that the fitting element forms at least partially (47) a passage from door side to door side (45, 46), and that a flexible tounge element in the passage of the fitting element comprises means (49) for lock engagement with the jamb mounted insert element (48).

9. A jamb for a turnable door blade, **characterized** in that each jamb long-piece (36) is premanufactured with recesses (38, 39, 40) intended for in situ mounting of hinge elements and lock elements, and positioning of said recesses being adapted to symmetrically arranged door mounted hinge and lock elements.

10. A jamb according to claim 9, **characterized** in that the jam long-pieces each have an identical number of recesses (112), that the number of recesses is at least three, and that the contour of the recesses is identical.

11. A jamb according to claim 10, **characterized** in that the hinge element (114) and the lock element (120) are integral with units of recess contour adapted shape, each unit having an attachment part (116) for attachment to a respective one of the recesses, possibly in combination with a dummy.

12. A jamb according to claim 11, **characterized** in that said attachment part is covered by a cover plate (119) in the plane of the jamb lap, possibly having a certain overlap and entirely covering the attachment.

13. A jamb according to claim 12, **characterized** in that the cover plate has a portion (119b) which covers a section of the recess otherwise visible in the direction towards the plane of the jamb opening.

14. A jamb according to anyone of claims 10-13, **characterized** in that the recess (12) has a depth corresponding to the required depths for a bevelled bolt and the striker plate.

15. A jamb according to claim 14, **characterized** in that the recess has two depth levels, one (112a) defining a bottom and one (112) breaking through the jamb front side at a minor depth in the jamb lap side.

16. A jamb according to claim 15, **characterized** in that the attachment part is attached to the bottom of the recess.

17. A jamb according to claim 16, **characterized** in that at said minor depths from the lap the recess (112b) acts as a support surface for the cover plate and/or a part of the hinge element or lock element supplementing the attachment part.

18. A jamb according to claim 17, **characterized** in that the supplementing part comprises a joint device of the hinge element (114) or a striker plate (120).

19. A jamb according to claim 15, **characterized** in that the attachment part is attached at the level breaking through the jamb front side (Figure 52).

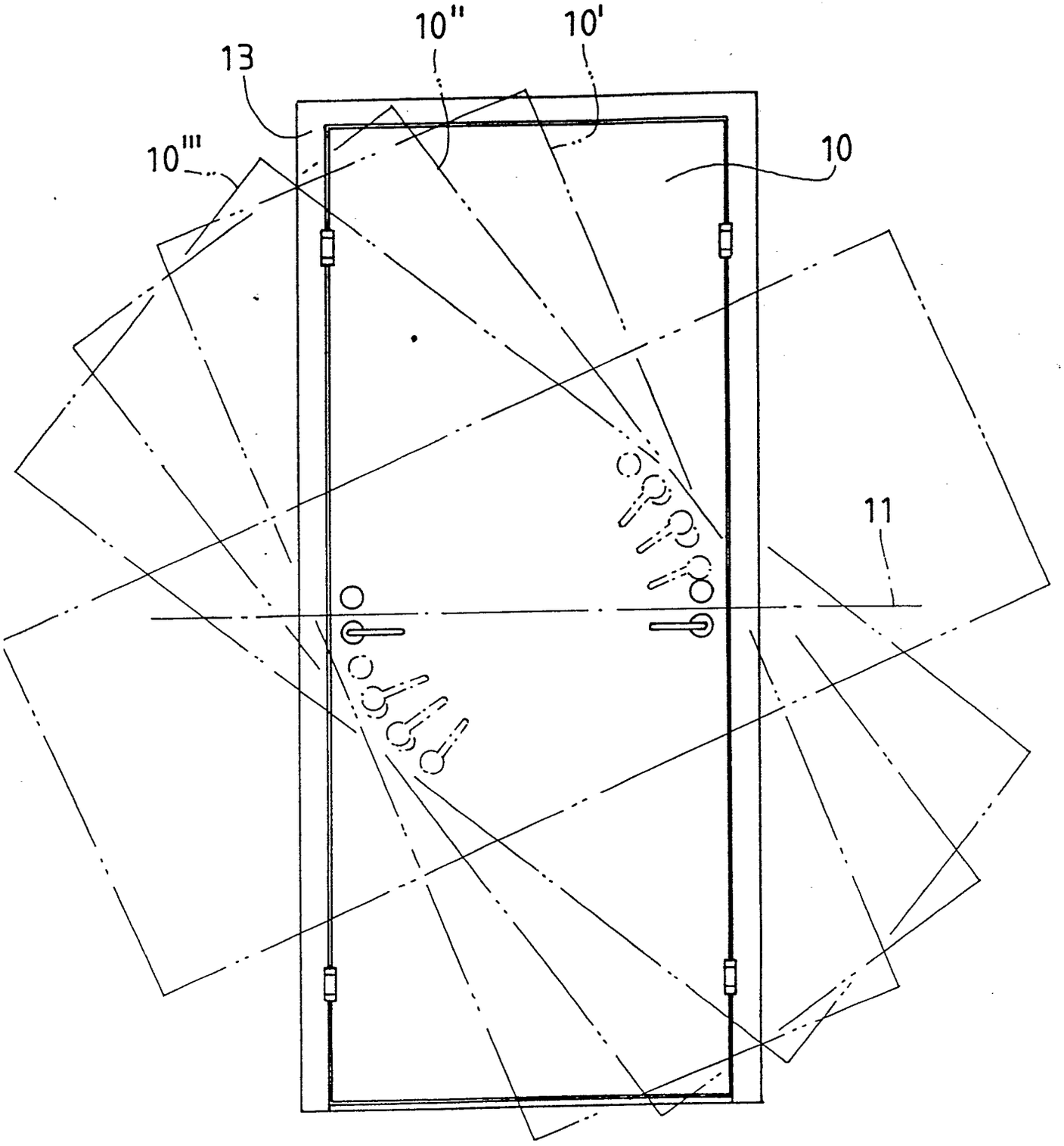
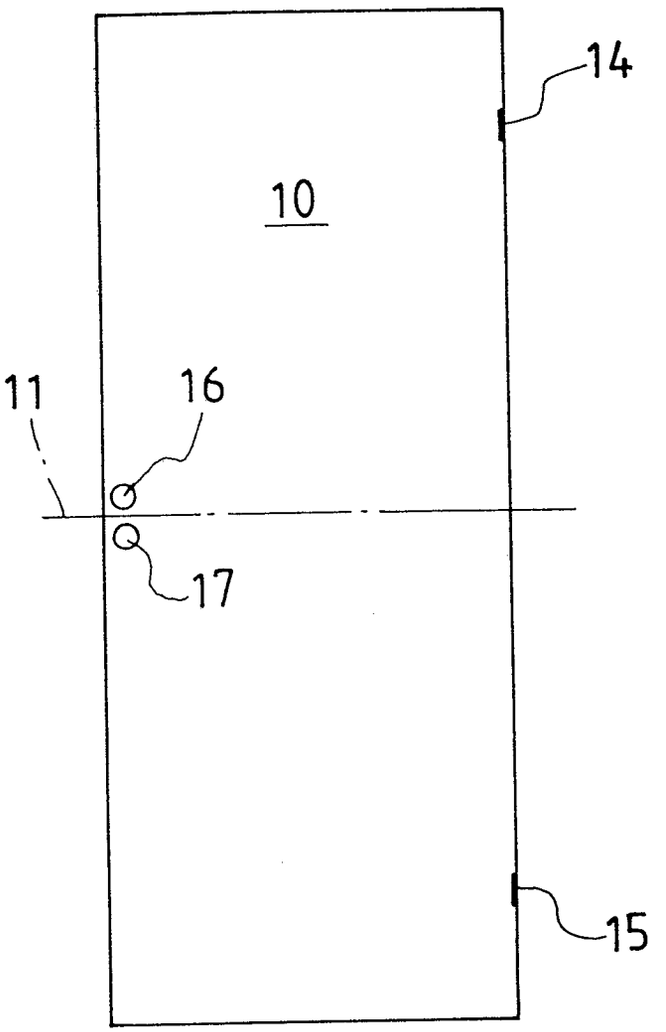


FIG. 1

FIG. 2



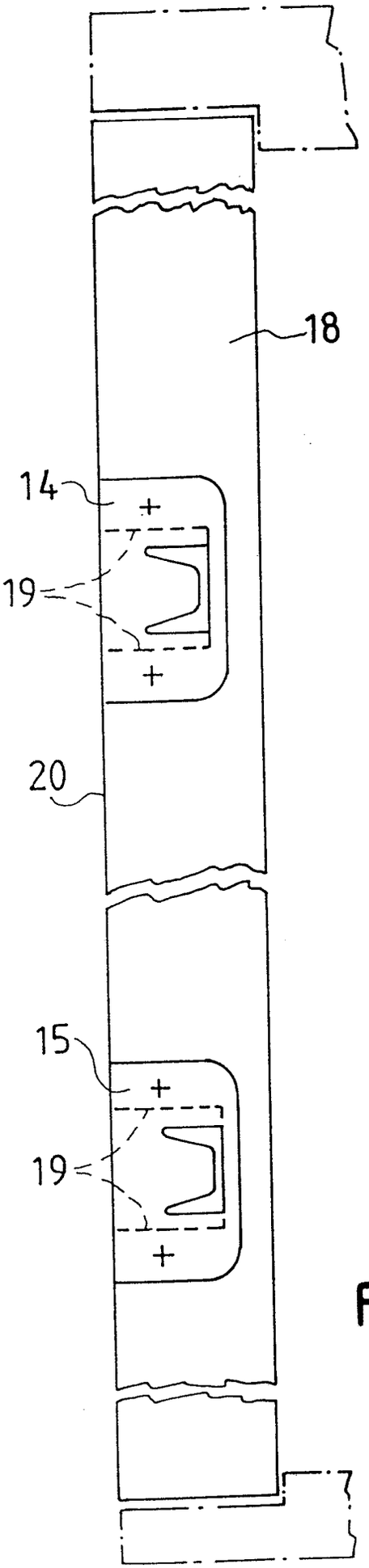


FIG. 3

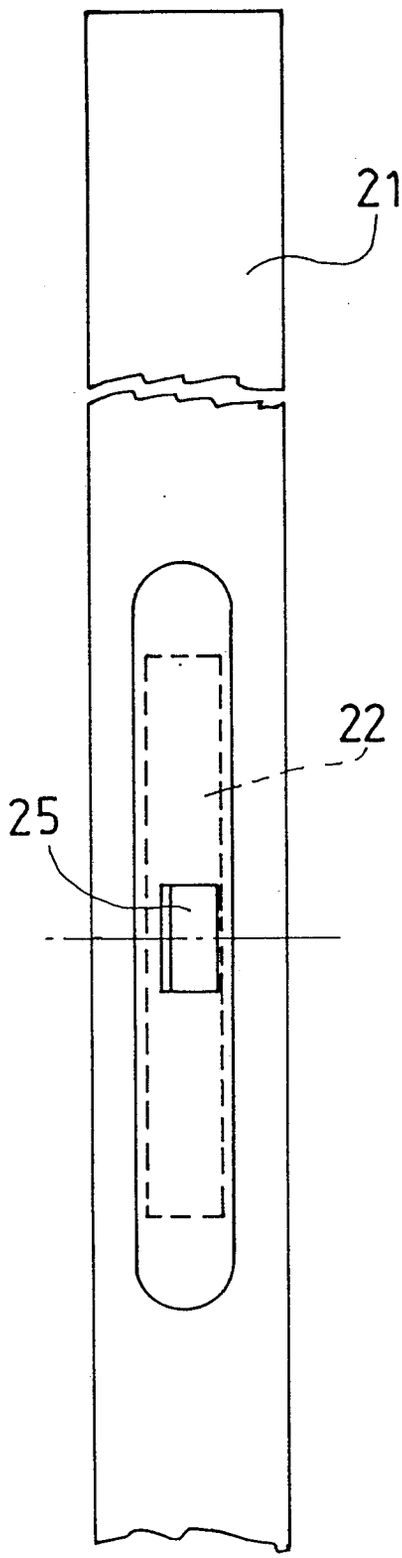


FIG. 4

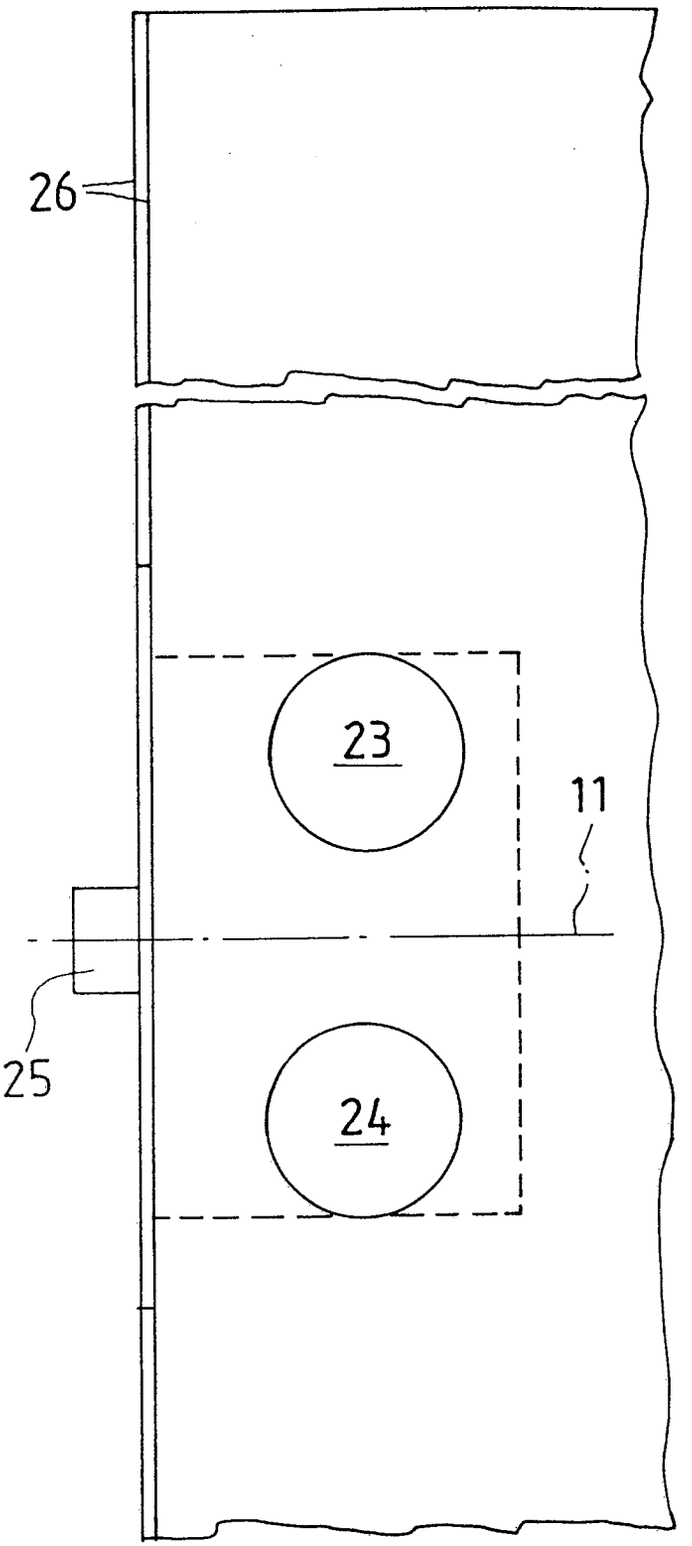


FIG. 5

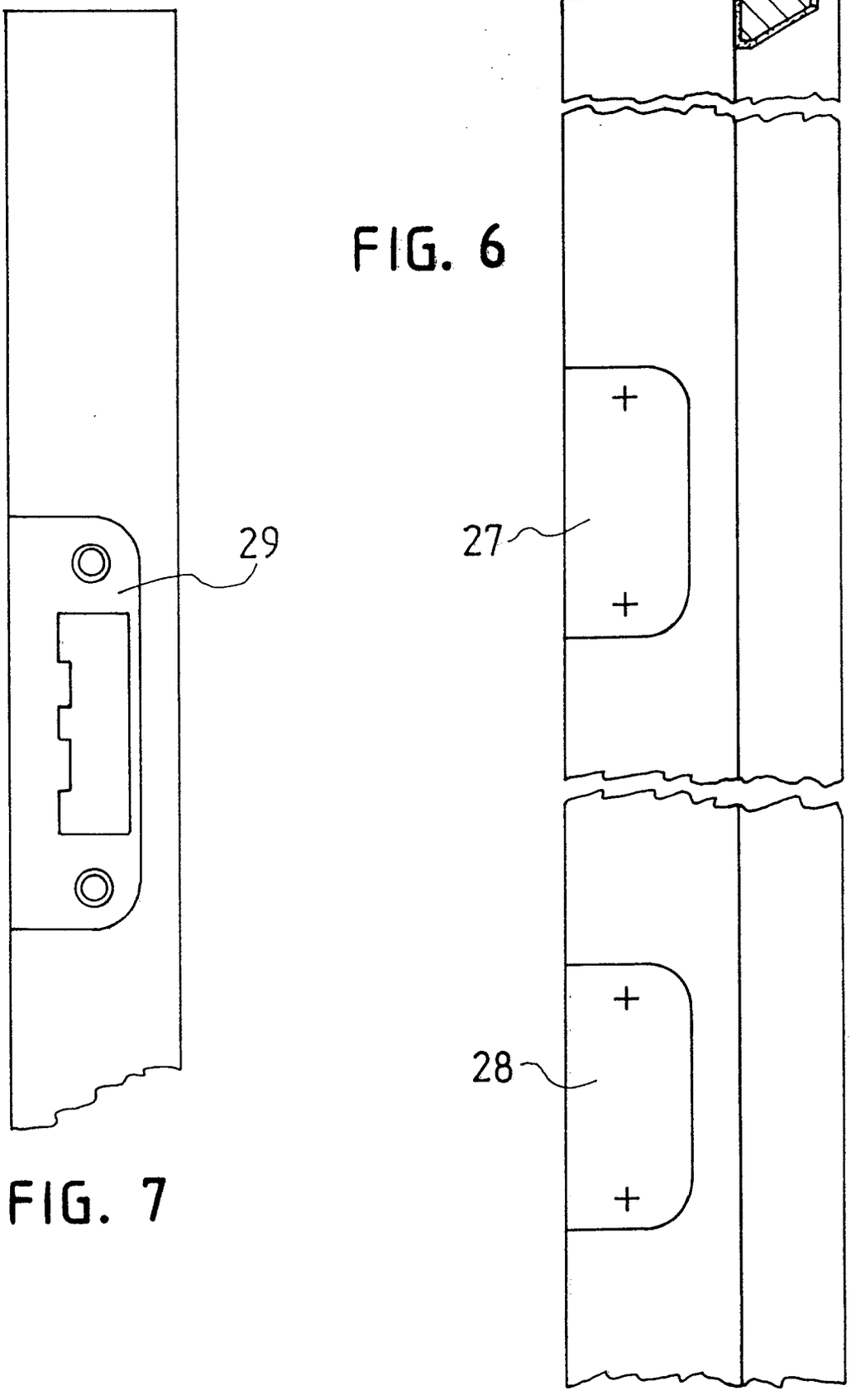


FIG. 6

FIG. 7

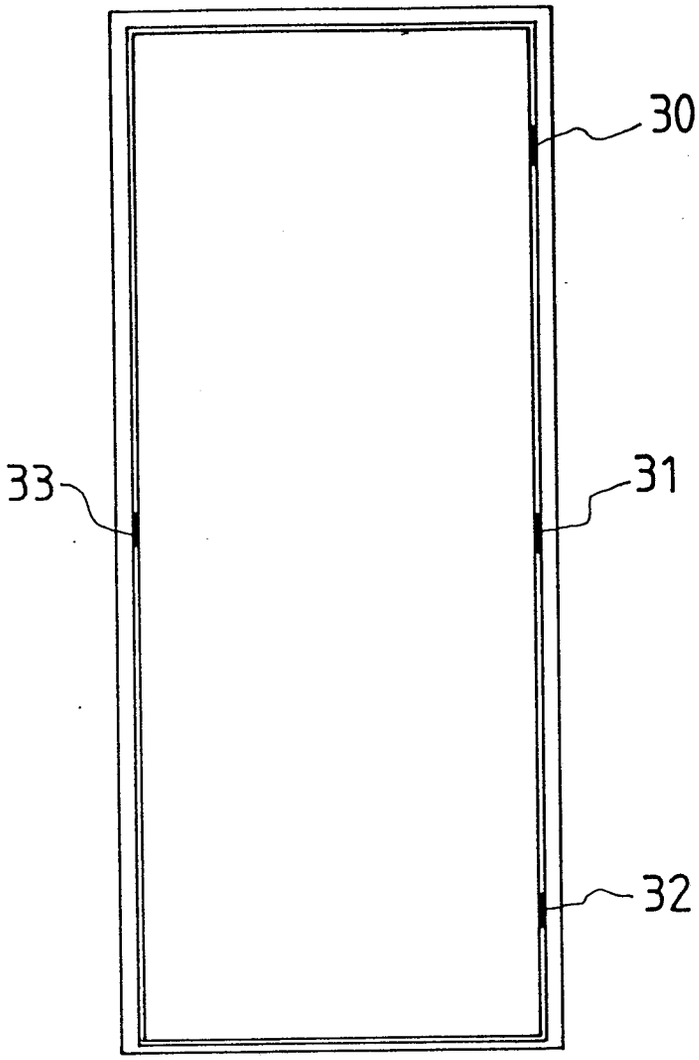


FIG. 8

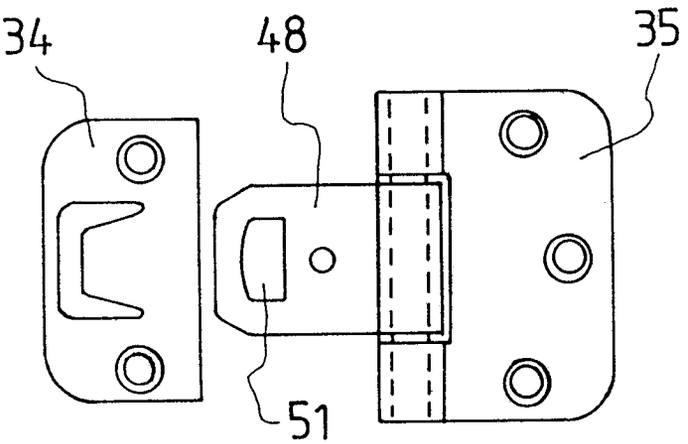


FIG. 9

FIG. 10

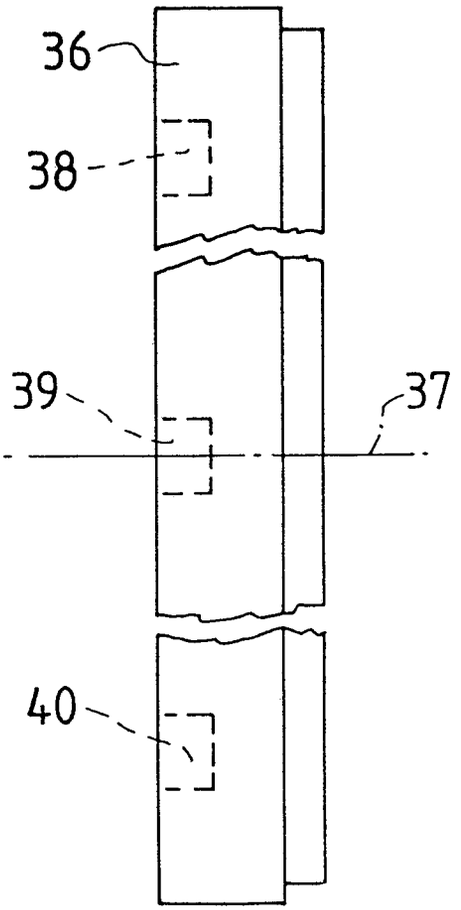


FIG. 11

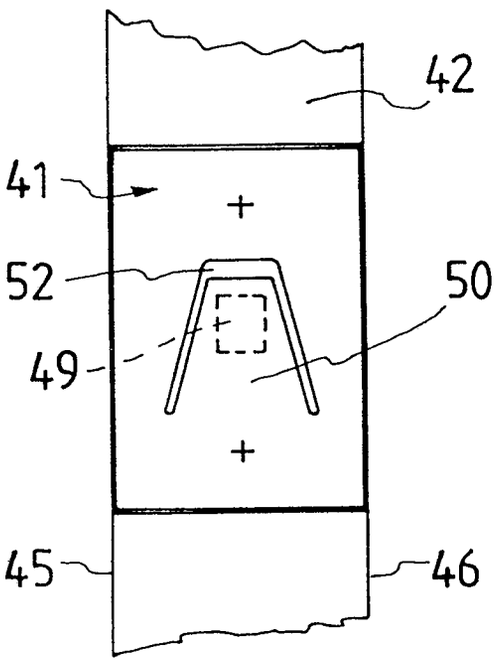


FIG. 12

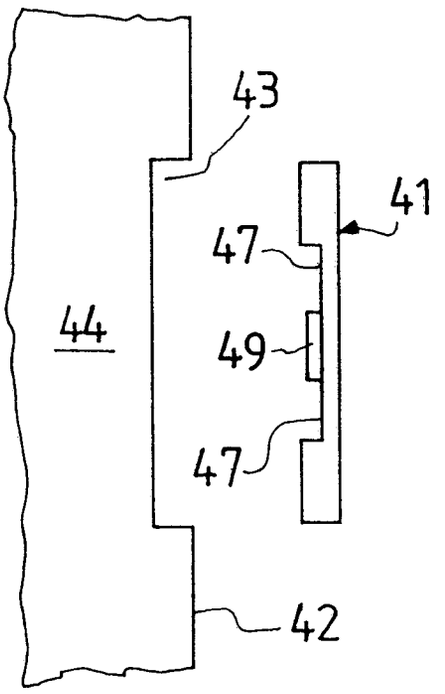


FIG. 14

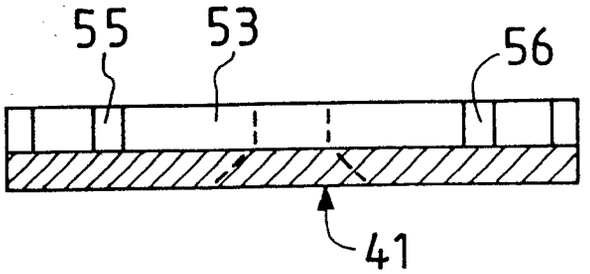


FIG. 13

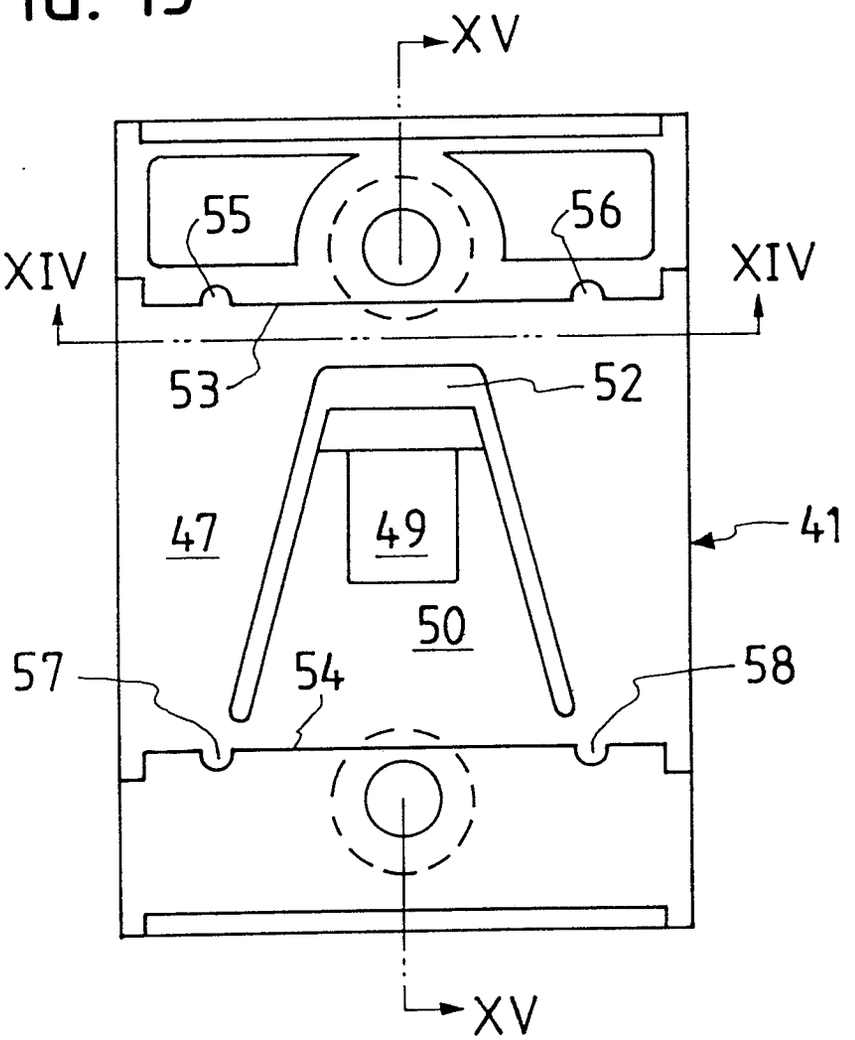


FIG. 15

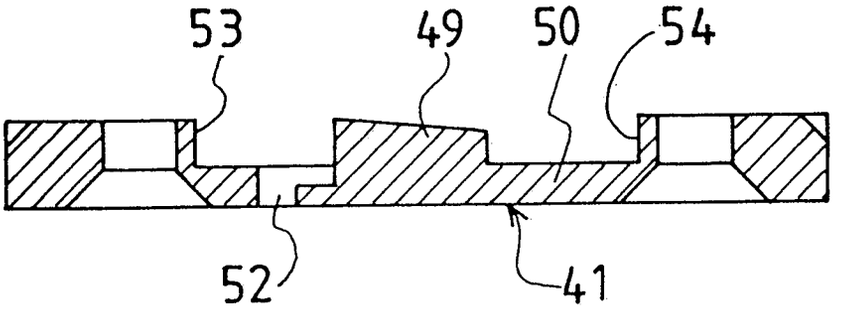


FIG. 16

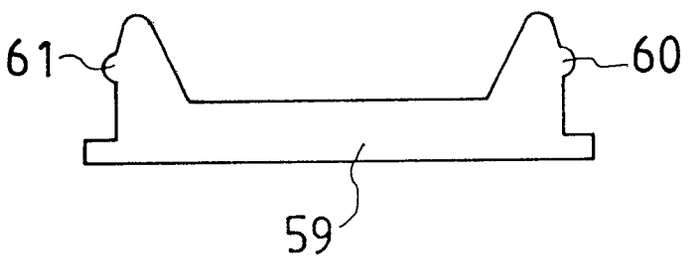


FIG. 17

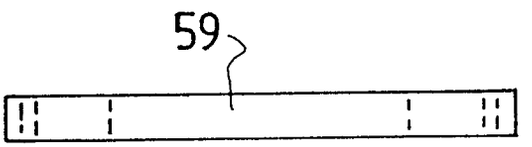


FIG. 18

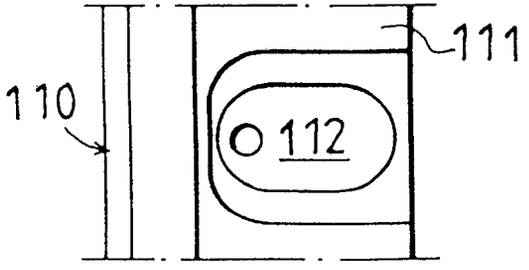


FIG. 19

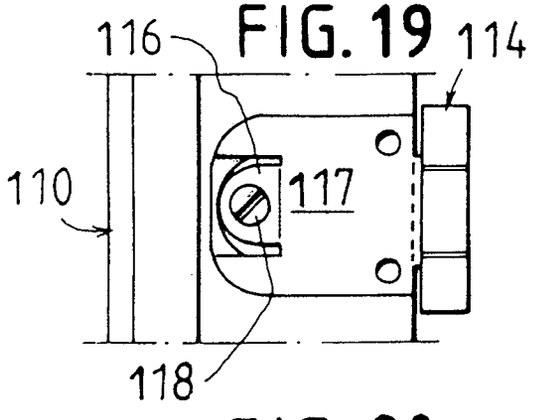


FIG. 20

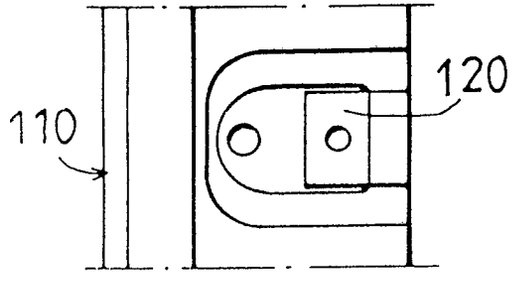


FIG. 21

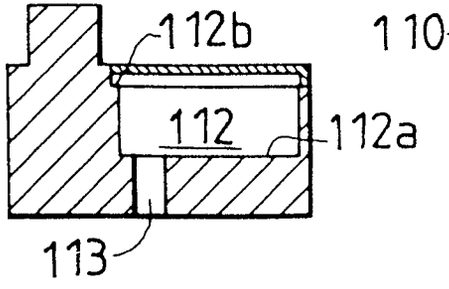


FIG. 22

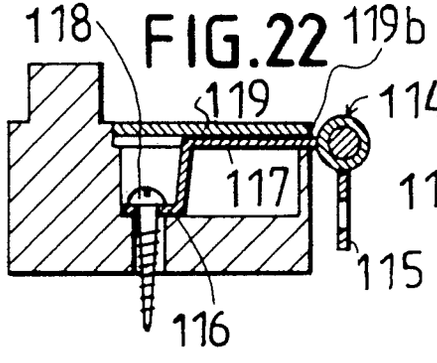


FIG. 23

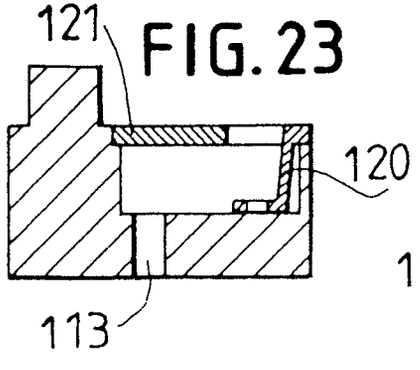


FIG. 24

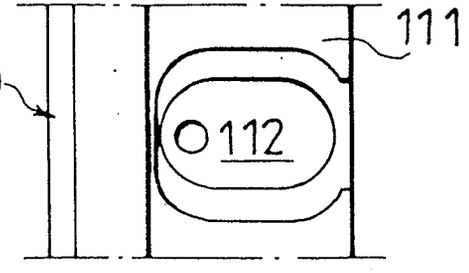


FIG. 25

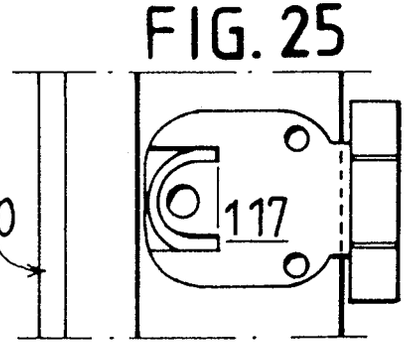


FIG. 26

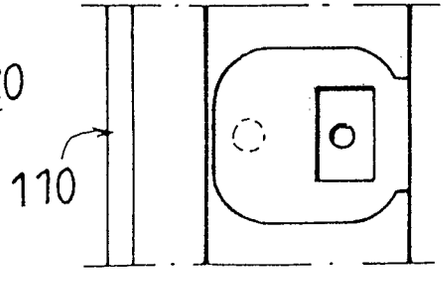


FIG. 27

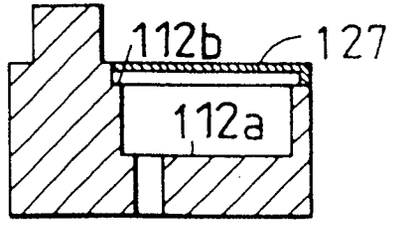


FIG. 28

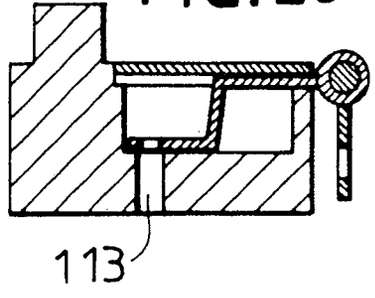


FIG. 29

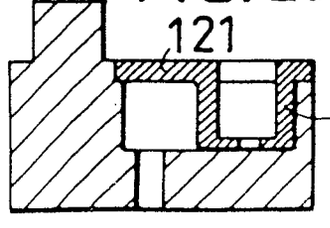


FIG. 30

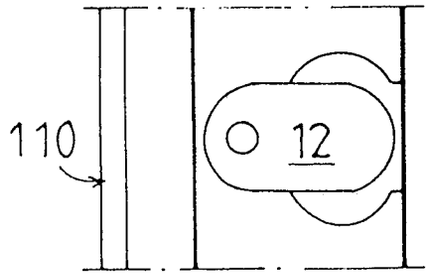


FIG. 31

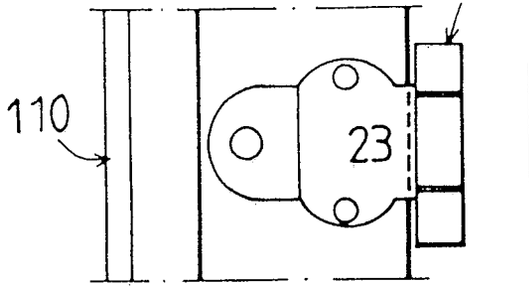


FIG. 32

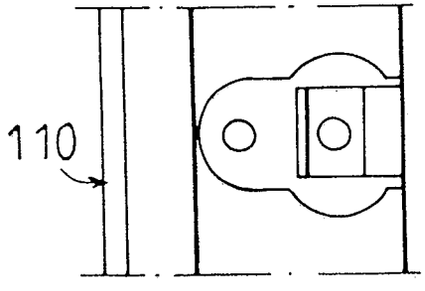


FIG. 33

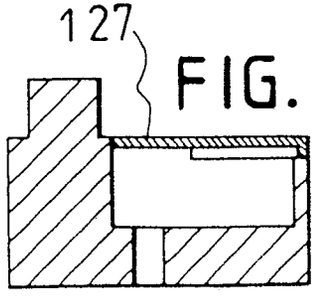


FIG. 34

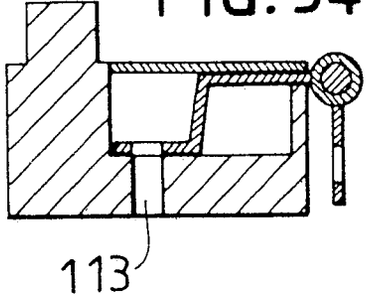


FIG. 35

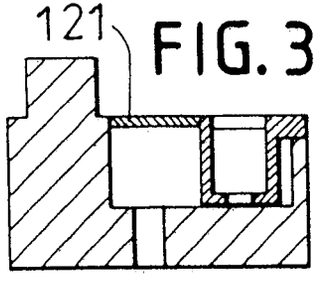


FIG. 36

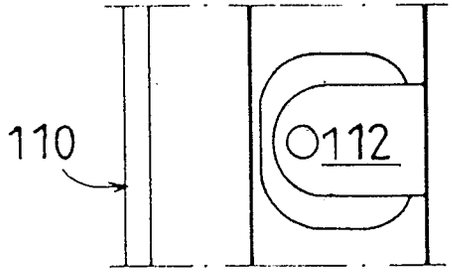


FIG. 37

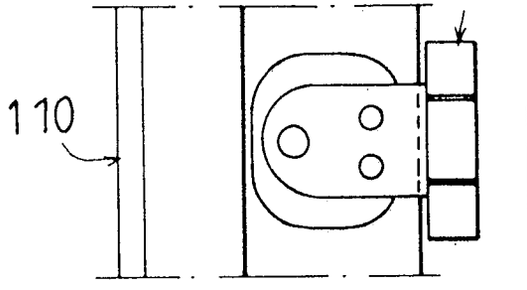


FIG. 38

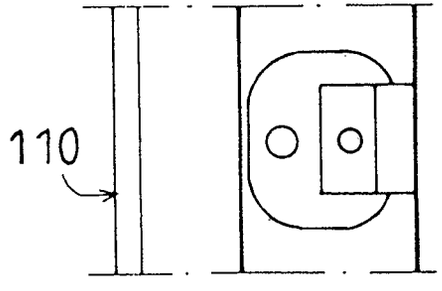


FIG. 39

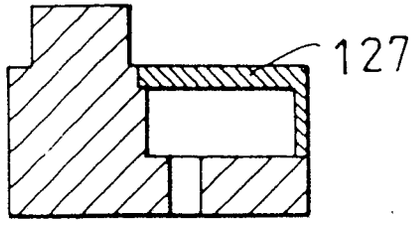


FIG. 40

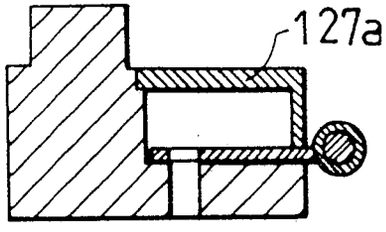


FIG. 41

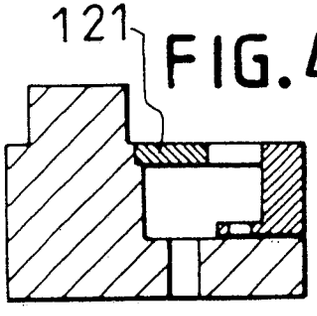


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FIG.42

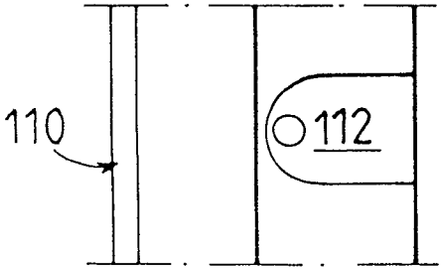

FIG.45

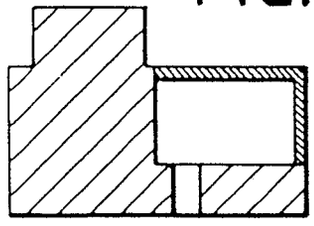

FIG.48

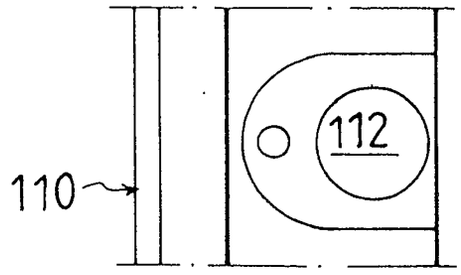

FIG.51

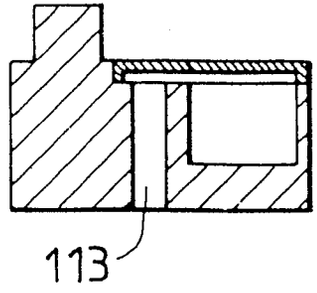

FIG.43

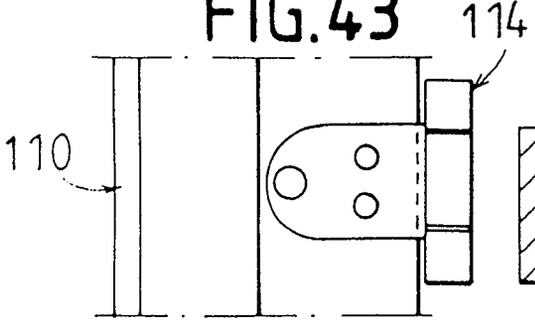

FIG.46

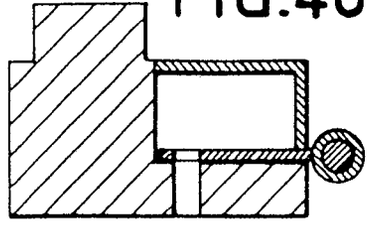

FIG.49

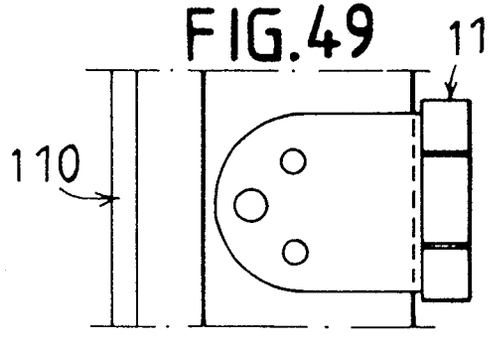

FIG.52

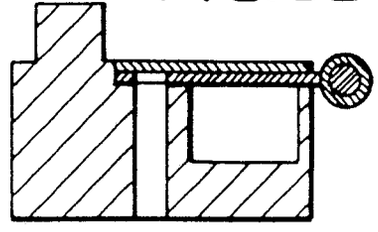

FIG.44

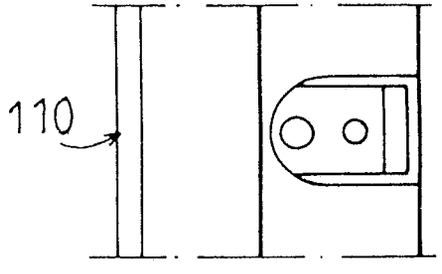

FIG.47

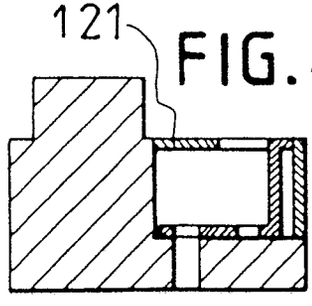

FIG.50

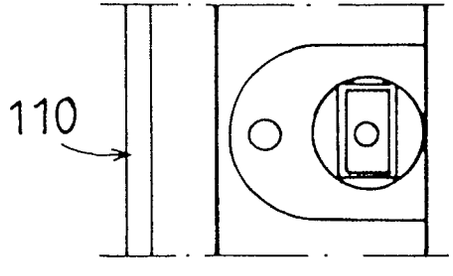

FIG.53

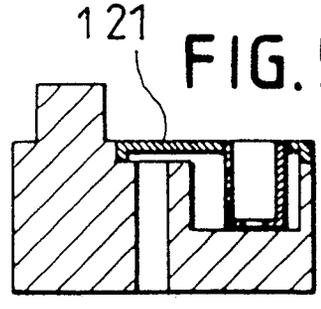

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FIG. 54

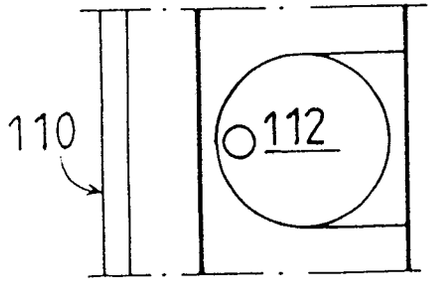


FIG. 55

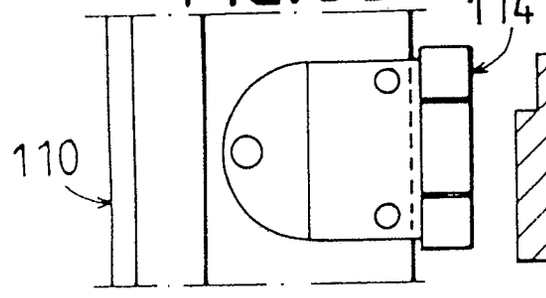


FIG. 56

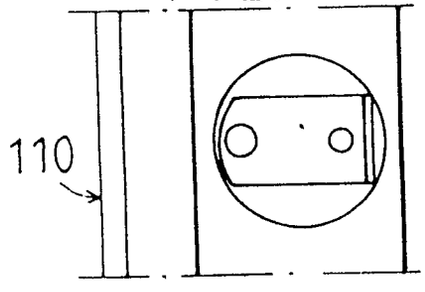


FIG. 57

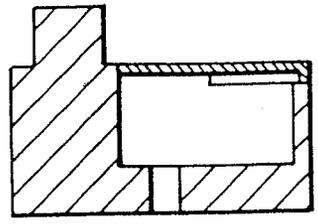


FIG. 58

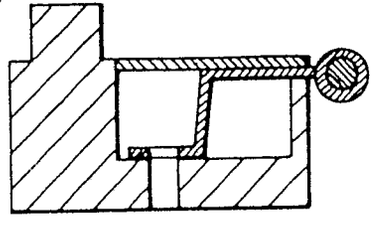


FIG. 59

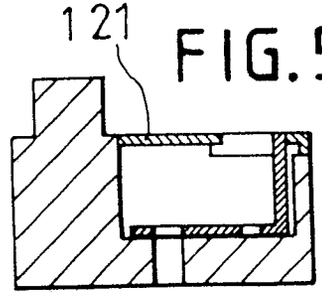


FIG. 60

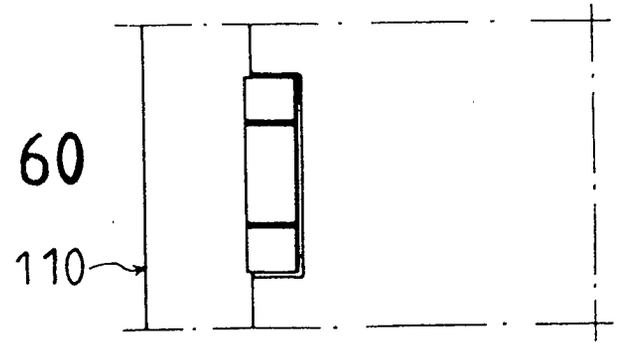


FIG. 61

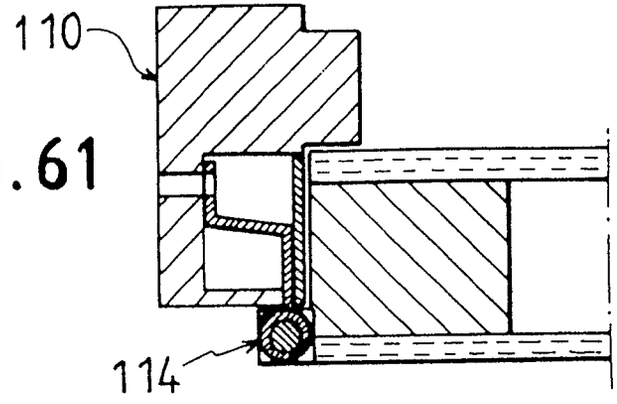
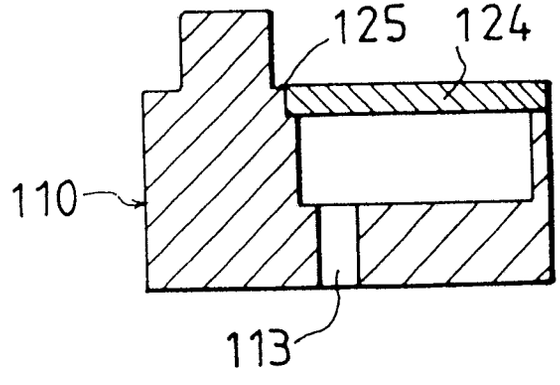


FIG. 62



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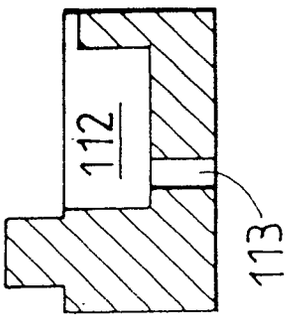

FIG. 66

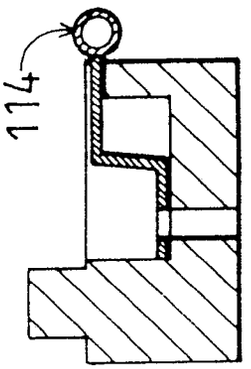

FIG. 67

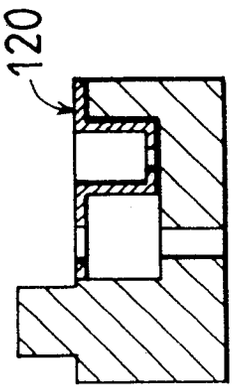

FIG. 68

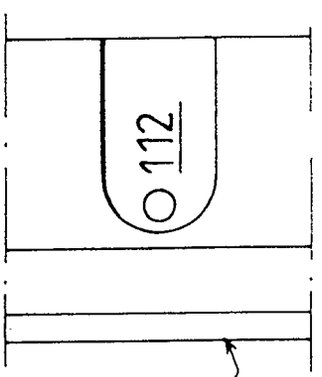

FIG. 63

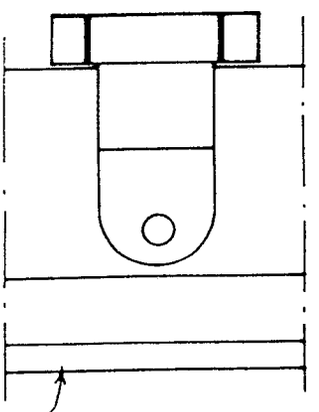

FIG. 64

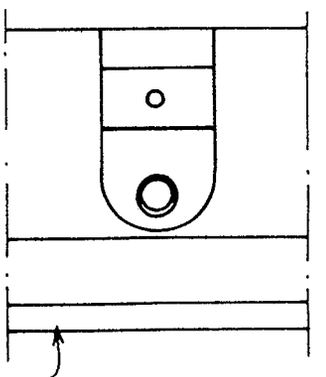

FIG. 65