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(72) Inventor: **Redaelli, Gianfranco**  
**20034 Giussano (MI) (IT)**

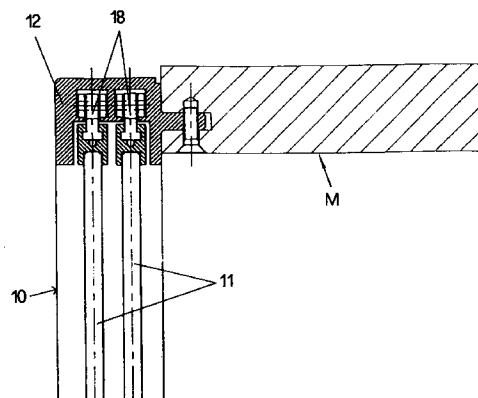
(74) Representative: **Carloni, Franco**  
**c/o Calvani, Salvi & Veronelli S.r.l.,**  
**Piazza Duca d'Aosta, 4**  
**20124 Milano (IT)**

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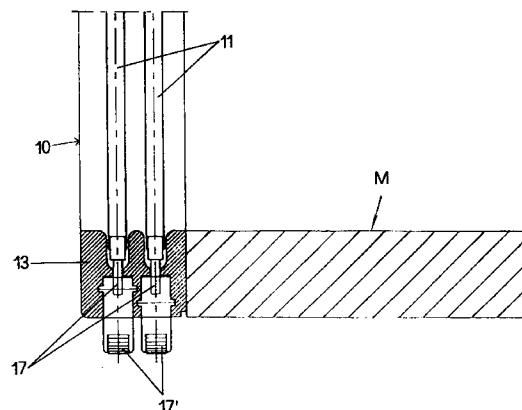
(71) Applicant: **DADA S.p.A.**  
**20010 Mesero (MI) (IT)**

(54) **Improved furniture piece with sliding shutters**

(57) The furniture piece (M) is provided with shutters (11) which slide in horizontal guides, generally formed in the internal walls of the upper and lower plane surfaces of the furniture piece (M) or in a supporting and guiding frame (10) attached to the front portion of the furniture piece (M). Manoeuvring means (17) are directly or indirectly attached to one of the two horizontal edges of each sliding shutter (11) and are adapted to make the shutters (11) more functional and comfortable to use when the user imparts the aperture and closure movements thereto. The particular advantage offered by the manoeuvring means (17) is that it eliminates the deposit of dirt and unaesthetical fingerprints on the facing surface of the shutters during the manoeuvre thereof, especially when they are made of glass.



**FIG. 2**



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## Description

[0001] The present invention generally relates to the furnishings field and, more in particular, a furniture piece with sliding shutters more functional and comfortable to use.

[0002] Furniture pieces with sliding shutters are known from time in the furnishings field. With respect to conventional furniture pieces having pivoting shutters, furniture pieces with sliding shutters have the advantage of eliminating the obstacle caused by the shutters when they are in the open condition and, therefore, they are particularly well suited for furnishing the indoor spaces of houses or office environments where it is desirable to eliminate any obstacle to a functional use of the space or to the movement of persons during the performance of an activity.

[0003] It is known that in order to cause the sliding movement of the shutters of the furniture piece there are provided manoeuvring means, typically handles or the like, arranged on the facing surface of the shutter and intended to be operatively gripped by the user for imparting the closure and aperture movements of the shutters. A drawback of these kind shutters, especially from an aesthetical point of view, is represented by the conventional arrangement of the handles on the facing surface of the shutter. As a matter of fact, on the long run, dirt and undesired fingerprints left by the user when he grips the handles deposit on the shutters. This drawback occurs more frequently when the shutter is made of glass and the furniture piece is intended to furnish a kitchen.

[0004] The present invention is aimed at obviating the above mentioned drawback by providing a furniture piece with sliding shutters in which the arrangement of the shutter manoeuvring means is so as to make the shutters more functional and comfortable to use than the shutters which are known in the art.

[0005] More in particular, the furniture piece according to the present invention is providing with shutters which slide in horizontal guides, generally formed in the internal walls of the upper and lower plane surfaces of the furniture piece or in a supporting and guiding frame attached to the front portion of the furniture piece, and is characterized in that manoeuvring means are directly or indirectly attached to one of the two horizontal edges of each sliding shutter, said manoeuvring means being adapted to make the shutters more functional and comfortable to use when the user imparts the aperture and closure movements thereto.

[0006] According to a first embodiment of the present invention, in the case of a suspended furniture piece, the shutter manoeuvring means are attached to the lower horizontal edge of the shutter and project downwardly from the lower plane surface of the furniture piece or from the supporting and guiding frame.

[0007] According to a second embodiment of the present invention, in the case of the floor-based furni-

ture piece, the shutter manoeuvring means are attached to the upper edge of the shutter and project horizontally from the front portion of the furniture piece or from the supporting and guiding frame.

[0008] According to a feature of the present invention, for the horizontal translation movement of each shutter, at least two wheeled frames are provided from which the shutter suspends, said wheeled frames being connected to the upper horizontal edge of the shutter and being intended to move in rectilinear guides formed in the internal wall of the upper plane surface of the furniture piece or in the upper portion of the supporting and guiding frame.

[0009] The features and the advantages of the present invention will appear more clearly from the following detailed description together with the accompanying drawings, wherein:

Fig. 1 is a front elevation view of a furniture piece provided with sliding shutters according to a first embodiment of the present invention;

Fig. 2 is a sectional view taken along line II-II of Fig. 1;

Fig. 3 is a sectional view taken along line III-III of Fig. 1;

Fig. 4 is a front elevation view of the manoeuvring means attached to the sliding shutters according to the embodiment of Fig. 1;

Fig. 5 is a front elevation view of a furniture piece provided with sliding shutters according to a second embodiment of the present invention;

Fig. 6 is a sectional view taken along line VI-VI of Fig. 5;

Fig. 7 is a sectional view taken along line VII-VII of Fig. 5;

Fig. 8 is a sectional view taken along line VIII-VIII of Fig. 5; and

Figs 9,10 are a front elevation view and a top plan view, respectively, of the manoeuvring means attached to the sliding shutters according to the embodiment of Fig. 5.

[0010] The invention has its best application in relation to a furniture piece having shutters which slide in a supporting frame connected to the front portion thereof, but it can also be applied to a furniture piece having shutters which slide in guides formed in the internal walls of the lower and upper plane surfaces of the furniture piece.

[0011] Referring to Figures 1 to 5 of the drawings, there is shown a first embodiment of the present invention in which a furniture piece is provided with shutters which slide in a supporting frame. The furniture piece, generally designated by M, is of the suspended kind and on its front portion a supporting and guiding frame 10 is attached in which two shutters 11 are arranged so as to move in the horizontal direction, each sliding in proper guides. The supporting and guiding frame 10 is

formed of sections 12-16 parallel two by two, the upper and lower sections 12,13 of which embody the guides for the movement of the shutters 11.

[0012] On the lower horizontal edge of each shutter 11 manoeuvring means 17 are attached which are intended to be manipulated by the user in order to effect the horizontal translation of the shutter 11. The manoeuvring means 17 project downwardly from the lower section 13 of the supporting and guiding frame 10 and have a knurl 17' along their edge which is intended to ease the grip by the user.

[0013] For the horizontal translation of each shutter 11 of the furniture piece, at least two wheeled frames 18 are provided from which the shutter 11 suspends. The wheeled frames 18 are connected to the upper horizontal edge of the shutter 11 and move along a rectilinear guide formed in the upper section 12 of the supporting and guiding frame 10.

[0014] Referring now to Figs. 6-10 of the drawings, there is shown a second embodiment of the present invention. In this case, the furniture piece is of the floor-based kind because it is supported on a floor. For the sake of simplicity of the description, all the portions which have the same form and/or function of those described above with reference to Figs. 1-5 have been designated by the same reference numerals.

[0015] In the second embodiment of the present invention the manoeuvring means 17 are attached to the upper edge of the shutter 11 and are configured so as to project horizontally from the upper section 12 of the supporting and guiding frame 10 in order to be easily reached and manipulated by the user.

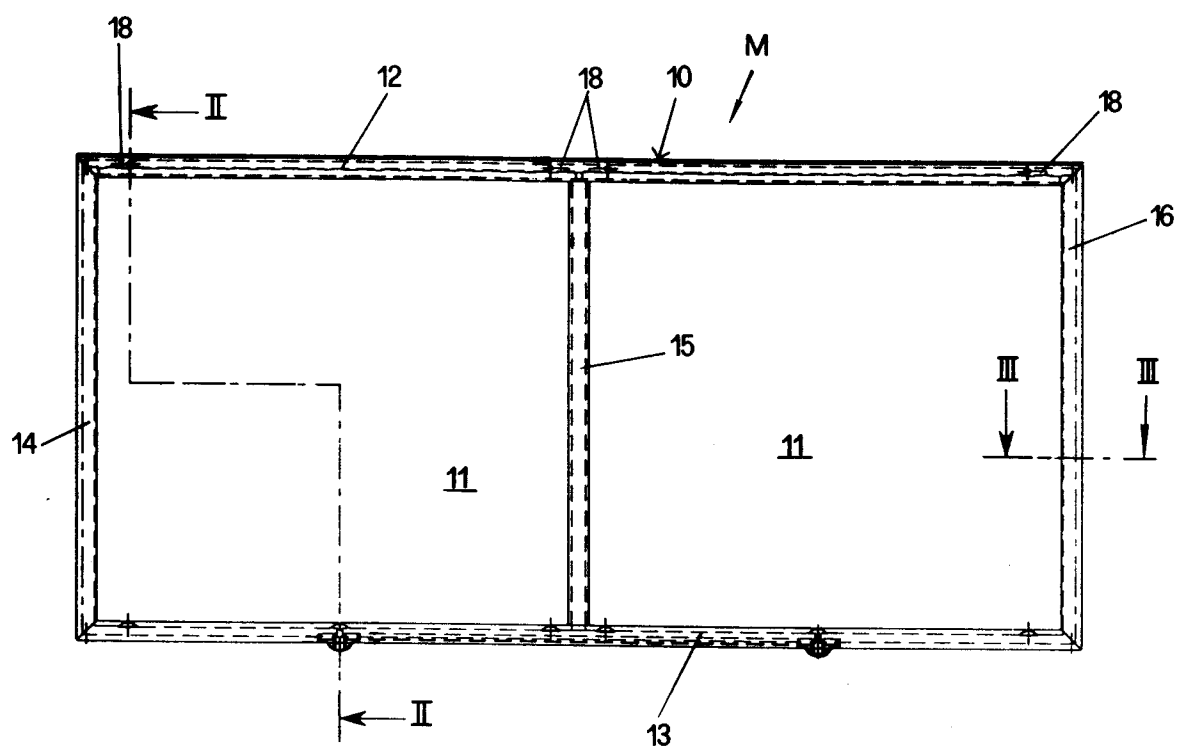
[0016] From the foregoing it can be clearly seen that the invention reaches the aimed objectives and in particular it provides a manoeuvring means for sliding shutters which is more functional and comfortable to use than that of the conventional kind which is attached to the facing surface of the shutter. The manoeuvring means of the invention eliminates the deposit of dirt and unaesthetical fingerprints on the facing surface of the shutters.

## Claims

1. A furniture piece (M) provided with shutters (11) which slide in horizontal guides, generally formed in the internal walls of the upper and lower plane surfaces of the furniture piece (M) or in a supporting and guiding frame (10) attached to the front portion of the furniture piece (M), characterized in that manoeuvring means (17) are directly or indirectly attached to one of the two horizontal edges of each sliding shutter (11), said manoeuvring means (17) being adapted to make the shutters (11) more functional and comfortable to use when the user imparts the aperture and closure movements thereto.

2. A furniture piece according to claim 1, characterized in that in the case of a suspended furniture piece, the shutter manoeuvring means (17) are attached to the lower horizontal edge of the shutter (11) and project downwardly from the lower plane surface of the furniture piece (M) or from the supporting and guiding frame (10).
3. Furniture piece according to claim 1, characterized in that in the case of the floor-based furniture piece, the shutter manoeuvring means (17) are attached to the upper edge of the shutter (11) and project horizontally from the front portion of the furniture piece (M) or from the supporting and guiding frame (10).
4. Furniture piece according to one or more of the preceding claims, characterized in that for the horizontal translation movement of each shutter (11) of the furniture piece (M), at least two wheeled frames (18) are provided from which the shutter (11) suspends, said wheeled frames (18) being connected to the upper horizontal edge of the shutter (11) and being intended to move in a rectilinear guide formed in the upper plane surface of the furniture piece (M) or in the upper portion of the supporting and guiding frame (10).
5. Furniture piece according to claim 1, characterized in that the supporting and guiding frame (10) is formed of sections (12-16) parallel two by two and attached to the front portion of the furniture piece (M).
6. Furniture piece according to claim 5, characterized in that the sections (12-16) of the supporting and guiding frame (10) are metallic.
7. Furniture piece according to claim 6, characterized in that the sections (12-16) of the supporting and guiding frame (10) are obtained by extrusion.

FIG. 1



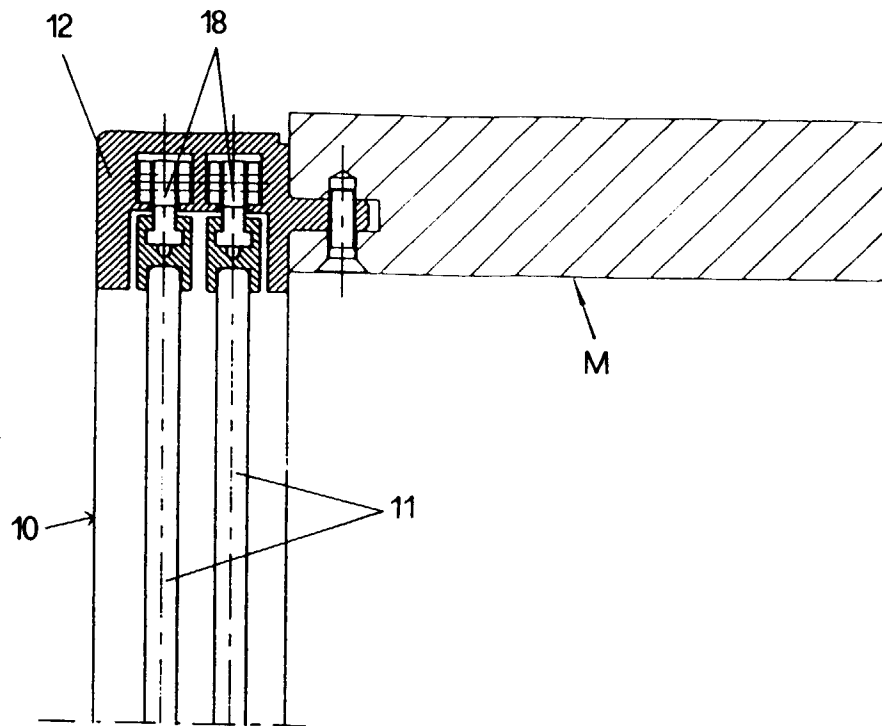


FIG. 2

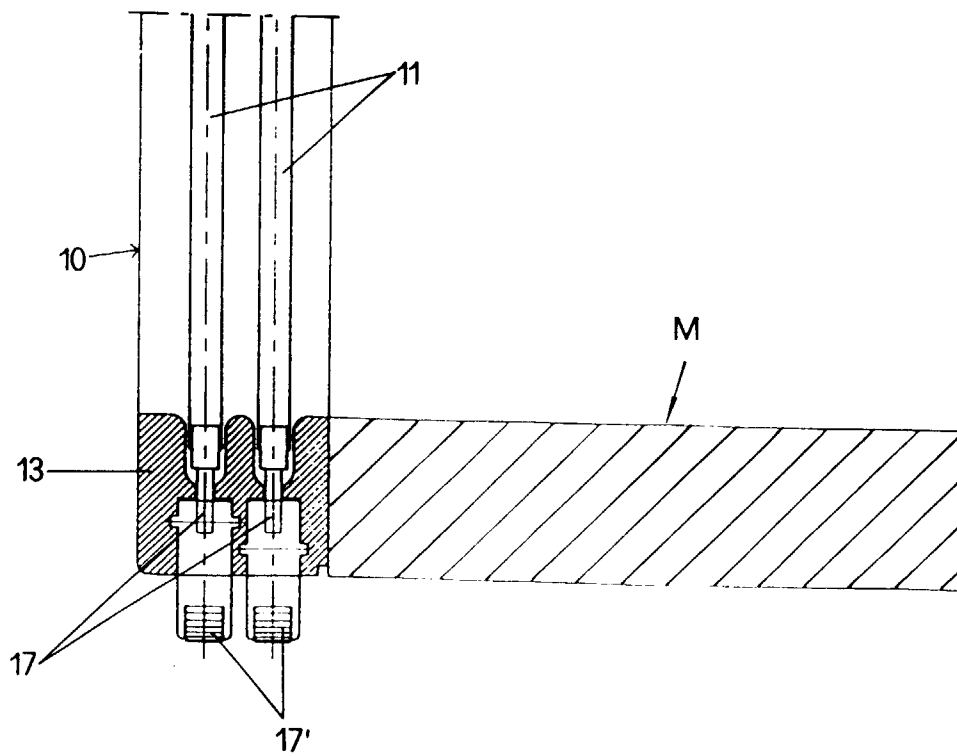


FIG. 3

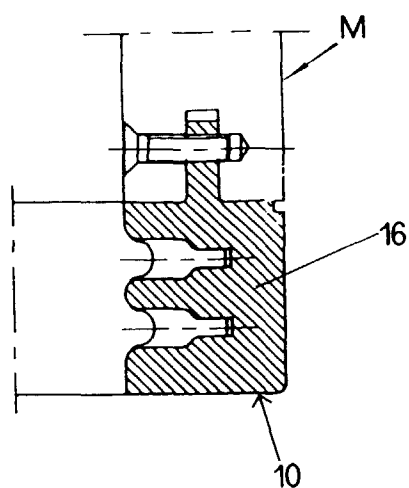


FIG. 4

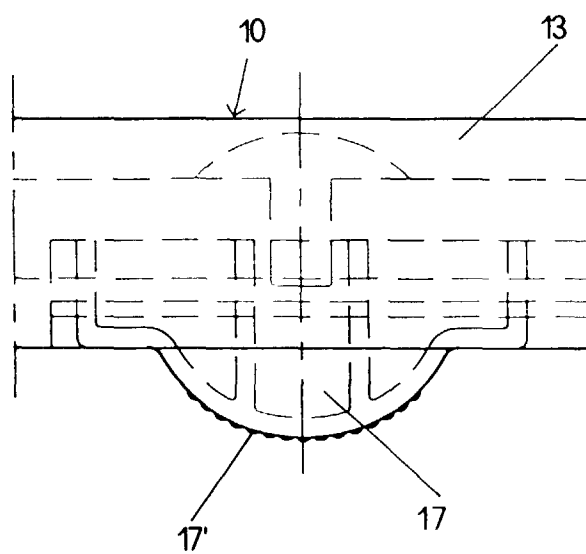
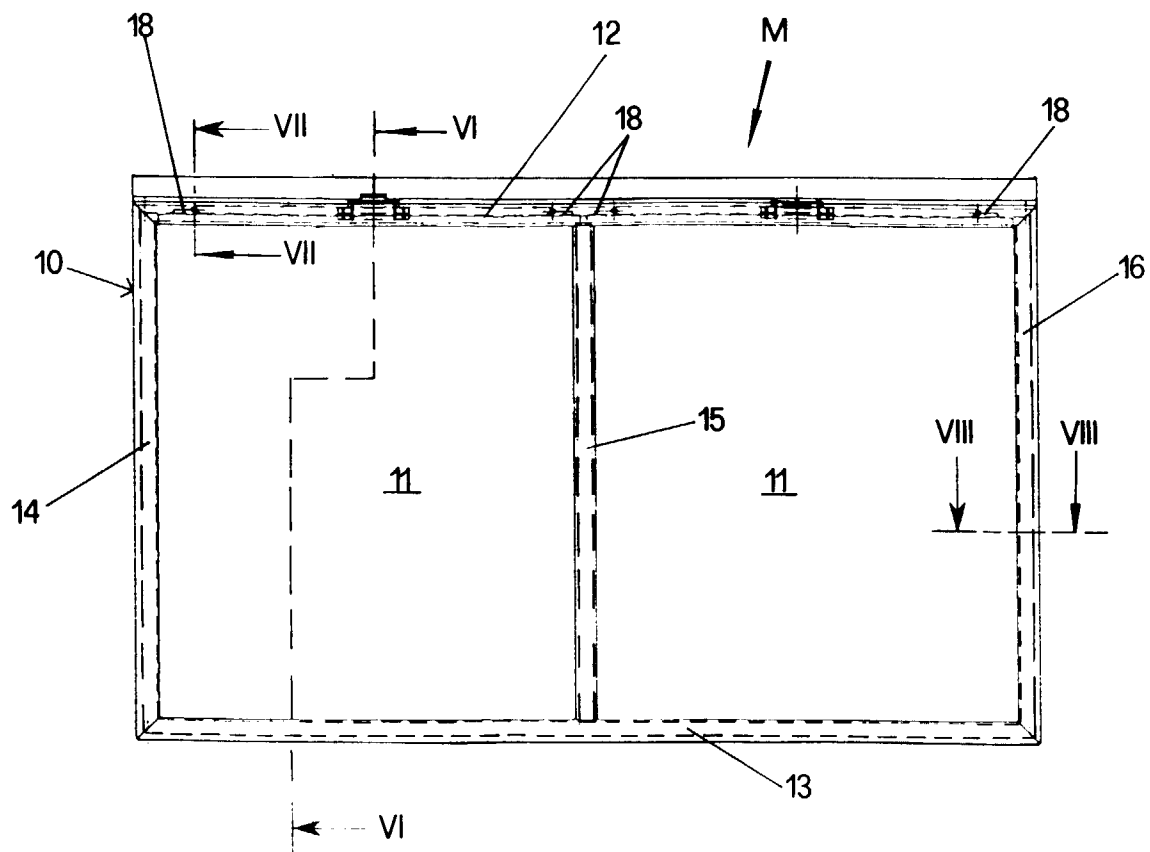


FIG. 5



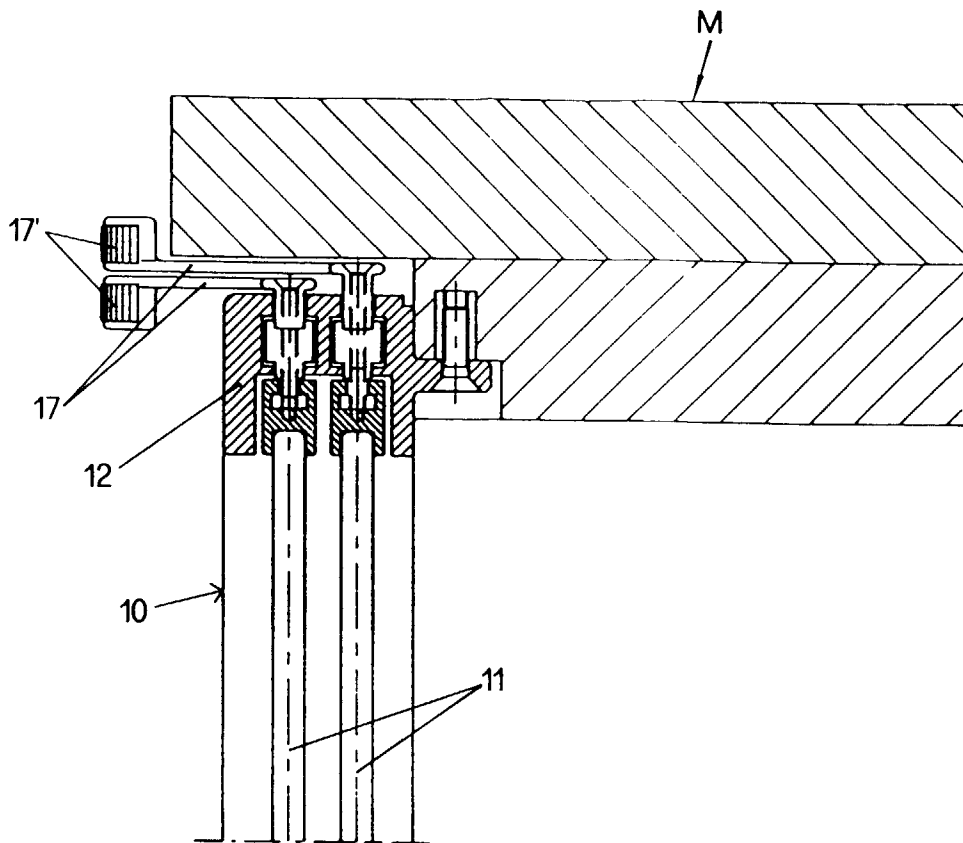


FIG. 6

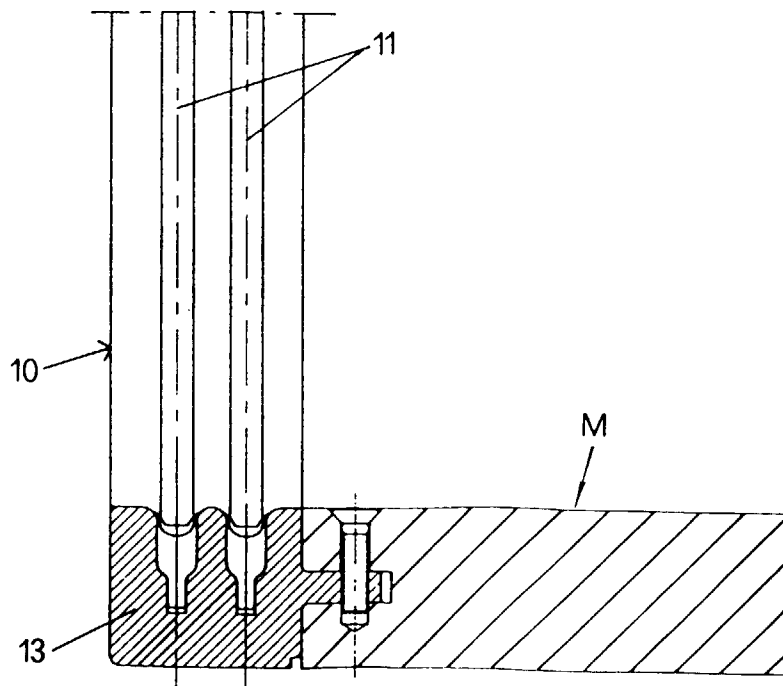


FIG. 7

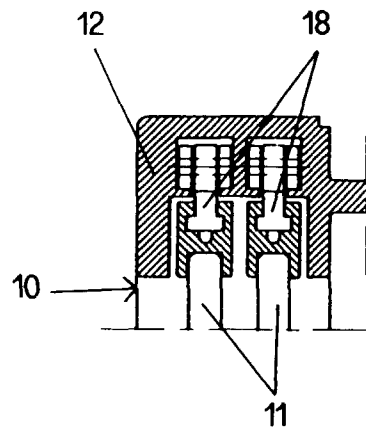


FIG. 8

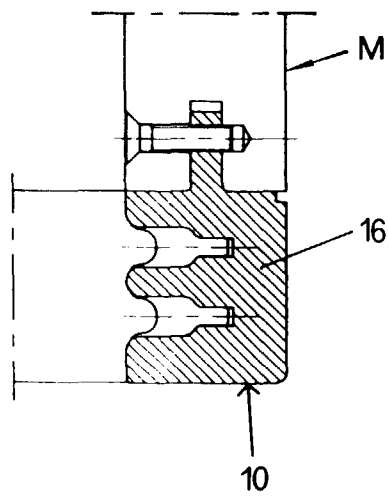


FIG. 9

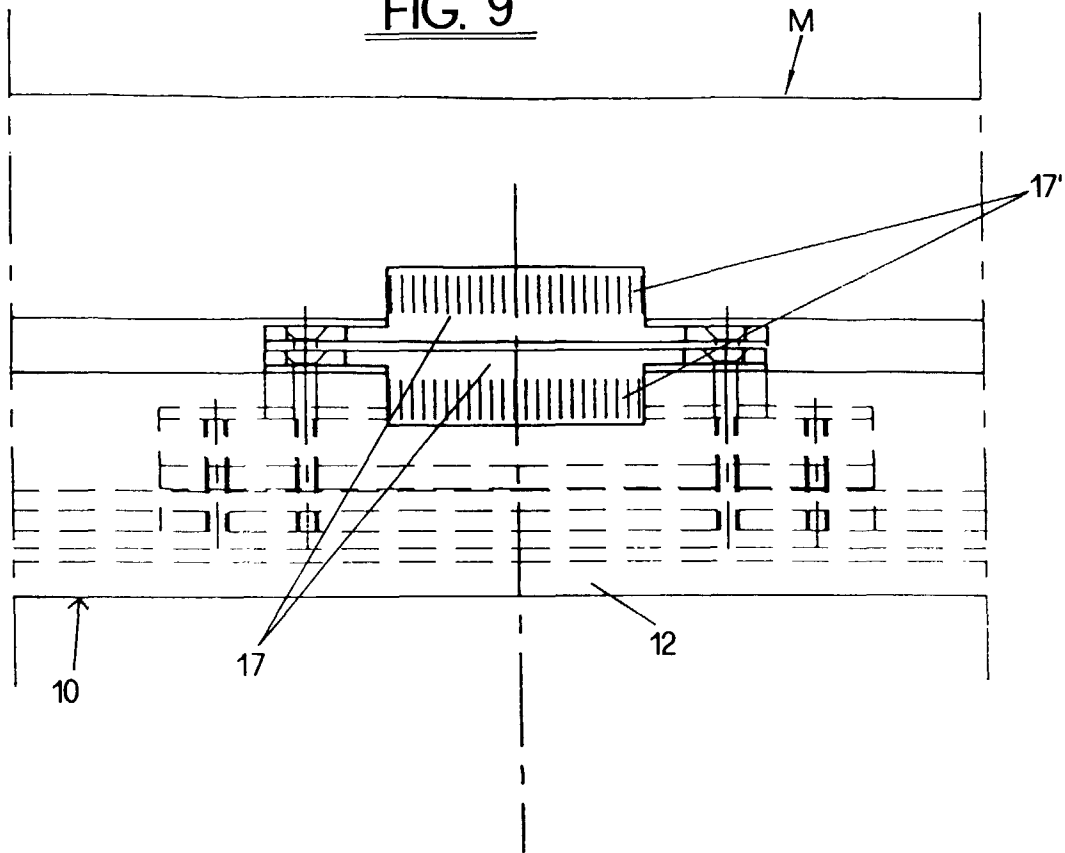


FIG. 10

