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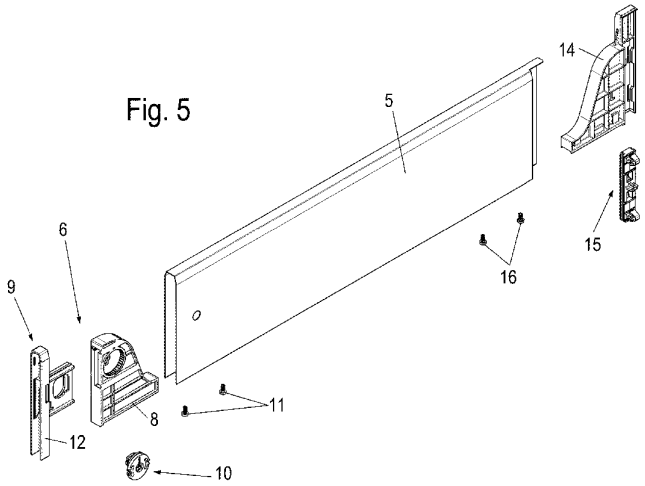
(54) Title: DRAWER

(54) Bezeichnung : SCHUBKASTEN

Fig. 5



(57) Abstract: A drawer (1) having a front panel (2), a rear wall (3) and two side walls (4), wherein at least one side wall (4) has arranged above it an attachment frame (5) which consists of a hollow profile and is connected to the front panel (2) via an adjusting device (6), is designed such that the adjusting device (6) has a carrying part (8), which is fixed exclusively to the attachment frame (5) within the attachment frame (5), and a slide (9), which can be moved in the longitudinal direction of the attachment frame (5) by means of an actuator (10) and has a coupling part (12), wherein the coupling part (12) has a contour which corresponds to the clear cross section of the attachment frame (5), or to the outer contour of the attachment frame (5), and the longitudinal extent of the coupling part, as seen in the direction of the longitudinal axis of the attachment frame (5), is greater than the maximum adjusting distance of the actuator (10), and wherein the coupling part (12) has its front-panel end side butting flush against the front panel (2) and is secured in a force-fitting and/or form-fitting manner on a connecting part (7), fastened on the front panel (2), and covers over the connecting part (7).

(57) Zusammenfassung:

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Veröffentlicht:

— *mit internationalem Recherchenbericht (Artikel 21 Absatz 3)*

Ein Schubkasten (1) mit einer Frontblende (2), einer Rückwand (3) und zwei Seitenwänden (4), wobei oberhalb mindestens einer Seitenwand (4) eine aus einem Hohlprofil bestehende Aufsatzzarge (5) angeordnet ist, welche über eine Verstellvorrichtung (6) mit der Frontblende (2) verbunden ist, ist so ausgebildet, dass die Verstellvorrichtung (6) ein innerhalb der Aufsatzzarge (5) ausschließlich mit der Aufsatzzarge (5) fest verbundenes Tragteil (8) und einen mittels eines Stellgliedes (10) in Längsrichtung der Aufsatzzarge (5) beweglichen Schieber (9) mit einem Koppelungsteil (12) aufweist, wobei das Koppelungsteil (12) eine dem lichten Querschnitt der Aufsatzzarge (5) oder der Außenkontur der Aufsatzzarge (5) entsprechende Kontur aufweist und dessen Längserstreckungin Richtung der Längsachse der Aufsatzzarge (5) größer ist als der maximale Verstellweg des Stellgliedes (10) und dass das Koppelungsteil (12) mit seiner frontblendenseitigen Stirnseite bündig an der Frontblende (2) anliegt und an einem an der Frontblende (2) befestigten Verbindungsteil (7) kraft-und/oder formschlüssig festgelegt ist und das Verbindungsteil (7) überdeckt.

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DRAWER

The present invention relates to drawer having a front panel, a rear wall and two side walls, wherein an attachment frame consisting of a hollow profile is disposed above at least one side wall, which is connected to the front panel by means of an adjusting device.

A drawer of the aforementioned type is known, for example, from DE 91 09 648 U1. Here the attachment frame is guided longitudinally displaceably on the side wall and the adjusting device is fixed firmly on the upper side of the side wall.

Known from EP 1 151 697 B1 is a drawer in which the attachment frame consists of a plate-shaped component, wherein in its front-panel end region the attachment frame is partially enclosed by a housing which accommodates the adjusting device in itself.

The invention provides a drawer having a front panel, a rear wall and two side walls, wherein an attachment frame consisting of a hollow profile is disposed above at least one side wall, which is connected to the front panel by means of an adjusting device, wherein the adjusting device has a carrying part which is fixed exclusively to the attachment frame inside the attachment frame and a slide which can be moved in the longitudinal direction of the

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attachment frame by means of an actuator and having a coupling part, wherein the coupling part has a contour corresponding to the clear cross-section of the attachment frame or to the outer contour of the attachment frame and whose longitudinal extension in the direction of the longitudinal axis of the attachment frame is greater than the maximum adjusting distance of the actuator and that the coupling part abuts flush against the front panel with its front-panel end side and is fixed non-positively and/or positively on a connecting part fastened to the front panel and covers said connecting part.

An advantage of the drawer is that the attachment frame can be fixed adjustably on a hollow profile completely independently of the side wall in a visually pleasing manner on the front panel.

By means of this design, the fixing of the attachment frame with respect to the front panel is accomplished completely independently of a fixing of the attachment frame with respect to the side wall and a pleasing appearance is achieved in the connecting region insofar as even during an adjustment no gap is formed between the front panel on the one hand and the end side of the attachment frame facing the front panel on the other hand since this is completely avoided by the coupling part. The coupling part has the same cross-section as the inner contour of the attachment frame so that in the event of a possible necessary adjustment, at least a small shoulder corresponding to the wall thickness of the attachment frame is obtained.

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Alternatively the coupling part can also have the same cross-section as the outer contour of the attachment part so that in the event of a possible necessary adjustment, at least a small shoulder corresponding to the wall thickness of the coupling part is obtained.

Further features of the invention are the subject of subclaims.

An exemplary embodiment of the invention is shown in the appended drawings and will be described in detail in the following.

In the figures:

Figure 1 shows a perspective partial view of a drawer according to the invention having a first attachment frame placed on a side wall of the drawer.

Figure 2 shows a perspective view corresponding to Figure 1 with a further attachment frame shown in a pre-assembly position for the second side wall of the drawer

Figure 3 shows a perspective view of the drawer corresponding to Figures 1 and 2 with completely mounted attachment frame shown with a tool for actuating an adjustment device for an attachment frame

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Figure 4 shows an enlarged partial view of the front-panel side region of the drawer according to Figures 1-3 in an adjusting position between attachment frame and front panel differing from Figure 3

Figure 5 shows an exploded view of an attachment frame of the drawer according to the invention

Figure 6 shows a perspective view from below of an attachment frame

Figure 7 shows an enlarged view compared with Figure 5 of a slide with a coupling part

Figure 8 shows a perspective view of a connecting part which can be fixed on a front panel side.

Figures 1-3 show a drawer 1 having a front panel 2, a rear wall 3 and two side walls 4 wherein attachment frames 5 are placed on the side walls 4.

As Figures 5 and 6 show very clearly, the attachment frames 5 each consist of a hollow profile which is almost closed in cross-section.

Of particular importance within the framework of the present invention is the connection of each attachment frame 5 to the front panel 2.

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The connection of each attachment frame 5 to the front panel 2 is accomplished by means of an adjusting device 6 (see Figure 5) and a connecting part 7 fixed on a front-panel side as shown in the perspective view in Figure 8 and in a position fixed on the front panel 2 in Figure 1.

Returning to Figure 5 it becomes clear that the adjusting device 6 consists of a carrying part 8, a slide 9 and an actuator 10. The carrying part 8 is fixed within the attachment frame 5 by fastening screws 11 which pass through the base 5a (see Figure 6) of the respective attachment frame 5 so that the fastening of the carrying part 8 in the attachment frame 5 in the mounted state of the attachment frame 5 is no longer visible and so that the base 5a of the attachment frame 5 lies directly opposite the upper side of the respective side wall 4.

The slide 9 projects into the carrying part 8 guided displaceably in the direction of the longitudinal axis of the attachment frame 5 and can be displaced by the actuator 10, preferably in the form of an eccentric tappet, within limits relative to the longitudinal axis of the attachment frame 5.

The slide 9 is provided with a coupling part 12 whose contour corresponds to the clear cross-section of the attachment frame 5 and whose longitudinal extension is greater than the maximum adjusting path of the actuator 10. In other words, a part of the coupling part 12 remains continuously inside the attachment frame 5.

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In the mounted state the coupling part 12 lies flush against the front panel 2 and is fixed non-positively and/or positively with respect to the connecting part 7. At the same time, the coupling part 12 is configured so that in the mounted state it completely covers the connecting part 7 on the front panel 2 so that in the mounted state the connecting part 7 is no longer visible.

The attachment frame 5 is thereby firmly connected by the adjusting device 6 whilst achieving the possibility of adjusting the inclination of the front panel 2. To this end, it is merely necessary to actuate the actuator 10 by means of a tool 13 in order to move the coupling part 12 more or less far out from the attachment frame 5 and consequently vary the distance between the front panel 2 and the front-panel side end of the attachment frame 5. In this case, no visible gap can be formed since the coupling part 12 almost continues the contour of the attachment frame 5 and only a small shoulder is formed in the transition region due to the wall thickness of the attachment frame 5. This however is not perceived as visually disturbing.

Also in the rear end region, the fixing of each attachment frame 5 to the rear wall 3 is accomplished in a screwless manner by non-positive and/or positive connection between a connector 14 fixed in the rear end region of the attachment frame 5 and a latching part 15 fixed in the rear wall 3.

The connector 14 is inserted into the attachment frame 5 in the same way as the carrying part 8 and fixed by fixing screws 16 which again pass through the base 5a of the

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attachment frame 5. Alternatively the connector 14 in the same way as the carrying part 8 can be connected non-positively, positively or seamlessly by other fastening means such as, for example, gluing, locking or riveting to the attachment frame 5.

Preferably the components of the adjusting device 6, but at least their carrying part 8 and their slide 9 are made of plastic. For reasons of load-bearing capacity it can be advantageous if the actuator 10 of the adjusting device 6 is made of metal.

The connector 14 and the latching part 15 for fixing the attachment frame 5 on the rear wall 3 are preferably also made of plastic.

The same applies to the connecting part 7 which is provided for fixing the adjusting device 6 on the front panel 2.

The attachment frame 5 itself is preferably made of metal but can easily also be made of plastic.

In particular the connecting means 14 and 15 for fixing an attachment frame 5 to the rear wall 3 can advantageously be configured so that a vertical pushing together of these components results in a non-positive and/or positive connection of the two parts to one another. Alternatively the connecting means 14 and 15 can be designed in one part or can be joined together before fixing on the rear wall 3 by a horizontal pivoting of the attachment frame 5.

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The major advantage of the design according to the invention lies overall in that for the fixing of an attachment frame 5 on a side wall 4 no connection needs to be made between the side wall 4 and the attachment frame 5 and that the adjustable connection between attachment frame 5 and front panel 2 is designed in a simple manner absolutely gap-free and visually pleasing.

It is to be understood that, if any prior art publication is referred to herein, such reference does not constitute an admission that the publication forms a part of the common general knowledge in the art, in Australia or any other country.

In the claims which follow and in the preceding description of the invention, except where the context requires otherwise due to express language or necessary implication, the word “comprise” or variations such as “comprises” or “comprising” is used in an inclusive sense, i.e. to specify the presence of the stated features but not to preclude the presence or addition of further features in various embodiments of the invention.

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Reference list

1	Drawer
2	Front panel
3	Rear wall
4	Side wall
5	Attachment frame
5a	Base
6	Adjusting device
7	Connecting part
8	Carrying part
9	Slide
10	Actuator
11	Fastening screw
12	Coupling part
13	Tool
14	Connector
15	Latching part
16	Fastening screws

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CLAIMS

1. Drawer having a front panel, a rear wall and two side walls, wherein an attachment frame consisting of a hollow profile is disposed above at least one side wall, which is connected to the front panel by means of an adjusting device, wherein the adjusting device has a carrying part which is fixed exclusively to the attachment frame inside the attachment frame and a slide which can be moved in the longitudinal direction of the attachment frame by means of an actuator and having a coupling part, wherein the coupling part has a contour corresponding to the clear cross-section of the attachment frame or to the outer contour of the attachment frame and whose longitudinal extension in the direction of the longitudinal axis of the attachment frame is greater than the maximum adjusting distance of the actuator and that the coupling part abuts flush against the front panel with its front-panel end side and is fixed non-positively and/or positively on a connecting part fastened to the front panel and covers said connecting part.

2. The drawer according to claim 1, wherein the carrying part and the connector are fixed by fastening means inside the attachment frame.

3. The drawer according to claim 1 or 2, wherein the carrying part and the connector are fixed by fastening screws inside the attachment frame, wherein the fastening screws pass through the base of the attachment frame.

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4. The drawer according to any one of the preceding claims, wherein in the rear end region of the attachment frame a connector is inserted partially into the attachment frame and is fixed there by means of screws, wherein the connector can be connected non-positively and/or positively to a latching part which for its part is fixed on the rear side of the drawer.

5. The drawer according to any one of the preceding claims, wherein the actuator is configured as an eccentric tappet.

6. The drawer according to any one of the preceding claims, wherein the attachment frame is made of metal.

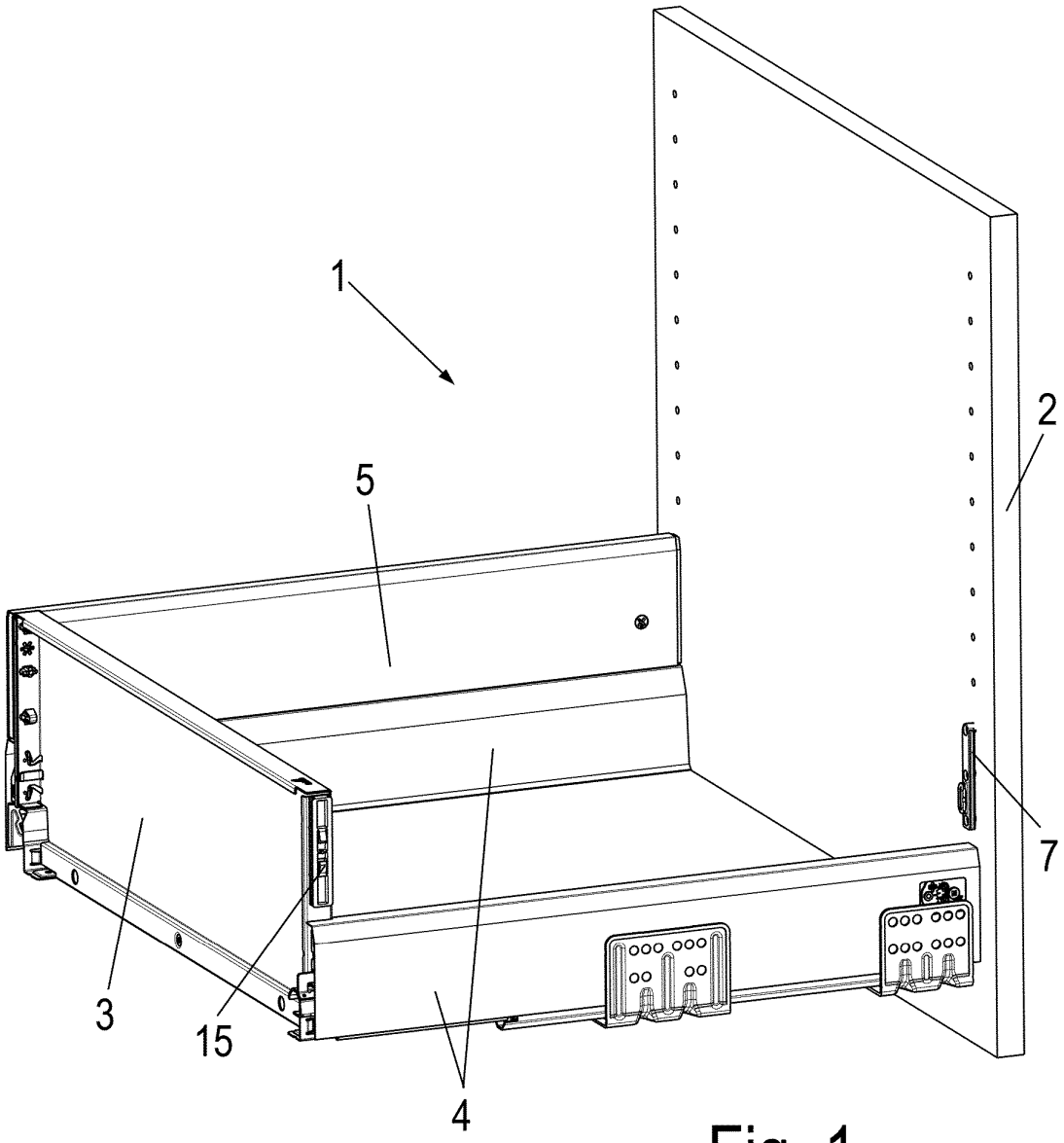


Fig. 1

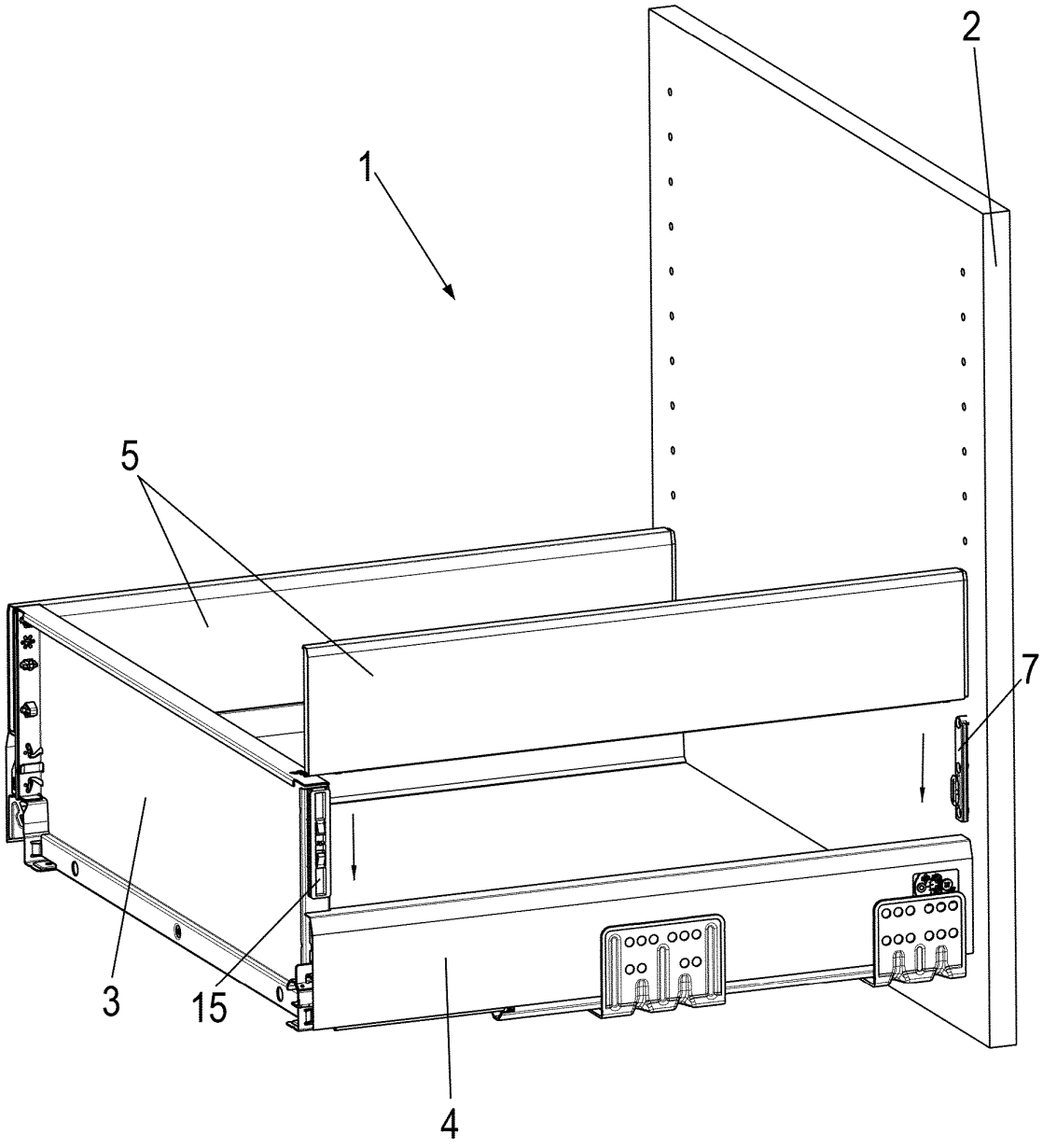


Fig. 2

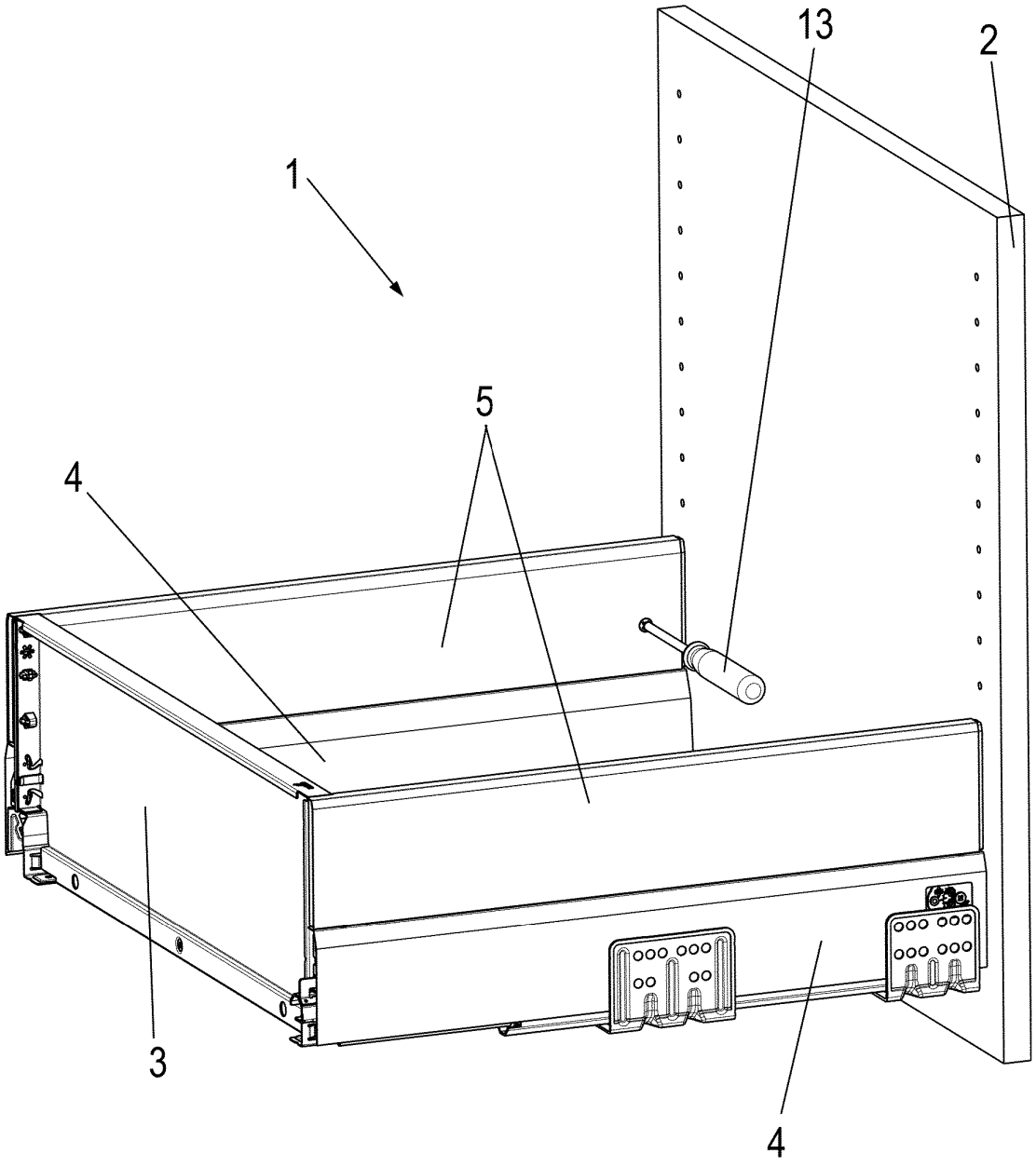
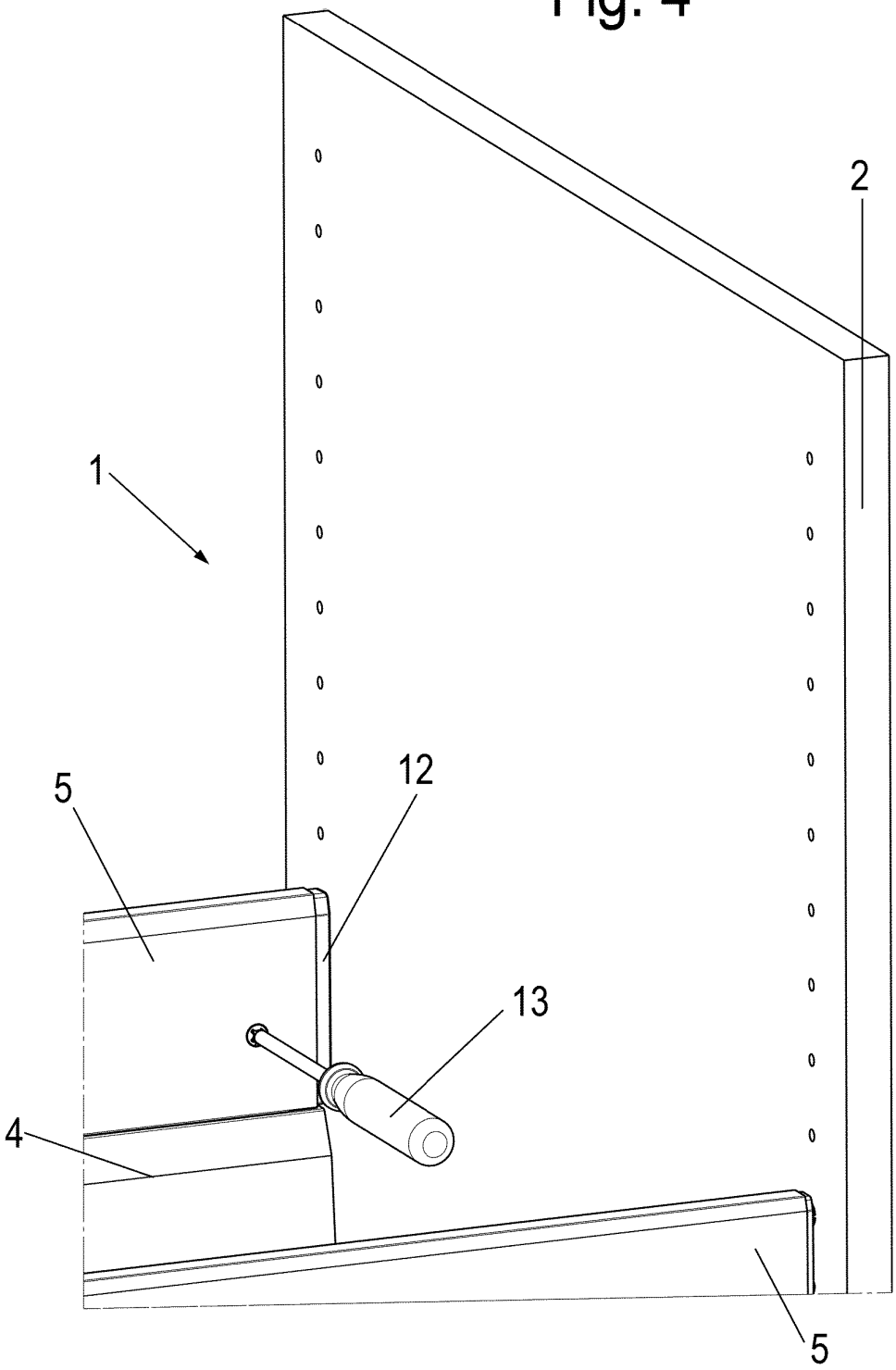


Fig. 3

Fig. 4



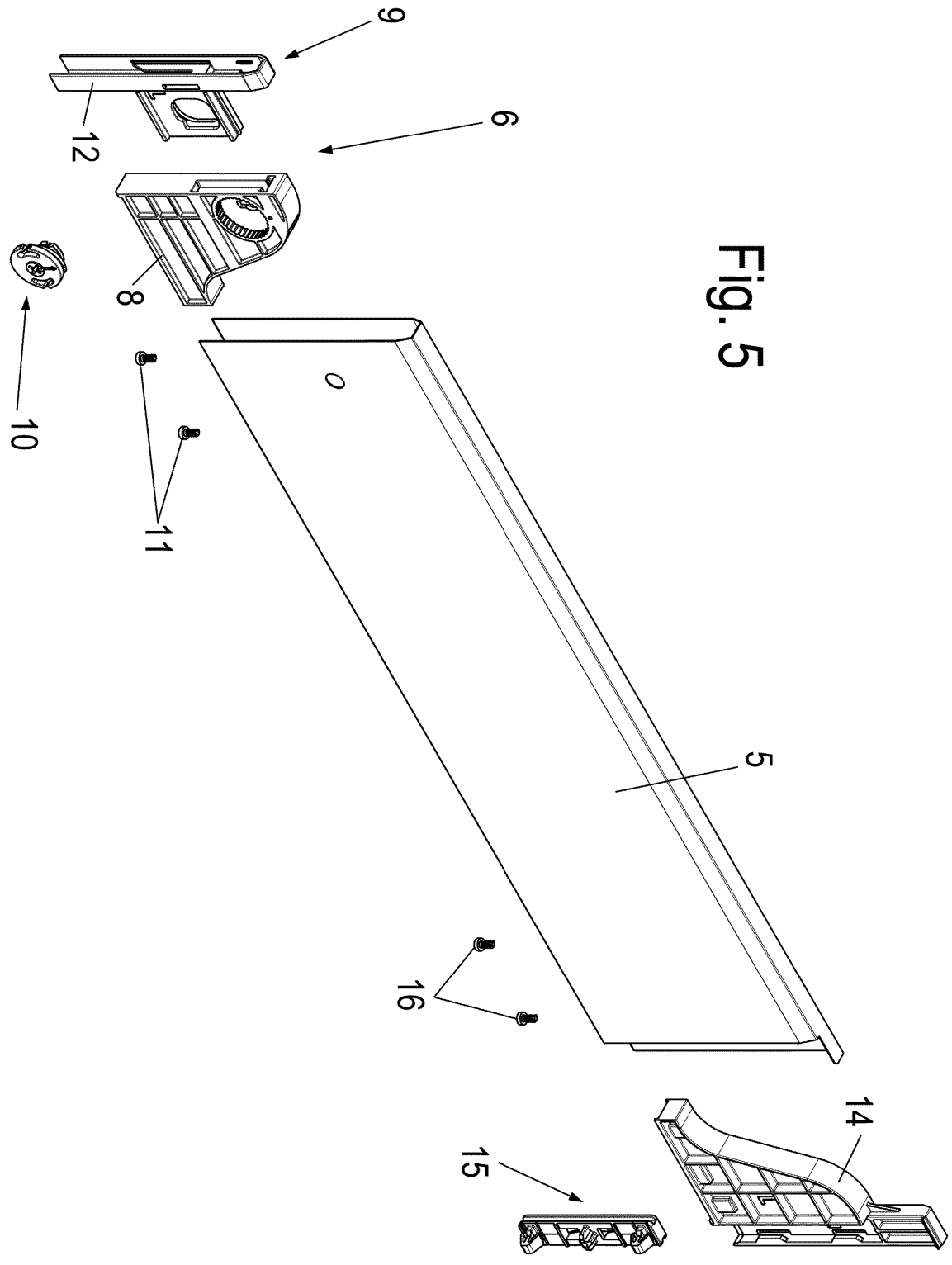


Fig. 5

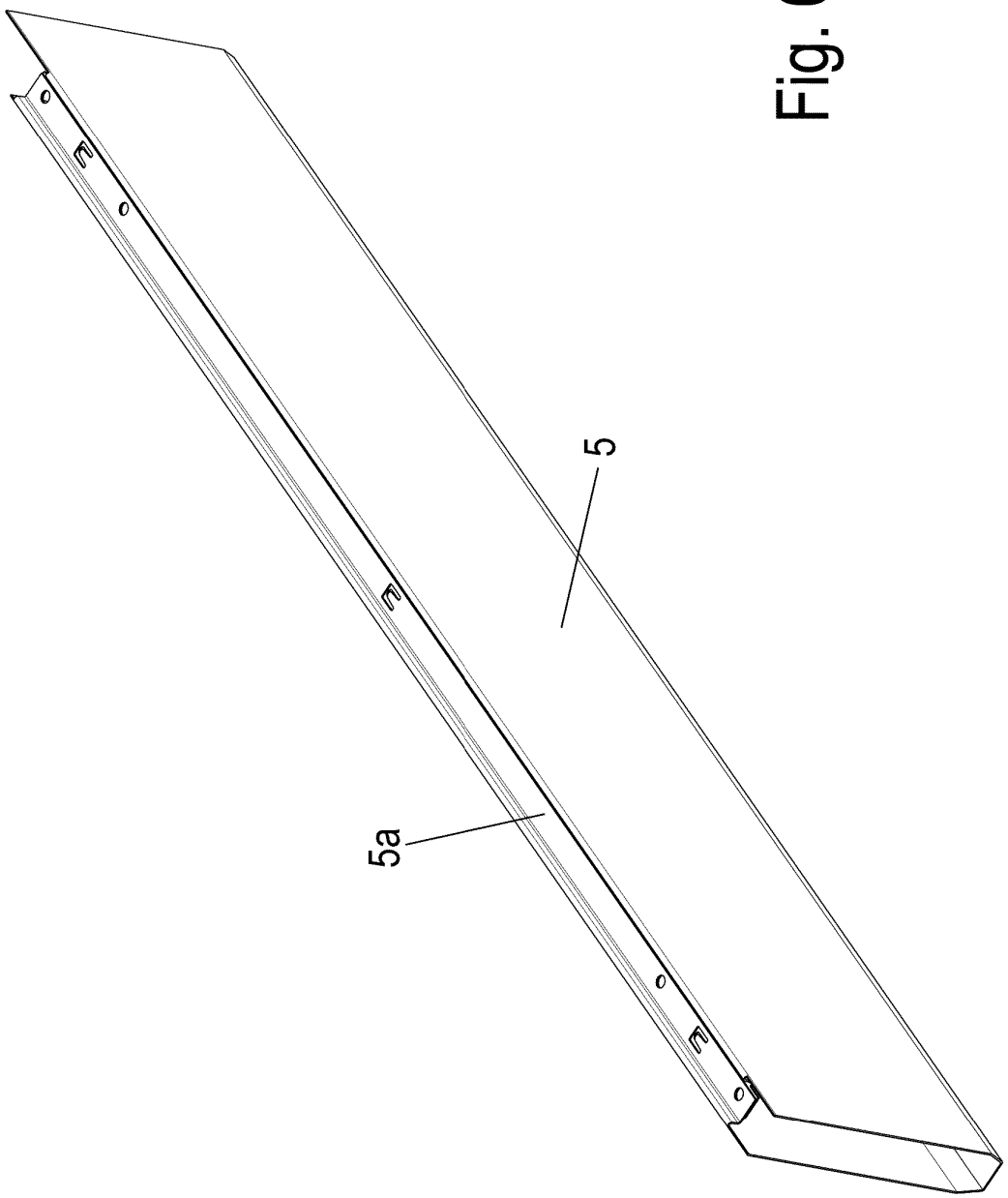


Fig. 6

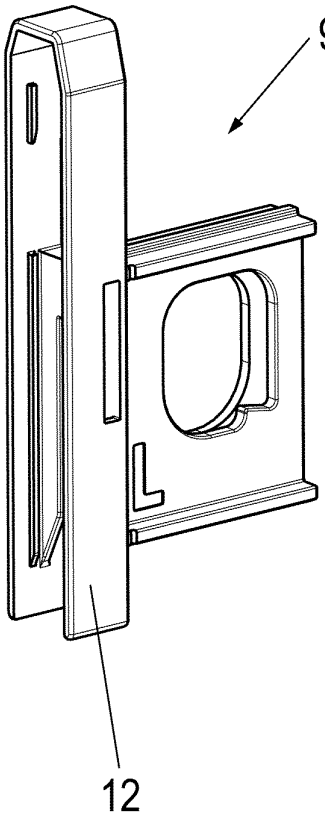


Fig. 7

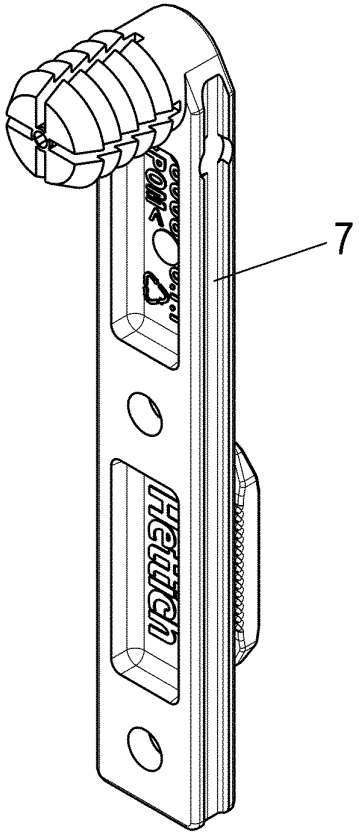


Fig. 8