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(54) High-chair with means for adjusting the position of the seat tray

(57) A high-chair with means for adjusting the position of the seat tray, comprising a seat (3) which is associated with a supporting frame (2) and is provided with a tray (11) which is detachably associable with the seat.

The device further comprising means (20,21) for adjusting the distance of the tray (11) with respect to the back of the seat (3).

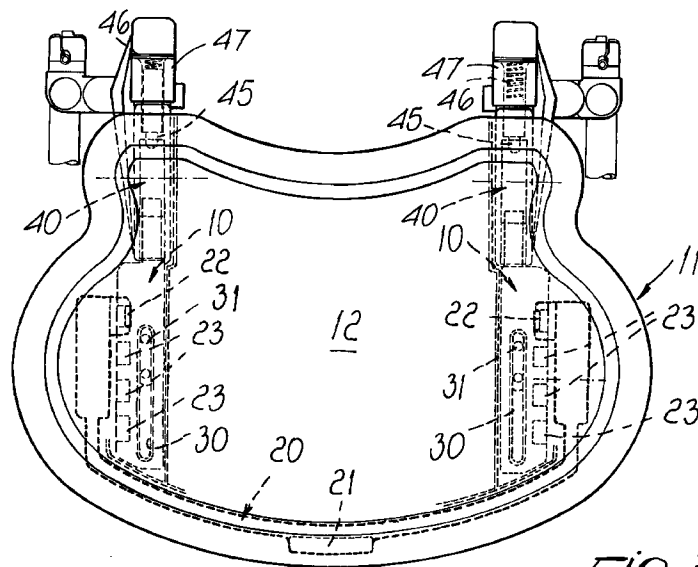


Fig. 2

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Description

[0001] The present invention relates to a high-chair with means for adjusting the position of the seat tray.

[0002] Conventional high-chairs are usually provided with a seat which can optionally be positioned at various heights on the frame and where to a tray is connected; in order to be detached, said tray usually requires a rather troublesome operation because it entails the actuation of release screws.

[0003] Moreover, in conventional solutions the position of the tray is substantially fixed and therefore cannot adapt to different requirements.

[0004] Another problem is also encountered in high-chairs of the folding type, in which the tray must normally be disassembled in order to reduce the dimensions of the high-chair in the folded position.

[0005] The aim of the invention is to eliminate the above-described drawbacks by providing a high-chair with means for adjusting the position of the seat tray which can be handled very quickly and easily, thus simplifying all the operations linked to the application of the tray.

[0006] Within the scope of this aim, a particular object of the present invention is to provide a high-chair in which the tray can be removed very quickly without thereby requiring the use of tools or complicated operations.

[0007] A further object of the present invention is to provide a high-chair which, thanks to its particular constructive characteristics, is capable of giving the greatest assurances of reliability and safety in use.

[0008] A further object of the present invention is to provide a high-chair with means for adjusting the position of the seat tray which can be obtained easily starting from commonly commercially available elements and materials and is also competitive from a purely economic point of view.

[0009] This aim, these objects and others which will become apparent hereinafter are achieved by a high-chair with means for adjusting the position of the seat tray, according to the present invention, comprising a seat which is associated with a supporting frame and is provided with a tray which is detachably coupled to said seat, characterized in that it comprises means for adjusting the distance of said tray with respect to the back of said seat.

[0010] Further characteristics and advantages of the invention will become apparent from the following detailed description of a preferred but not exclusive embodiment of a high-chair with means for adjusting the position of the seat tray, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

Figure 1 is a schematic lateral elevation view of a high-chair according to the present invention;

Figure 2 is a schematic plan view of the tray moved

toward the back of the high-chair;

Figure 3 is a plan view of the tray moved away from the back;

Figure 4 is a partially sectional lateral elevation view of the tray moved toward the back;

Figure 5 is a sectional view of the tray moved away from the back;

Figure 6 is a sectional lateral elevation view of the tray in the tipped-up position.

[0011] With reference to the above figures, the high-chair with means for adjusting the position of the seat tray according to the present invention, generally designated by the reference numeral 1, comprises a supporting frame 2, for example of the easel-like type, where to a seat generally designated by the reference numeral 3 is connected and can be arranged at various heights.

[0012] The seat is provided with armrests 10 to which it is possible to connect a tray generally designated by the reference numeral 11.

[0013] The tray 11 has an upper shell 12 which is coupled to a lower shell 13 in order to form channels for accommodating the armrests 10 with the presence of means for adjusting the distance of the tray with respect to the back of the seat 3.

[0014] In greater detail, the distance adjustment means are constituted by a forklike lever, designated by the reference numeral 20, which is mounted so that it can oscillate on the tray 11 and can be actuated by means of a button 21 which can be accessed in the front part of the tray and has protrusions 22 which can be inserted in recesses 23 formed in the lower face of the armrest 10.

[0015] The fork-like lever 20 is contrasted by a spring which inserts the pins or protrusions 22 in the corresponding recesses 23, maintaining the stable connection.

[0016] If the translatory motion is to be performed, it is sufficient to act on the button 21, which by producing the oscillation of the fork-like lever 20 disengages the protrusions 22 from the corresponding recesses 23, allowing the sliding of the tray with respect to the back and allowing to place it in a spaced position.

[0017] It should be observed that on the armrest 10 a guiding slot is provided, designated by the reference numeral 30, in which pins 31 engage which are associated with the tray 11, which is accordingly retained on the corresponding armrest with the possibility to slide in the chosen positions.

[0018] The right and left armrests 10 are connected to an oscillating block, designated by the reference numeral 40 and illustrated more clearly in Figure 6, which has a substantially circular body 41 which is pivoted at 42 to a block 43 which can be fixed to the seat 3.

[0019] The circular body 41 has a notch 44 in which it is possible to insert a plunger 45 which can slide in contrast with, and by means of the action of, a spring 46. A movable button 47 is rigidly connected to the plunger 45

and allows to retract the plunger 45, producing disengagement from the notch 44 and consequently allowing the rotation of the armrests and of the corresponding tray.

[0020] A further characteristic of the present invention is that the armrests 10 are connected to the oscillating block 40 by way of quick-coupling means which are constituted by an elastic tab 50 connected to the end of the armrest 10 which is pushed elastically so as to enter an opening 51 correspondingly provided in a wing 52 of the body 41.

[0021] In this way it is possible to release the armrest and the corresponding tray 11 very quickly, simply by acting on the elastic tab 50 in order to disengage it from the opening 51, consequently allowing to extract the armrests 10 from the corresponding coupling bodies.

[0022] From the above description it is thus evident that the invention achieves the intended aim and objects, and in particular the fact is stressed that an extremely functional high-chair is provided wherein the tray can be arranged in different positions by means of the actuation of a button which can be easily accessed by the user but not by the child, since it is located in the lower face of the front region of the tray.

[0023] A further aspect is that the tray can be easily tipped up, again by acting on easily accessible elements, such as the sliding buttons 47, and that the armrests with the associated tray can likewise be removed simply by acting on the elastic tabs 50.

[0024] The invention thus conceived is susceptible of numerous modifications and variations, all of which are within the scope of the inventive concept.

[0025] Moreover, all the details may be replaced with other technically equivalent elements.

[0026] In practice, the materials employed, as well as the contingent dimensions and shapes, may be any according to requirements.

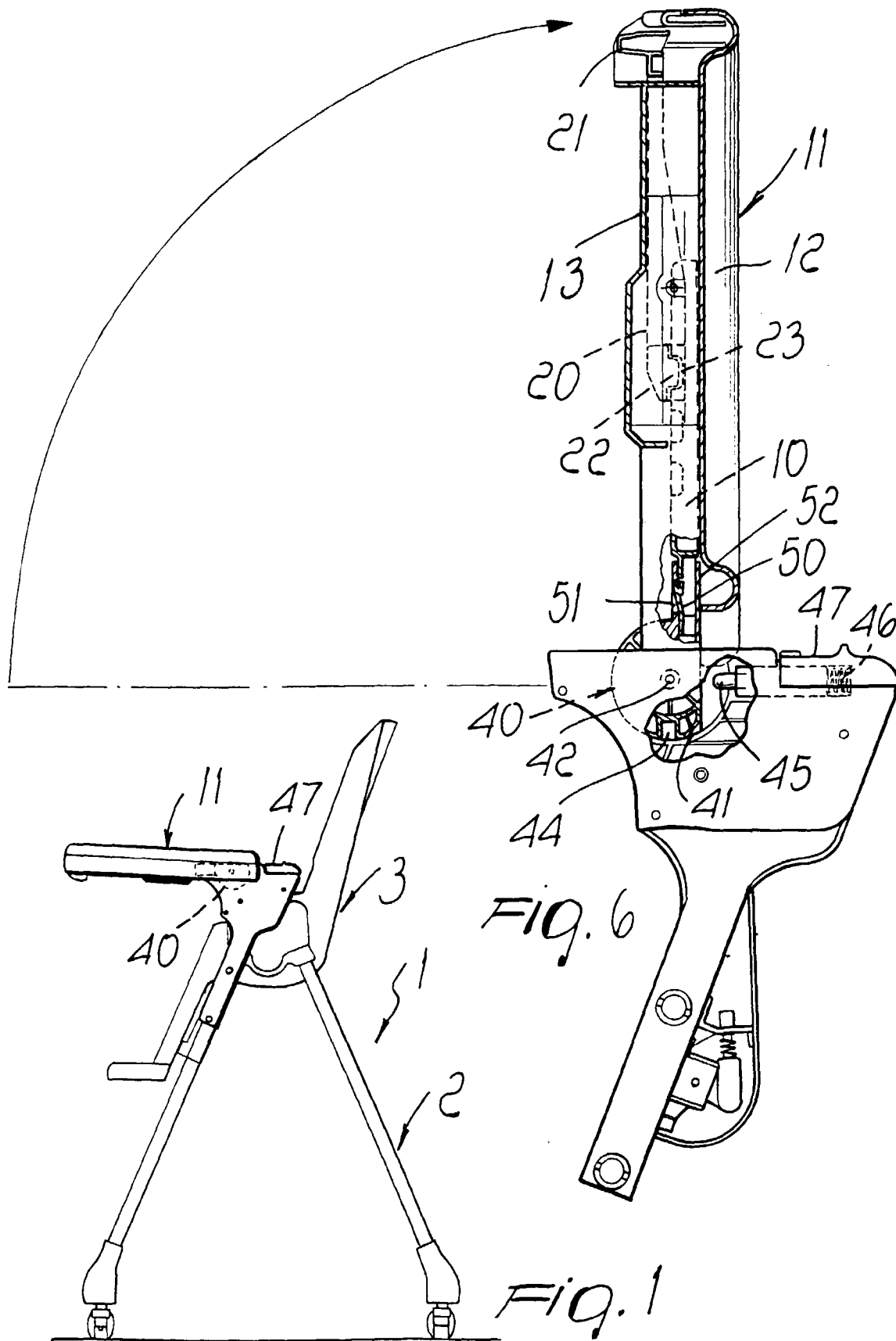
[0027] The disclosures in Italian Patent Application No. MI98A001353 from which this application claims priority are incorporated herein by reference.

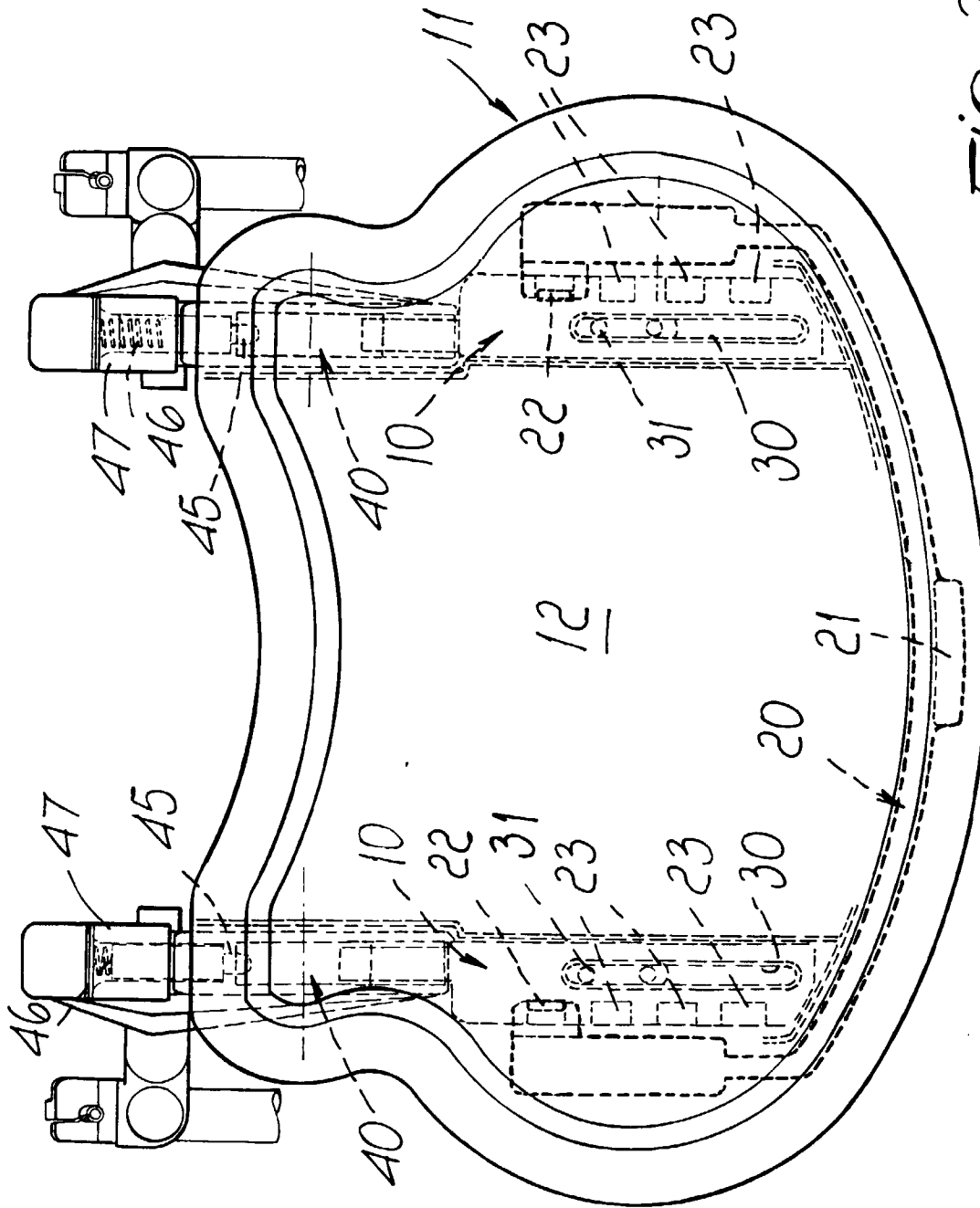
[0028] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

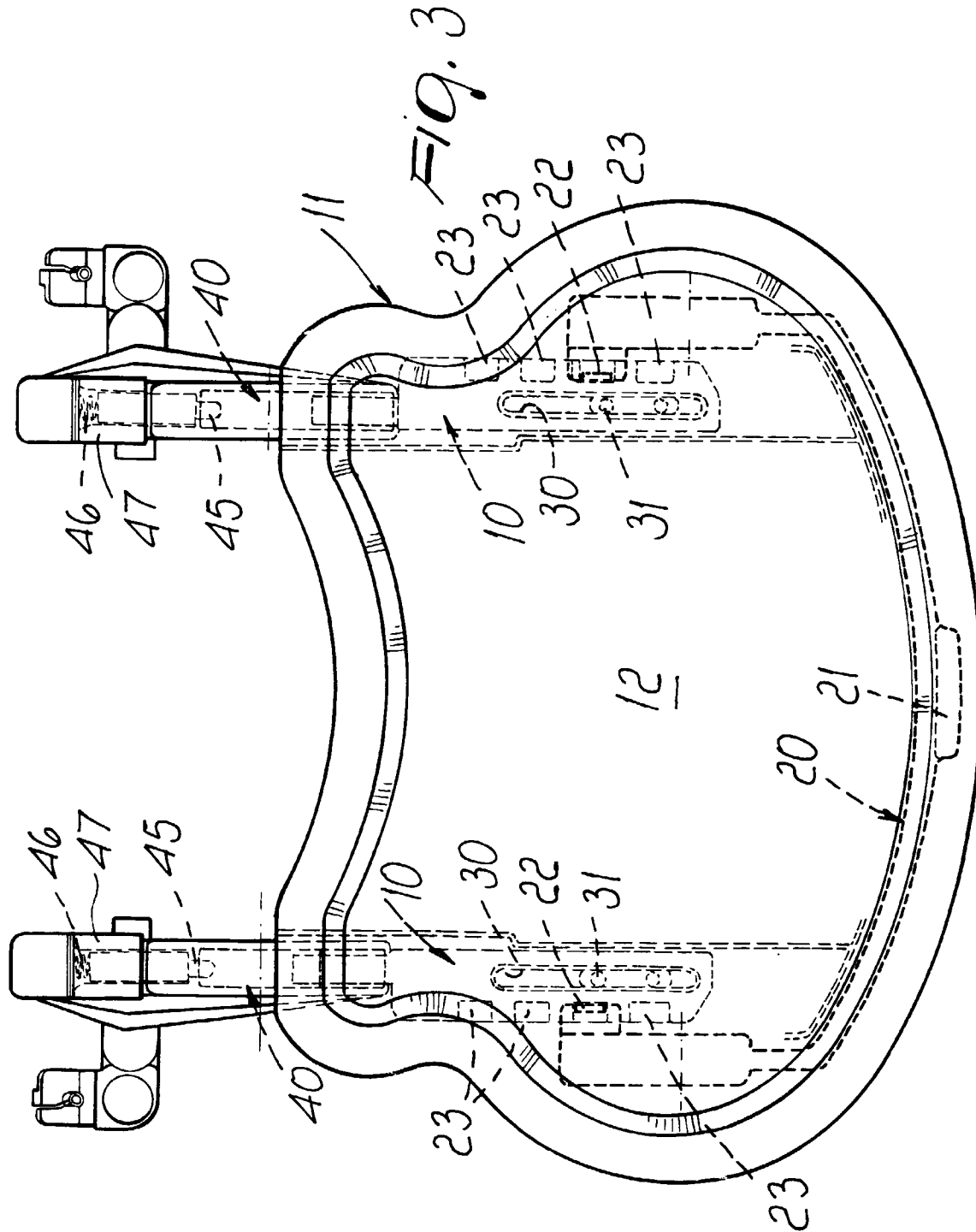
Claims

1. A high-chair with means for adjusting the position of the seat tray, comprising a seat which is associated with a supporting frame and is provided with a tray which is detachably associable with said seat, characterized in that it comprises means for adjusting the distance of said tray with respect to the back of said seat.

2. The high-chair according to claim 1, characterized in that it comprises armrests which can be detachably inserted in said tray.
3. The high-chair according to claim 2, characterized in that said tray comprises an upper shell and a lower shell which form channels for accommodating said armrests.
4. The high-chair according to claim 2, characterized in that said adjustment means comprise a fork-like lever which is mounted on said tray so that it can oscillate and forms a button which can be accessed at the front part of said tray, said fork-like lever having, on the opposite side with respect to said button, protrusions which can be removably inserted in recesses formed in said armrests.
5. The high-chair according to claim 4, characterized in that it comprises a spring which acts on said fork-like lever in order to retain said protrusions in said recesses.
6. The high-chair according to claim 2, characterized in that it comprises, on said armrests, a guiding slot in which pins connected to said tray slidably engage.
7. The high-chair according to claim 2, characterized in that it comprises oscillating blocks which can be rotatably associated with said seat and can be detachably connected to said armrests, said oscillating block having a substantially circular body provided with a notch in which a plunger is detachably insertable, said plunger sliding in contrast with, and through the action of, elastic means, a button being rigidly associable with said plunger, said button being movable for the actuation of said plunger.
8. The high-chair according to claim 7, characterized in that it comprises quick-coupling means for the connection of said armrests to said oscillating blocks.
9. The high-chair according to claim 8, characterized in that said quick-coupling means comprise an elastic tab which is provided at the ends of said armrests and can be inserted elastically in an opening formed in a wing of said circular body.







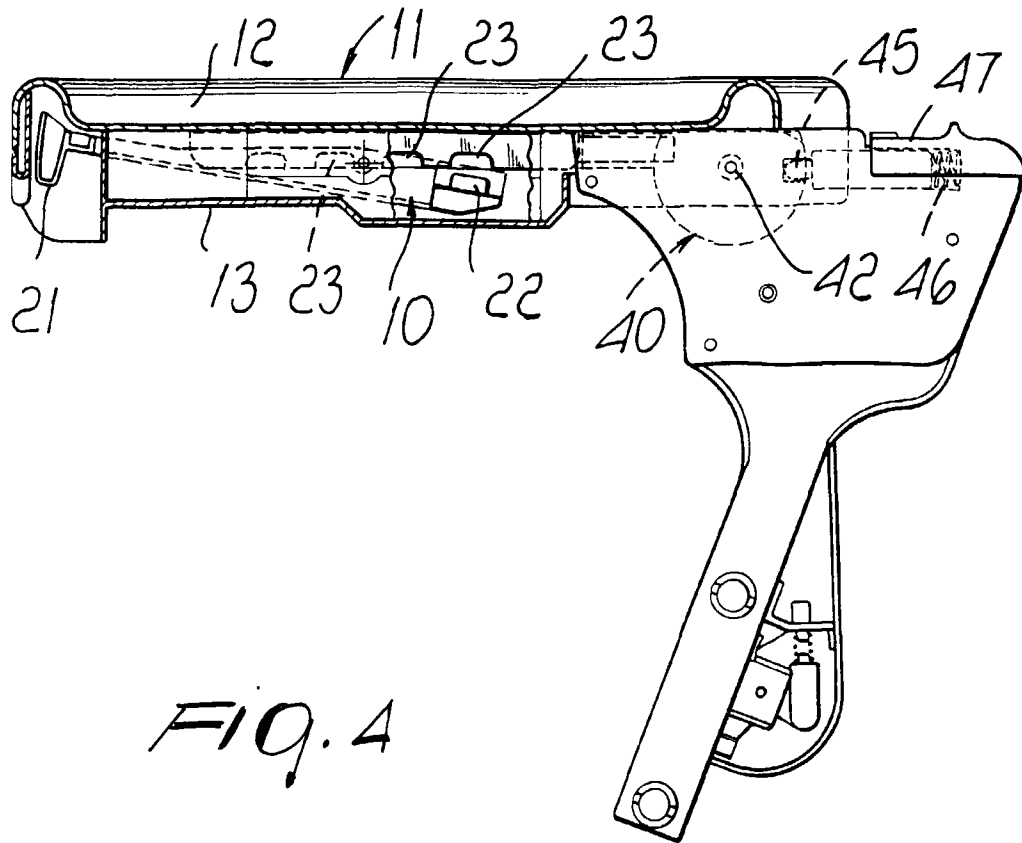


Fig. 4

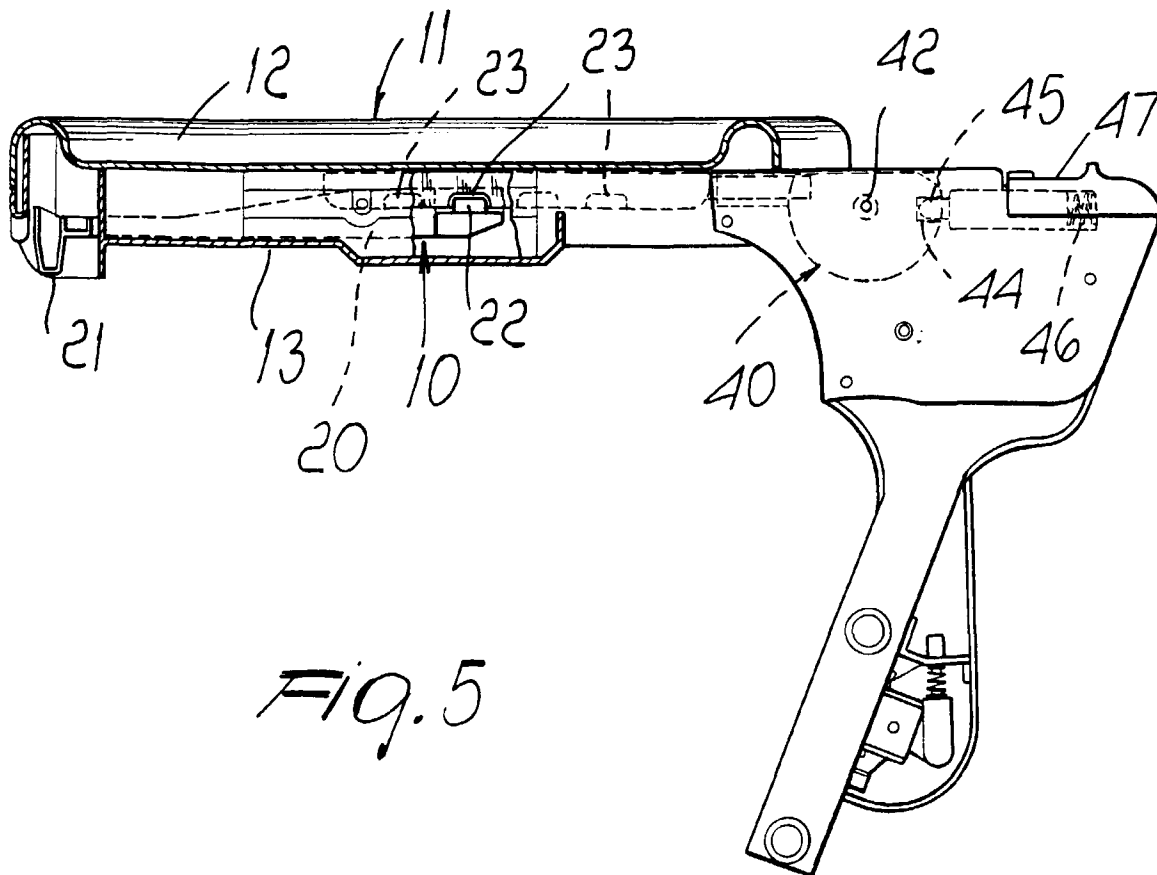


Fig. 5