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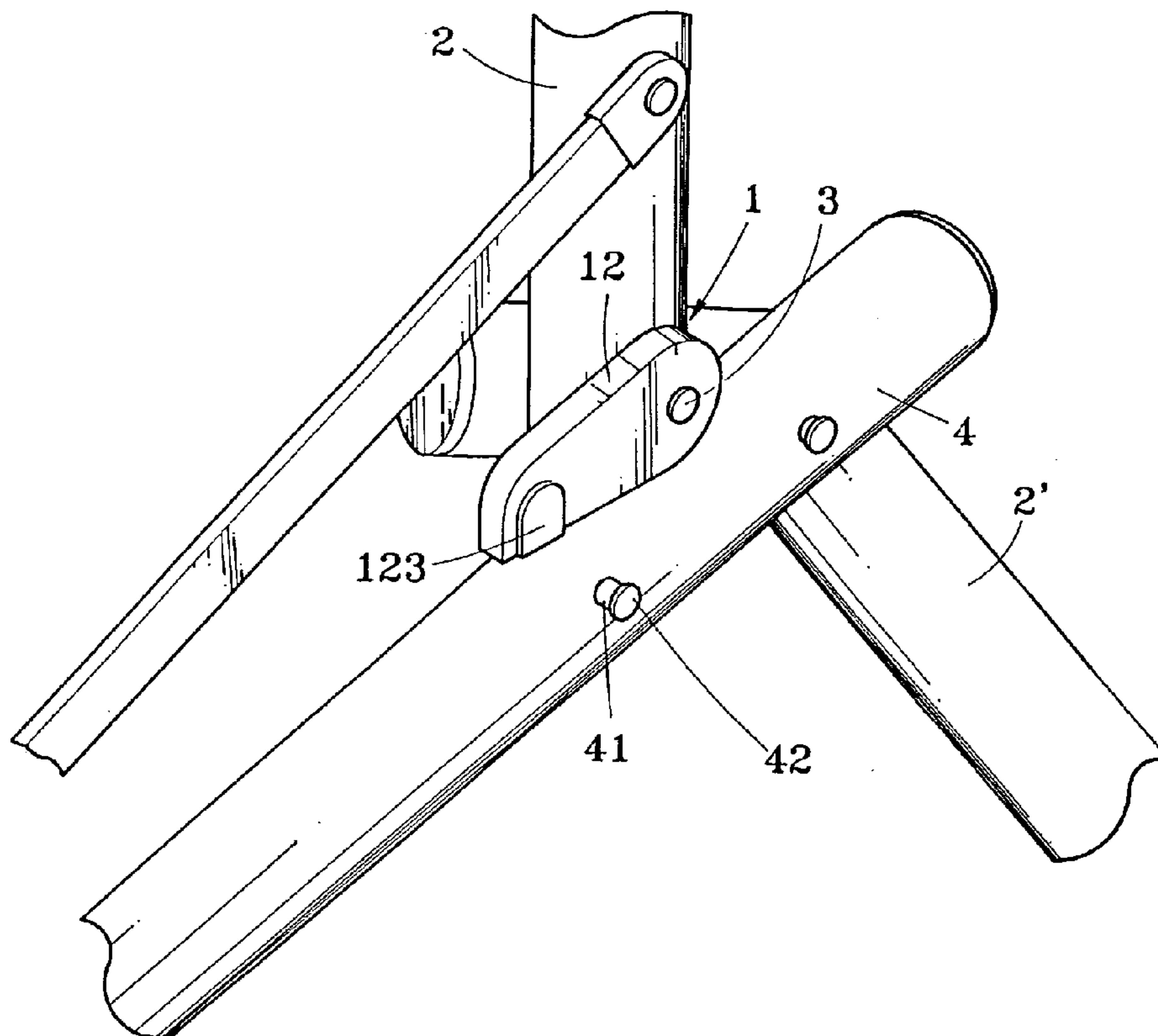
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(54) **BLOCAGE DE SECURITE POUR CHAISE PLIANTE**

(54) **SAFETY LOCK FOR A FOLDING CHAIR**



(57) Dispositif de sécurité à pivot s'articulant sur le cadre de dossier et le cadre de piètement d'une chaise pliante et conçu pour s'accrocher à une goupille de positionnement à tête située sur un des côtés du cadre de siège de la chaise en vue de la maintenir en position dépliée. Le dispositif de sécurité comprend un crochet de métal articulé autour du pivot et présentant un cran de retenue qui s'accroche à la goupille de positionnement de même qu'un capuchon de caoutchouc recouvrant le crochet, lequel est également articulé autour du pivot, et un embrèvement pour recevoir la tête de la goupille de positionnement.

(57) A safety lock pivoted to a back frame and a stand frame of a folding chair by a pivot and adapted for hooking on a headed locating pin at one side of a seat frame of said folding chair to secure said folding chair in an extended position, the safety lock including a metal hook turned about the pivot and having a retaining notch adapted for hooking on the headed locating pin, and a rubber cap covered on the hook and turned with it about the pivot, having a retaining notch adapted for hooking on the headed locating pin and an inside recess adapted for receiving the head of the headed locating pin.



ABSTRACT OF THE DISCLOSURE

A safety lock pivoted to a back frame and a stand frame of a folding chair by a pivot and adapted for hooking on a headed locating pin at one
5 side of a seat frame of said folding chair to secure said folding chair in an extended position, the safety lock including a metal hook turned about the pivot and having a retaining notch adapted for hooking on the headed locating pin, and a rubber
10 cap covered on the hook and turned with it about the pivot, having a retaining notch adapted for hooking on the headed locating pin and an inside recess adapted for receiving the head of the headed locating pin.

SAFETY LOCK FOR A FOLDING CHAIRBACKGROUND OF THE INVENTION

The present invention relates to folding chairs, and more specifically to a safety lock for a folding chair which firmly retains the folding chair in the operative position when the folding chair is extended out.

Conventional folding chairs are commonly made from wooden material. Because these wooden folding chairs are heavy, they have been gradually abandoned. Nowadays, most folding chairs are made from metal. These metal folding chairs are commonly comprised of a folding frame structure comprised of a plurality of rod members pivotably connected together by screws and nuts, and a cloth seat and a cloth back respectively fastened to the folding frame structure. These conventional folding chairs are still not satisfactory in function. When the user sits on the chair, the back frame, the seat frame, and the stand frame tend to vibrate relative to one another. Therefore, the folding frame structure may collapse suddenly when in use, causing the user to be

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injured.

SUMMARY OF THE INVENTION

The present invention has been accomplished to provide a safety lock which eliminates the aforesaid problems. It is one object of the present invention to provide a safety lock for a folding chair which firmly retains the folding chair in the operative position when the folding chair is extended out. It is another object of the present invention to provide a safety lock for a folding chair which prolongs the service life of the folding chair. It is still another object of the present invention to provide a safety lock for a folding chair which is safe in use. According to the present invention, a safety lock pivoted to a back frame and a stand frame of a folding chair by a pivot and adapted for hooking on a headed locating pin at one side of a seat frame of said folding chair to secure said folding chair in an extended position, the safety lock comprising: a hook having a first end fixed about a pivot point and a second free end provided with a retaining notch adapted for hooking on said headed locating pin; and a cap covering said hook, said cap having a first end fixed about said pivot point, and a second free end

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provided with a retaining notch adapted for hooking on said headed locating pin and an inside recess adapted for receiving the head of said headed locating pin.

BRIEF DESCRIPTION OF THE DRAWINGS

5 Fig. 1 is an elevational view of a safety lock according to the present invention;

 Fig. 2 is an exploded view of Figure 1;

 Fig. 3 is a side view of Figure 1;

10 Fig. 4 is similar to Figure 3 but showing the safety lock locked;

 Fig. 5A is an applied view of the present invention, showing the safety lock installed in a folding chair; and

15 Fig. 5B is an enlarged view of a part of Figure 5A.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

20 Referring to Figures 1 and 2, a safety lock 1 in accordance with the present invention is generally comprised of a hook 11, and a cap 12 which holds the hook 11 on the inside. The hook 11 and the cap 12 have a respective pivot hole 111, 121 at one end respectively pivotably connected to a pivot hole 21 at one end of the back frame 2 of a folding chair (not shown) and a pivot hole 21' at

one end of a stand frame 2' of the folding chair by a pivot 3, and a respective arched retaining notch 112, 122 at an opposite end adapted for hooking on a locating pin 41 at one side of the seat frame 4 of the folding chair. The cap 12 has an inside recess 123 adapted for receiving the head 42 of the locating pin 41 when the retaining notch 122 is forced into engagement with the locating pin 41.

Referring to Figures 3 and 4, when the folding chair is extended out, the back frame 2 is retained in a position approximately perpendicular to the seat frame 4, and the safety lock 1 is turned about the pivot 3 to force the retaining notch 112 of the hook 11 and the retaining notch 122 of the cap 12 into engagement with the locating pin 41 of the seat frame 4, permitting the head 42 of the locating pin 41 to be received in the inside recess 123 of the cap 12, and therefore the back frame 2 and the seat frame 4 are firmly retained in the extended position, and prohibited from being turned relative to each other. The hook 11 of the safety lock 1 is preferably made from metal, so that the safety lock 1 can bear pressure transmitted through the seat frame 4 and the back

frame 2. The cap 12 is preferably molded from rubber. Because the hook 11 is protected inside the cap 12, the user will not be injured by the hook 11 when operating the safety lock 1.

5 Figures 5A and 5B show the present invention installed in a folding chair, and adapted for securing the folding chair in the extended position.

Claims:

1. A safety lock pivoted to a back frame and a stand frame of a folding chair by a pivot and adapted for hooking on a headed locating pin at one side of a seat frame of said folding chair to secure said folding chair in an extended position, the safety lock comprising: a hook having a first end fixed about said pivot point and a second free end provided with a retaining notch adapted for hooking on said headed locating pin; and a cap covering said hook, said cap having a first end fixed about said pivot point, and a second free end provided with a retaining notch adapted for hooking on said headed locating pin and an inside recess adapted for receiving the head of said headed locating pin.

2. The safety lock of claim 1 wherein said hook is made from metal.

3. The safety lock of claim 1 wherein the retaining notch of said hook and the retaining notch of said cap have an arched shape.

4. The safety lock of claim 1 wherein said cap is molded from rubber.

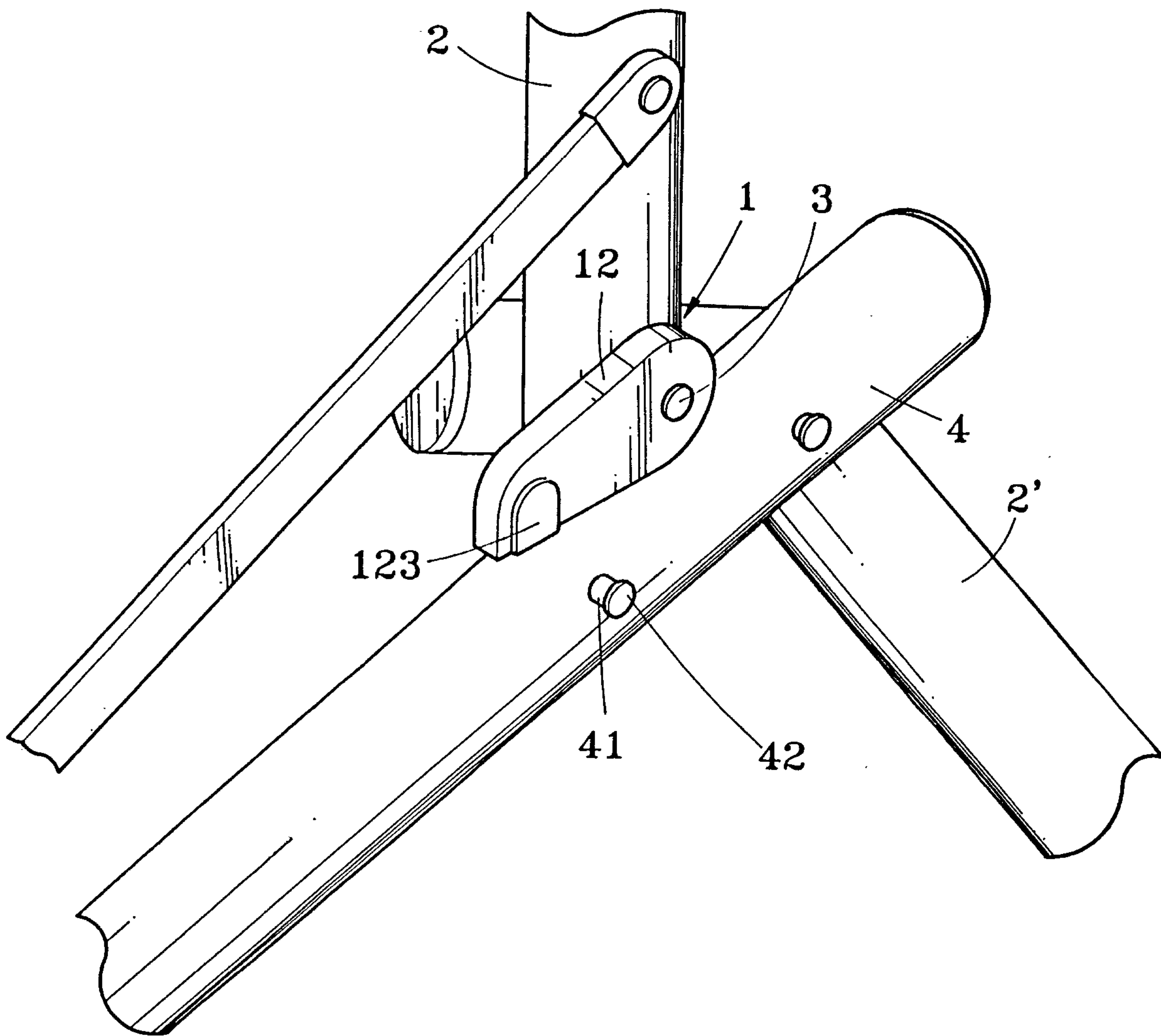


Fig. 1

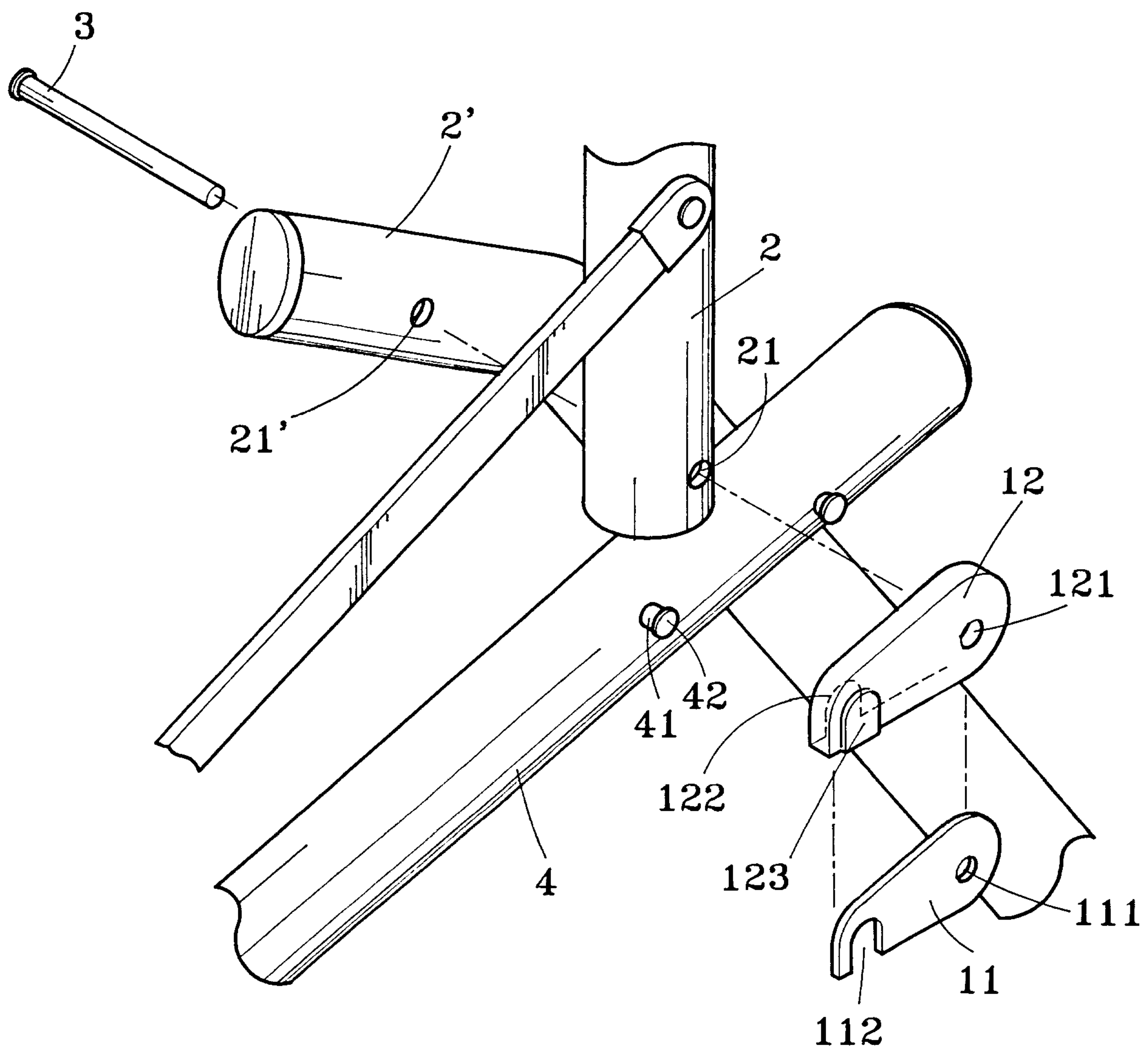


Fig. 2

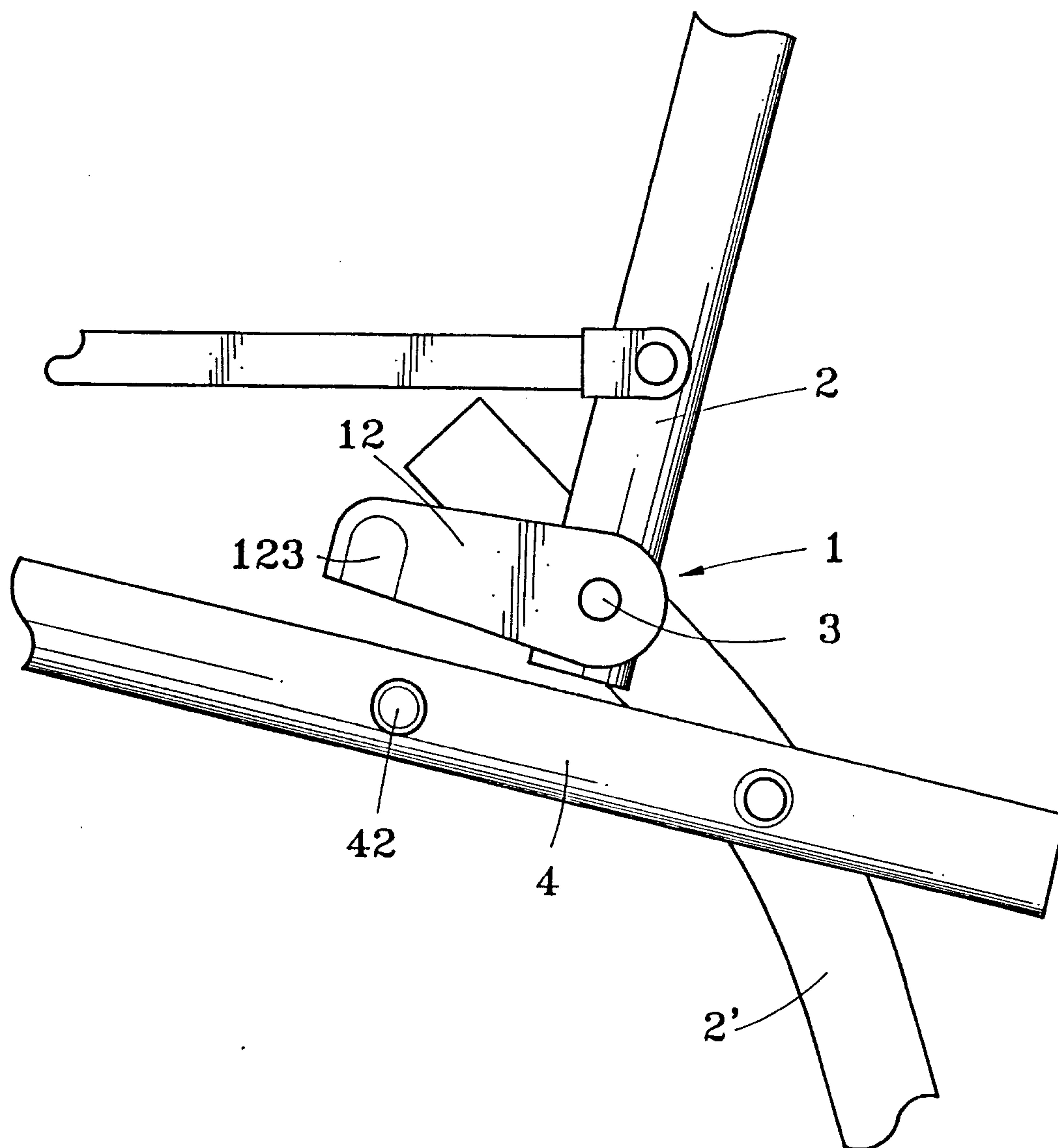


Fig. 3

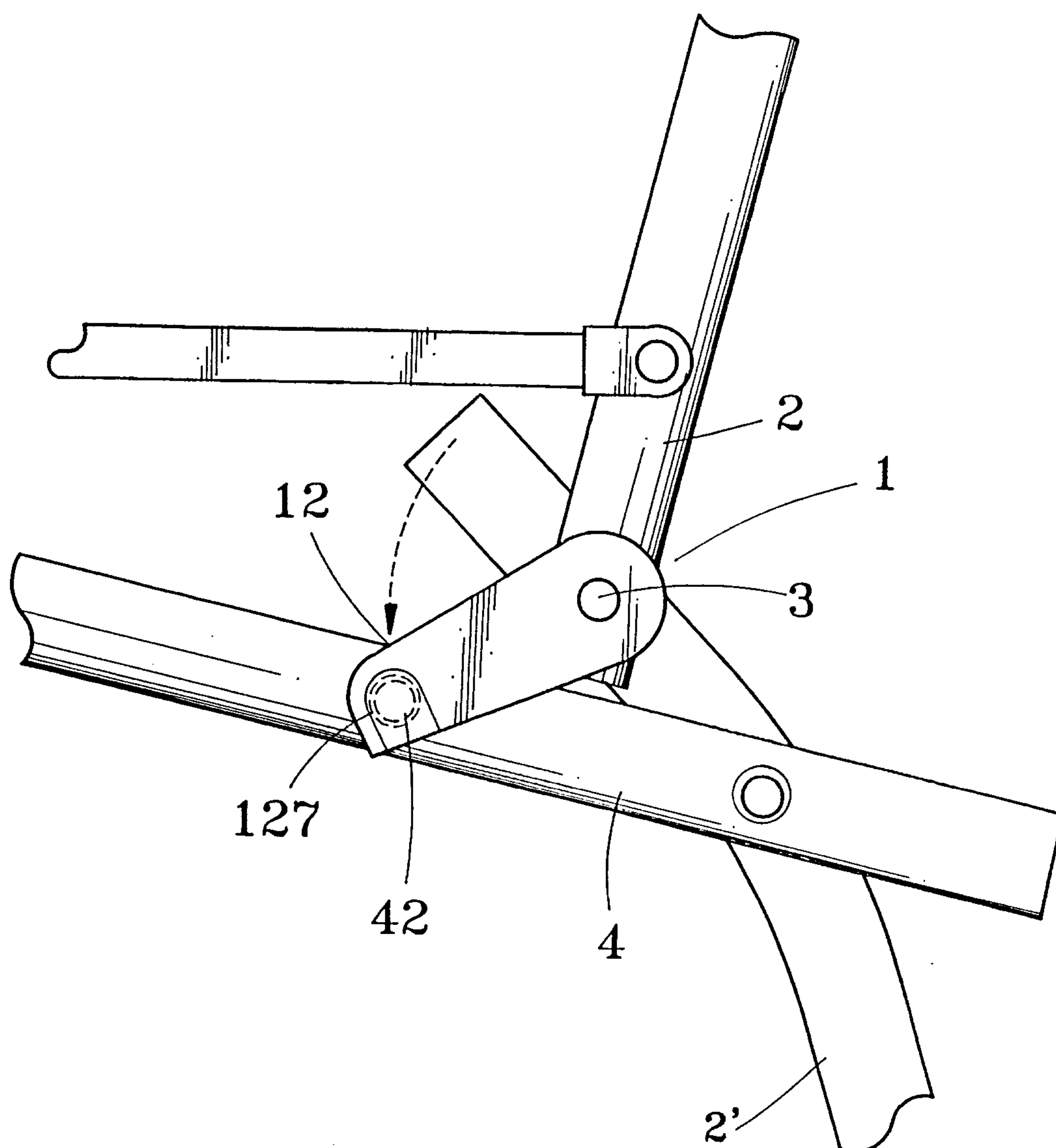


Fig. 4

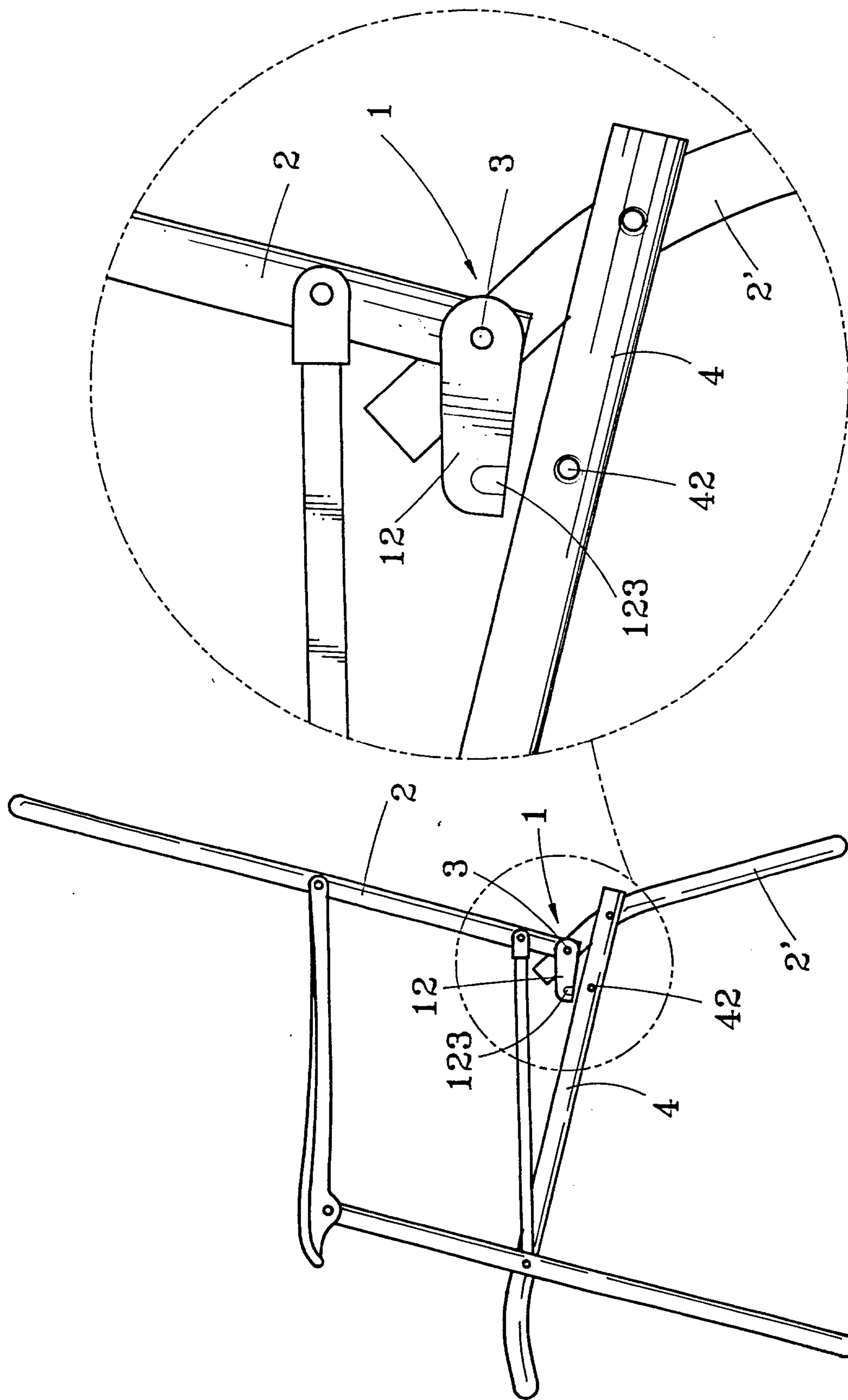


Fig. 5B

Fig. 5A