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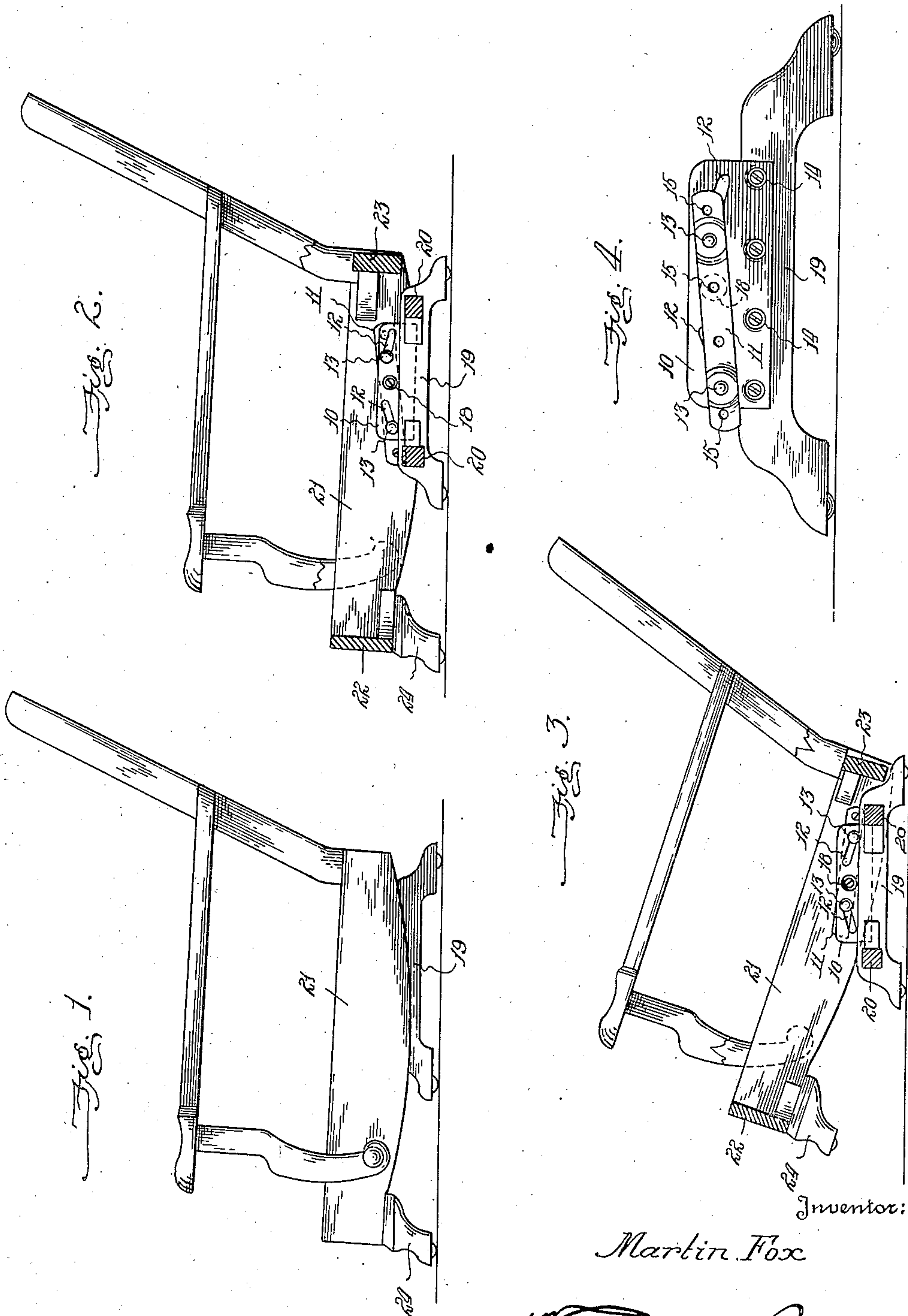
M. FOX

2,148,933

METAL FIXTURE FOR RECLINING CHAIRS

Filed Oct. 12, 1938

2 Sheets-Sheet 1



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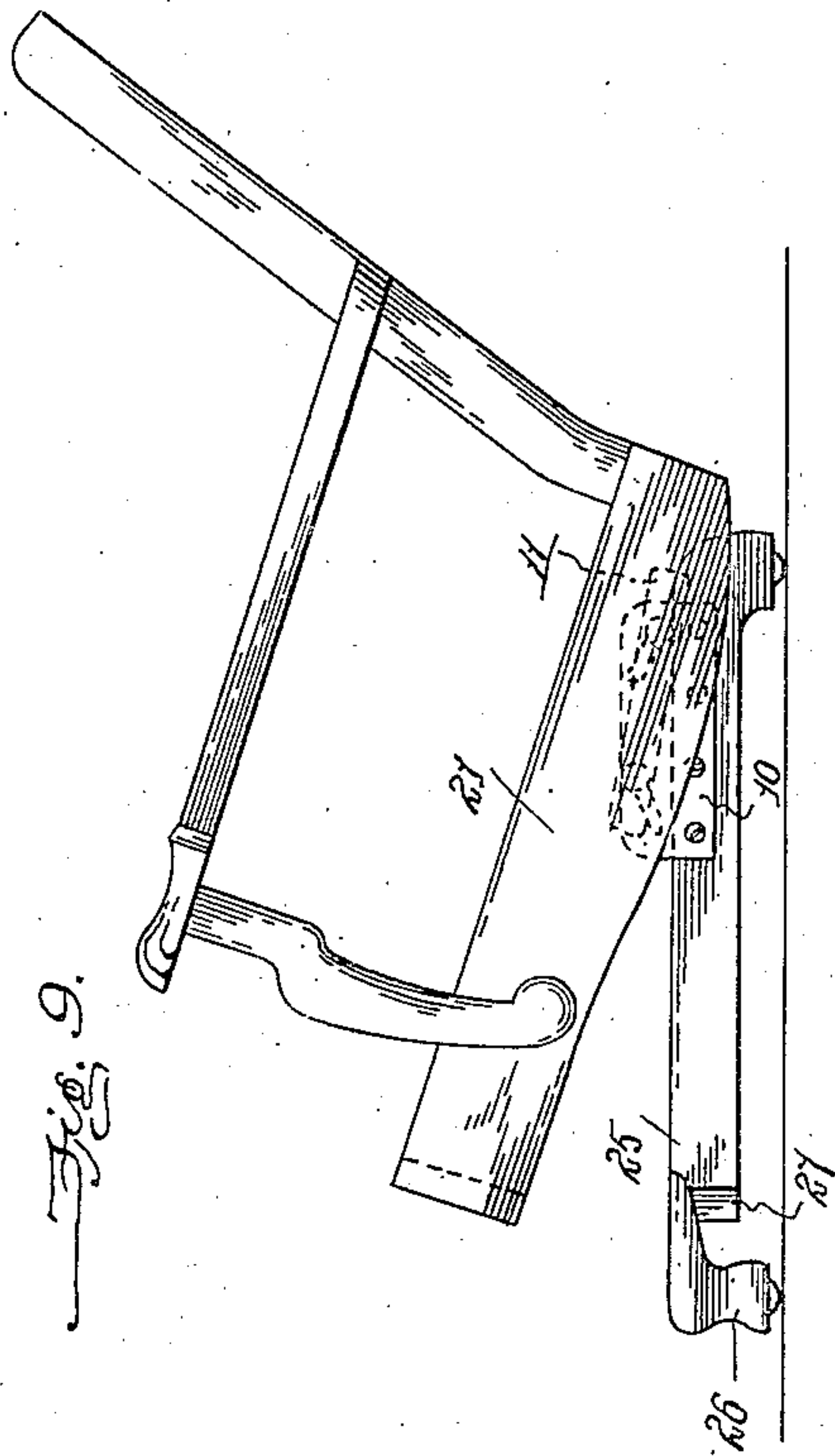
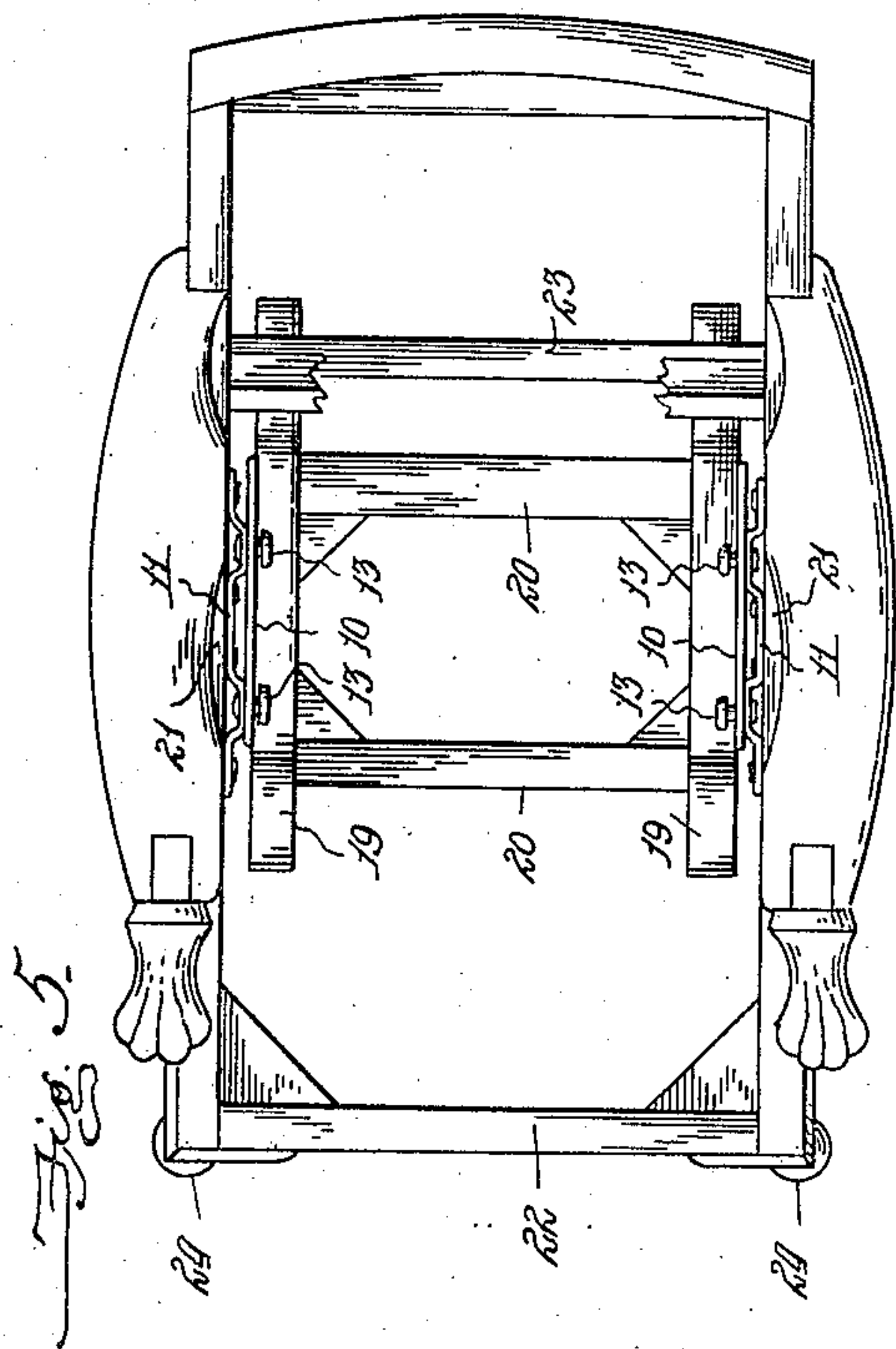
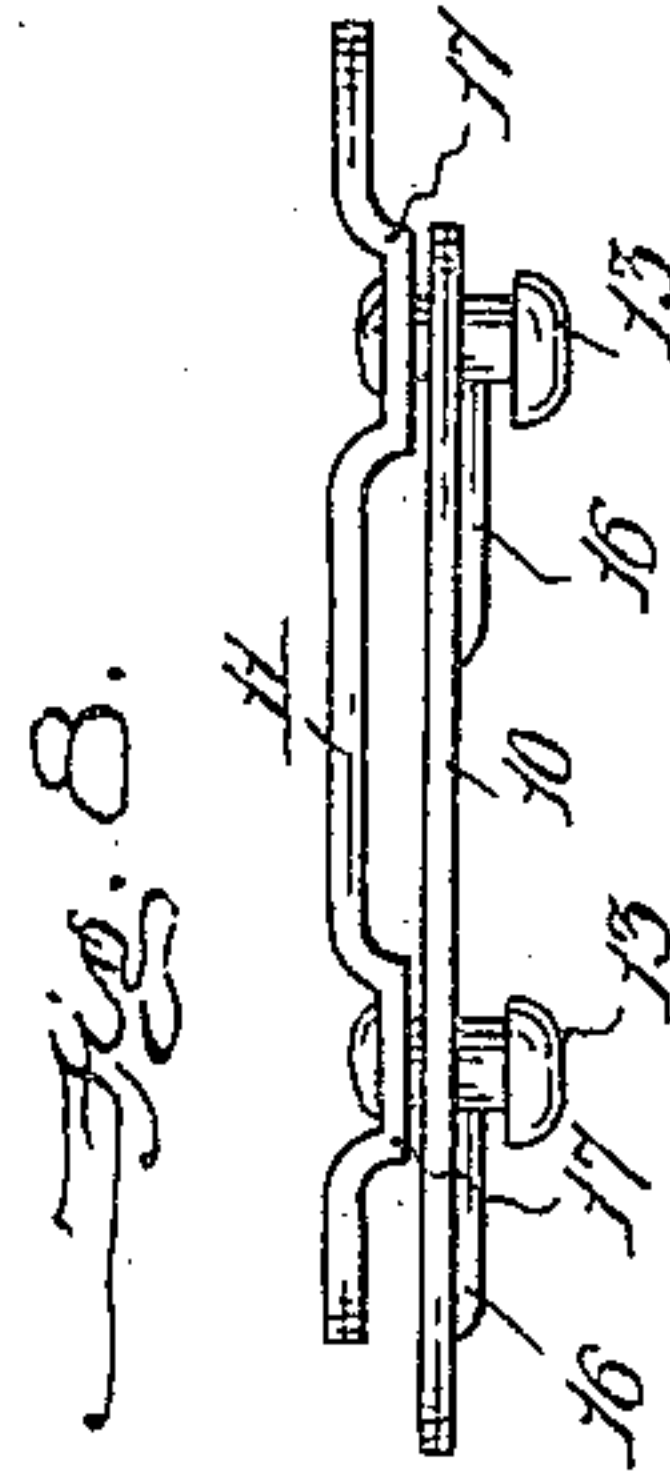
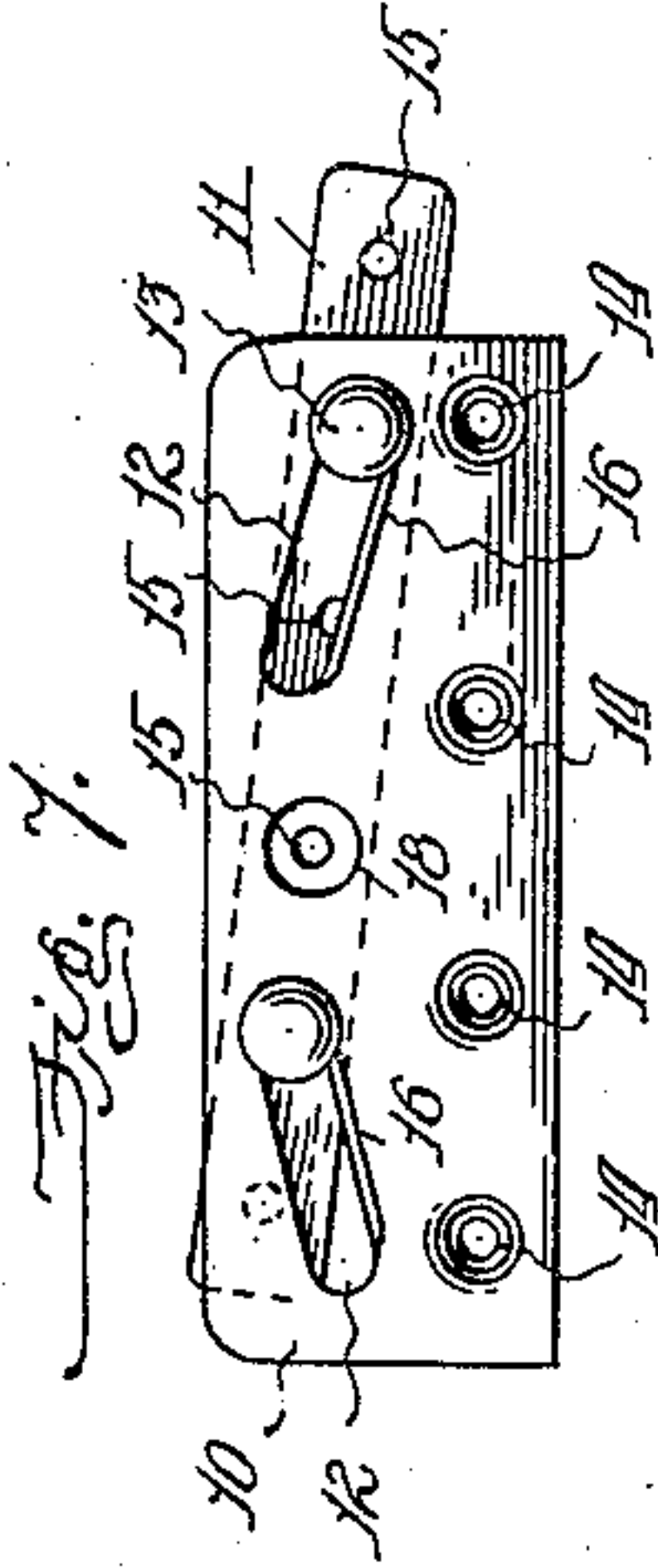
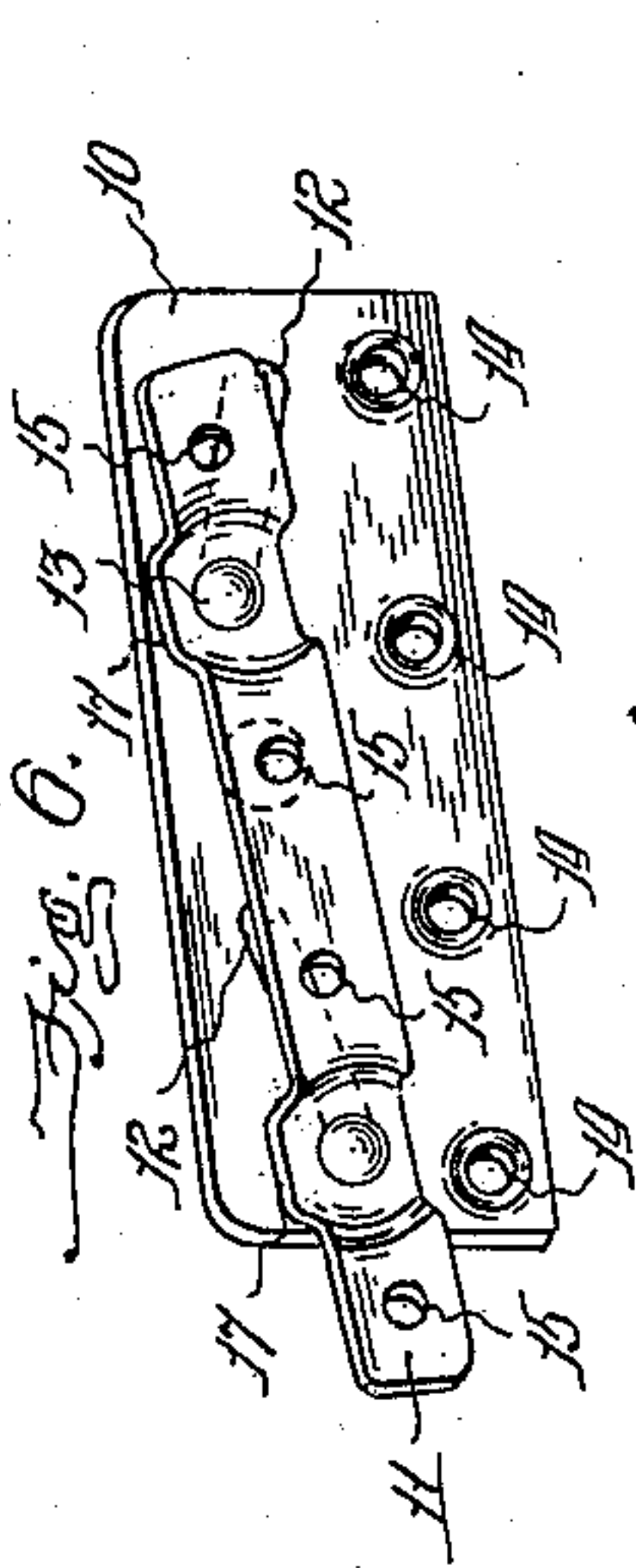
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METAL FIXTURE FOR RECLINING CHAIRS

Filed Oct. 12, 1938

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,148,933

METAL FIXTURE FOR RECLINING CHAIRS

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3 Claims. (Cl. 155—57)

My invention is an improvement in chairs of that particular type in which the rigidly connected seat and back are mounted on a stationary supporting base in such manner as to be capable of tilting movement for a reclining position of the occupant.

The main object of my invention is to provide a set of metal fixtures for chairs of this special type which can be readily and conveniently attached to the seat frame and supporting base, respectively, for connecting them together to not only insure a substantial connection of the parts but also provide an easy movement of the seat structure from one position to the other in respect to the base on which it is mounted.

A further object of my invention is to provide metal fixtures for this general purpose of sturdy construction to promote the stability of the connection between the chair frame and base thereby materially increasing the durability of the article of furniture.

With these principal objects in view my invention contemplates a novel form of connecting means especially adapted for reclining chairs, at each side thereof, in the form of metal plates one of which is provided with pins working in oppositely inclined slots in the companion plate, as hereinafter fully described and more particularly set forth in the appended claims.

In the drawings:

Figure 1 is a side elevation of a reclining chair illustrating an application of my invention.

Fig. 2 is a longitudinal sectional view through the chair with the seat structure in normal position.

Fig. 3 is a similar view with the seat structure tilted backward.

Fig. 4 is an enlarged detail view, in side elevation, showing one of the combined fixtures attached to the supporting base.

Fig. 5 is a plan view of the seat frame and supporting base with my improved metal fixtures attached at the opposite sides thereof.

Figs. 6, 7, and 8 are detail views of the combined fixture, and

Fig. 9 is a side elevation illustrating a modification in respect to the supporting base and seat frame.

The metal fixture in accordance with my invention, for application to the chair frame and supporting base of a reclining chair, is made up of two plates 10 and 11, the plate 10 being rectangular in shape with slots 12, 12 inclined downwardly in opposite directions from near the center thereof, while plate 11 is in the form of a

comparatively narrow strip connected to the other plate by pins 13 extending therefrom through the slots and provided with heads at their outer ends connecting the plates together as an article of manufacture. The spacing of the pins on the strip associated with the slots in the plate is such that in either position of the strip one of the pins is at the outer end of its slot and the other pin at the inner end of the companion slot, thus providing for a rocking motion of the strip on the plate, and for attachment of the plates to the supporting base and seat frame of a reclining chair, as hereinafter described, the plate is provided with screw holes 14 near its lower edge and the metal strip with screw holes 15 spaced along the center portion thereof.

To provide an increased bearing for the pins at the lower edges of the slots lateral flanges 16 (Fig. 7) are struck outwardly from the face of the plate in which the slots are formed, and in order to space the strip a slight distance from the companion plate bosses 17 are struck from said strip through the center of which the pins pass and are upset or riveted, as indicated in the drawings. Furthermore, as the two plates are connected together for rocking movement one on the other and constitute the combined article of manufacture to be sold to the furniture trade for attachment to the cooperating parts of a reclining chair, an opening 18 is provided at the upper part of the center of the plate 10 for exposing the intermediate screw holes through the metal strip so that access can be had thereto in driving the screws into the part of the chair to which the metal strip is secured.

It will be obvious that a set of fixtures in accordance with my invention, for application to the opposite sides of a reclining chair, can be applied to supporting bases and seat structures of various designs, in Figs. 1 to 5 inclusive a short base being shown, while in the modification, Fig. 9, a long base is employed, in each instance the fixtures being attached to the side pieces of the base and seat frame, respectively. The short base, located at the rear end of the seat frame, comprises side pieces 19 connected by crosspieces 20, and in this instance the seat frame having the side pieces 21 and connected by front and rear crosspieces 22, 23 carries the feet 24 for supporting the forward end of the chair, while in the modification including a long supporting base with side pieces 25 the feet, 26, are at the forward end of said base so that the forward end of the chair instead of resting directly on the floor will be supported on the crosspiece 27 of

the base. The fixtures are applicable to other designs or styled or reclining chairs, as well as other articles of furniture in which a tilting or rocking motion of one part in respect to another is desired, and instead of using pins riveted to and extending from one of the parts of the fixture for engagement with the slots in the other part any other analogous means may be employed, as a lug, gudgeon, or other offset, round or rectangular in cross-section, to accomplish the purpose of supporting the chair for tilting movement on the base.

In applying the metal fixtures to the supporting base and seat frame of a reclining chair the plate 10 is secured to the outer side of a side piece of the supporting base so that the slots will be located above the upper edge thereof, with the connected metal strip 11 at the outer side or face of the plate for attachment to the inner side of a side piece 21 of the seat frame, and in like manner another metal fixture is attached to the supporting base and seat frame at the other side of the chair, the screws for the intermediate holes in the metal strip being passed through the opening 18 in the plate by tilting the chair frame to bring these screw holes in line with said opening. In attaching the metal strip to the seat frame said strip is arranged with the pins at the forward ends of the slots in the plate secured to the supporting base, the seat being in normal position with the front feet resting on the floor (see Fig. 2), and after applying the screws through the holes exposed beyond the forward end of the plate and through the opening 18 therein the seat frame is tilted backward (Fig. 3) for applying the screws through the other holes in the strip exposed beyond the rear end of the plate and aforesaid opening in said plate. It will be apparent, therefore, that the attachment of the fixtures to the parts of the chair connected thereby can be quickly accomplished, and may be effected either before or after the seat (not shown) has been secured in the seat frame for completing the chair.

In use, when the chair is tilted backward the pins will travel in the slots from the forward to the rear ends thereof, and consequently the extent to which the chair may be tilted will be determined by the length of the slots, and by increasing the width of the bearing surfaces on which the pins ride the durability and ease of operation is increased.

I claim:—

1. A metal fixture for reclining chairs and like articles of furniture to support and provide for a tilting movement of one of the parts with respect to the other, comprising a plate having slots inclined downward in opposite directions from near the center thereof and an opening through the plate intermediate the slots, a companion plate or metal strip having a longitudinal series of holes to receive the means for attaching the plate to the article of furniture, and pins or lugs extending from the metal strip through the slots for connecting the plates together to form an article of manufacture, the hole in the center portion of the first mentioned plate providing access to the intermediate holes in the metal strip for applying the attaching means of the latter.

2. A metal fixture for reclining chairs and like articles of furniture to support and provide for a tilting movement of one of the parts with respect to the other, comprising a plate having slots inclined in opposite directions from near the center of the plate, a companion plate or metal strip having apertured bosses spaced to correspond with the spacing of the slots in the aforementioned plate for spacing the plates a slight distance apart, and pins or lugs extending through the apertured bosses into the slots and having heads at their outer ends for connecting the plates together.

3. A metal fixture for reclining chairs and like articles of furniture to support and provide for a tilting movement of one of the parts with respect to the other, comprising a plate having slots inclined in opposite directions from the center portion thereof and an opening intermediate said slots, laterally projecting flanges at the lower edges of the slots to provide increased bearings, and a companion plate or metal strip having pins or lugs extending through the slots to ride on the aforementioned bearings, said pins having heads at the outer ends thereof for connecting the plates together as an article of manufacture, the metal strip having screw holes at the ends, and screw holes in the intermediate portion thereof adapted to be brought in line with the aforementioned opening in the companion plate for attaching the metal strip to the article of furniture.

MARTIN FOX.