(No Model.)

J. M. BULKLEY.

ADJUSTABLE CHAIR.

No. 601,035. Patented Mar. 22, 1898.

Fig. 3.

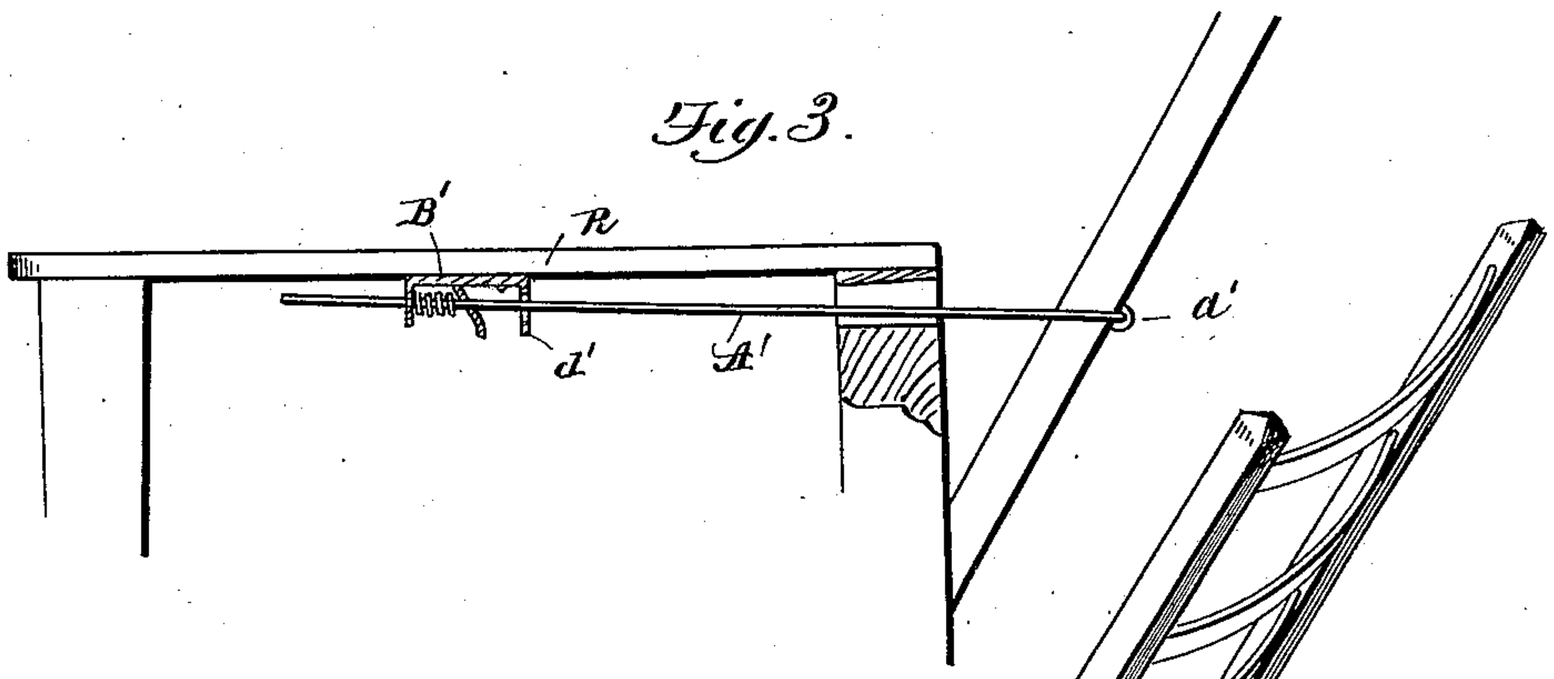


Fig. 1.

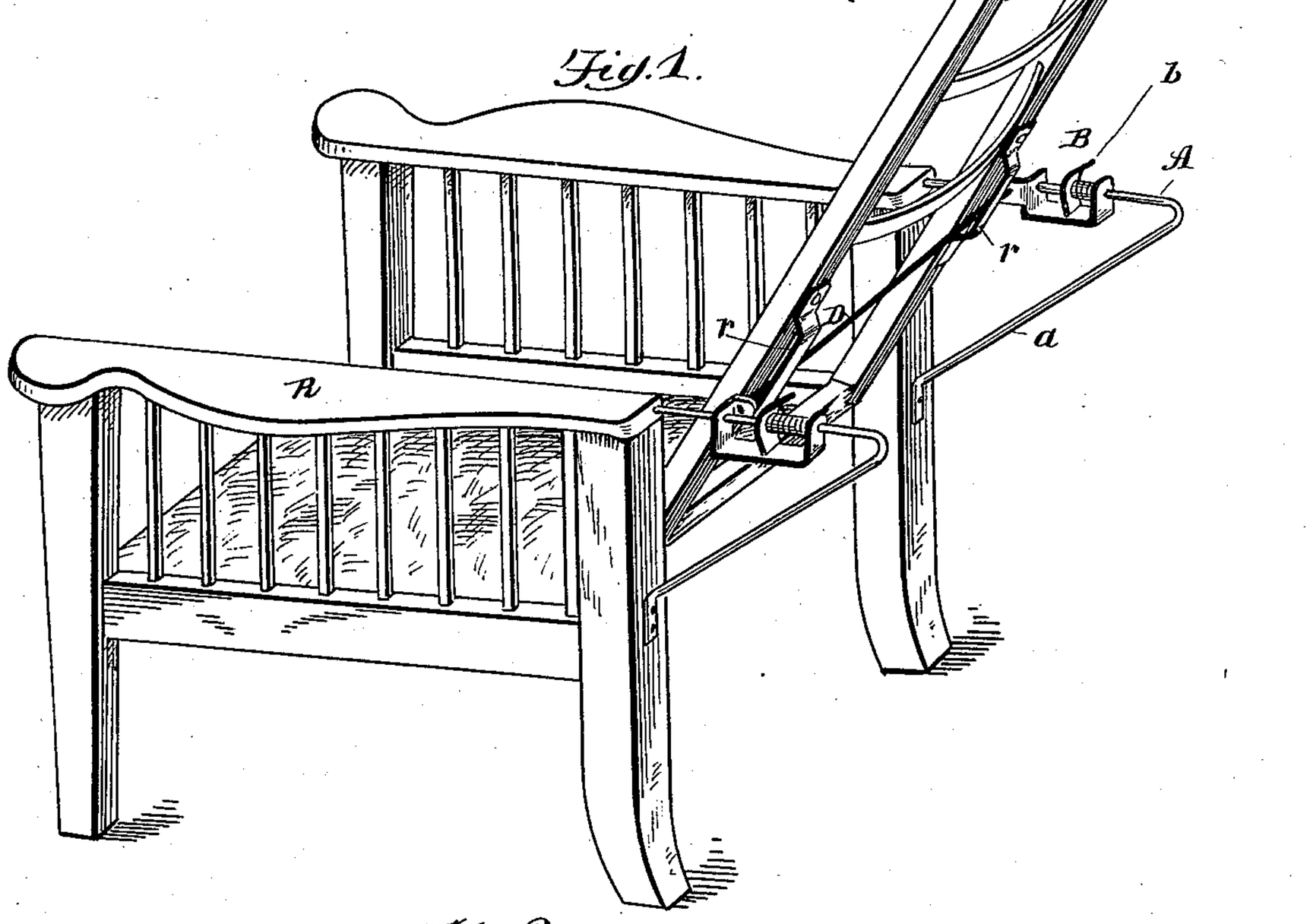
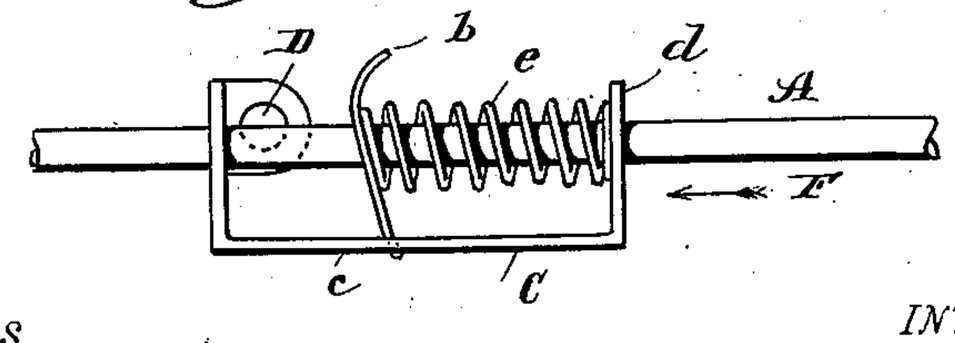


Fig. 2.



WITNESSES

O. H. Bradford

Virginia M. Clough.

By

INVENTOR

John M. Bulkley

Parker & Burton

Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN M. BULKLEY, OF MONROE, MICHIGAN, ASSIGNOR OF ONE-FIFTH TO CHARLES F. BURTON, OF DETROIT, MICHIGAN.

ADJUSTABLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 601,035, dated March 22, 1898.

Application filed April 8, 1897. Serial No. 631,266. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. BULKLEY, a citizen of the United States, residing at Monroe, county of Monroe, State of Michigan, have invented a certain new and useful Improvement in Adjustable Chairs; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to chairs of that class in which the back is made to adjust to various angles with respect to the seat part of the chair.

The object of the improvement is to produce a chair in which an attachment is used that enables the back to be placed at any one of the angles between the limits of which the attachment is capable.

Chairs have been made with adjustable backs in which there was a piece to adjust the back to any one of several angles by means of hooks or catches; but this attachment enables any angle to be used within the limits of which the attachment is capable.

In the drawings, Figure 1 shows in perspective the attachment secured to the rear of a chair-frame. Fig. 2 is a detail of the catch. Fig. 3 is a modification in which the clamping parts are so located with respect to the arm-rest of the chair as to be concealed thereunder or nearly concealed thereunder.

The attachment consists of a rod which is secured to one of the parts and a clamp which is secured to the other of the parts of the chair, so arranged that the clamp engages with the rod at any part within the limits of its travel and in engagement holds the chair-back from movement backward, although the clamp is so formed that the chair-back is capable of easy and immediate movement forward if the user desires to so move it.

In Fig. 1, A indicates a rod secured to the arm of the chair and projecting backward from it and turned downward and forward in a brace *a*, which aids in holding the rod securely in its place. B indicates a clamp made to engage with the rod A, capable of sliding in either direction along the rod A, capable of sliding forward toward the chair-seat without being manipulated in any way, but so arranged as to grip the rod A and hold tightly against movement backward along the rod A unless the lever *b* be manipulated. The clamp consists of a stirrup C, adapted to slide on the rod A, and a gripping-lever *b*, the lower end of which is engaged in a hole through the stirrup-bar *c*. Through the lever *b*, near its upper extremity, is a hole through which the rod A is passed. Between the lever *b* and the upright *d* of the stirrup C is a spring *e*, which normally holds the lever *b* in a position that is angular with respect to the rod A. When in this position, the stirrup will slide easily in the direction indicated by the arrow F, but it is practically impossible to move it in the opposite direction. If it be desired to move the stirrup along the rod A in the direction opposite that indicated by the arrow, the lever *b* must be turned to a position more nearly vertical than that shown in the drawings, when it ceases to grip the rod A and the movement is easily effected.

There are preferably two bracket attachments (the bracket comprising the rod A and brace *a*) and two stirrups, one on each bracket, and the two stirrups are connected by a rod D, that passes from one to the other behind the chair-back. This rod D is held in loose engagement with the chair-back by two straps *r r*, each of which is secured to a standard of the back and under which the rod D is capable of movement along the standards, or the standards are capable of movement over the rod. This freedom of movement of the one with respect to the other is required when the rod A is placed in the horizontal or nearly horizontal position. Other shapes might be made which would allow the rod D to be held substantially fixed to the standards. The lower end of the chair-back is hinged to the chair-body, and the hinged connection and the attachment permit the adjustment of the chair-back from a position wherein the standards are nearly vertical to a position in which they rest against the rod D with the stirrups B at the extreme rear limits of the rod A.

In the form shown in Fig. 3 the stirrup is made the same in all respects except one, but

is turned upside down from the position shown in Fig. 1 and is secured to the under side of the arm-rail R. The one respect in which the stirrup differs is that the hole through one of the uprights of the stirrup is increased in size to permit the rod to play vertically in it to a limited extent. The rod A′ may be made in a single piece, bent in a U form, with the cross-bar of the U secured to the back of the chair and the standard of the U running forward and engaging with the stirrups, one under each arm. As shown in Fig. 3, it also passes through a slot in the standard of the chair; but this is a feature of construction merely and not a feature essential to the invention.

In Fig. 3 the stirrup is indicated by B′. The standard, with the enlarged hole through it, is indicated at *d′* and the rod at A′, held by an eye *a′* to the chair-back. The chair-back is hinged to the chair-body in the same way as described before.

What I claim is—

1. In combination with a chair-body and back hinged thereto, a rod held to one of said parts, a gripping-clamp comprising a stirrup with perforated standards and a perforated spring-actuated lever, said rod traversing the perforations in the standards and the perforation in the lever, substantially as described.

2. In combination with a chair and a back hinged thereto, a bracket secured to the chair-body provided with an arm extending to the rear of the chair-body, a gripping-clamp held to the chair-back and adapted to slide on said bracket-arm, means whereby the grip is set against backward movement along said bracket-arm, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

JOHN M. BULKLEY.

Witnesses:

VIRGINIA M. CLOUGH,

MARION A. REEVE.