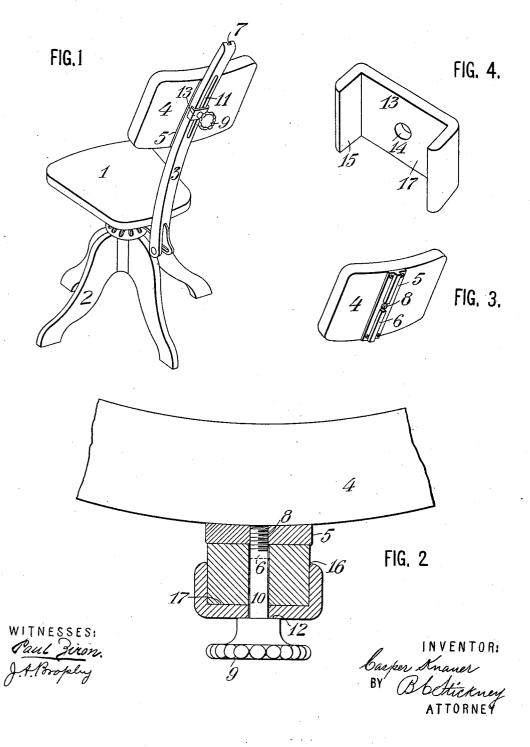
## C. KNAUER. CHAIR. APPLICATION FILED SEPT. 18, 1911.

1,095,890.

Patented May 5, 1914.



## UNITED STATES PATENT OFFICE.

CASPER KNAUER, OF BROOKLYN, NEW YORK, ASSIGNOR TO UNDERWOOD TYPE-WRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

## CHAIR.

1,095,890.

Specification of Letters Patent.

Patented May 5, 1914.

Application filed September 18, 1911. Serial No. 649,804.

To all whom it may concern:

Be it known that I, Casper Knauer, a citizen of the United States, residing in the borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Chairs, of which the following is a specification.

This invention relates to chairs for type-

10 writer operators and others.

A central support rises from the seat, and a back is adjustable thereon vertically. Heretofore, the back was held by a bolt passing through a vertical slot in said support, and threading into the back. The support being made of wood, said slot weakened the structure; so that the back was liable to split. Moreover, it was difficult to tighten the bolt sufficiently to secure the back. The washer was sometimes pressed into the wood and marred or grooved the support.

The objects of my invention are to avoid the foregoing objections. I provide a reinforce in the form of a clip whose jaws engage the support on opposite sides. The bolt passes through an aperture in said clip and through said slot and threads into the back, whereby the hand wheel on said bolt is tightened. The clip is caused to hold the sides of said support against the torsion caused by leaning heavily against one side of the back, whereby splitting is prevented. The large bearing surface afforded by the support, causes a firmer hold when tightened, and also avoids or reduces the liability of the handle or bolt to loosen.

In the accompanying drawings, Figure 1
40 is a general perspective view of a typewriter operator's chair with my improvements shown thereon. Fig. 2 is a full-size transverse section of the back support at the axis of the handle, and shows the manner of 45 tightening the back. Fig. 3 is a rear view of the back. Fig. 4 is a detail of the reinforce.

The seat 1 is mounted on legs 2 with the usual devices for swiveling, etc., and a central back support 3 is fixed to the seat. The back 4, which is usually of wood, is arranged to aid the operator in maintaining an erect position while writing, and is vertically adjustable along said support 3 to

suit various operators. To the back 4 is 55 fixed centrally a metal back plate 5 having a rib 6 which fits into a groove 7 formed upon the support 3, whereby the back can slide vertically therealong. Plate 5 has a tapped hole 8 and a hand wheel having a 60 bolt 10, passes through a vertical slot 11 and threads into said hole to tighten the back 4 on support 3, to maintain it where adjusted. Between the inner flat surface 12 of hand wheel 9 and the support 3, is dis-65 posed a slidable reinforce in the form of a clip 13 having an opening 14 through which the bolt 10 passes, against which the hand wheel is tightened when the back is secured. The sides 15 of the metal reinforce 13 bear- 70 ing against the surfaces 16, strengthen it against the torsion incurred when the back 4 is leaned against heavily at one side, whereby splitting of the support 3 is prevented. The large bearing surface 17 of 75 clip 13 enables to secure the back 4 in adjusted position without requiring the application of excessive strength when tightening the hand wheel 9.

Having thus described my invention, I 80

claim:

1. In a chair, the combination of a slotted wooden back support substantially rectangular in cross section, a back provided with a nut and a rib fitting the slot extending the 85 width of the back-rest, a clamping bolt passing through the slot of the support and taking into the nut of the back, and a substantially U-shaped clip adapted to and closely embracing the support in any position of 90 adjustment, said clip being provided with a perforation whereby it serves as a washer for the clamping bolt, the construction being such that the clip serves at all times to prevent the support from splitting or 95 spreading under torsional or transverse strain, substantially as described.

2. In a chair, the combination of a slotted wooden back support having substantially parallel sides and a rear surface substantially in a plane at right angles to the planes of the sides, the slot being parallel to the sides, a back provided with a nut and a rib fitting the slot, a clamping bolt passing through the slot of the support, and taking 105 into the nut of the back, and a clip shaped interiorly to conform closely to the sides and back of the support and closely embracing

said support in any position of adjustment, said clip being provided with a perforation through which perforation the clamping bolt passes, whereby said clip serves as a washer for the bolt, the construction being such that the said clip serves at all times to prevent the support from splitting or

spreading under torsional or transverse strain, substantially as described.

CASPER KNAUER.

Witnesses:
PAUL ZIRON,
K. FRANKFORT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."