

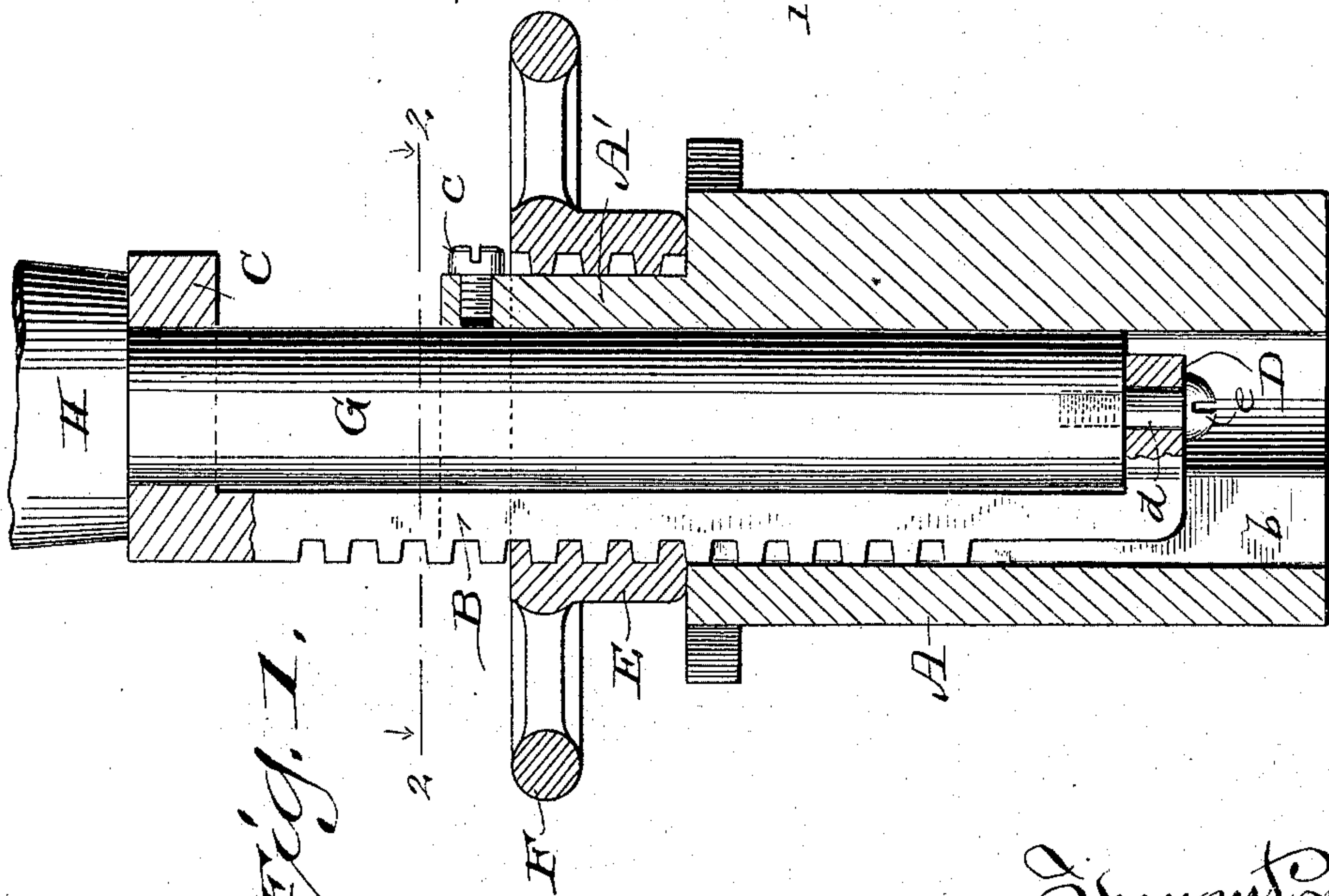
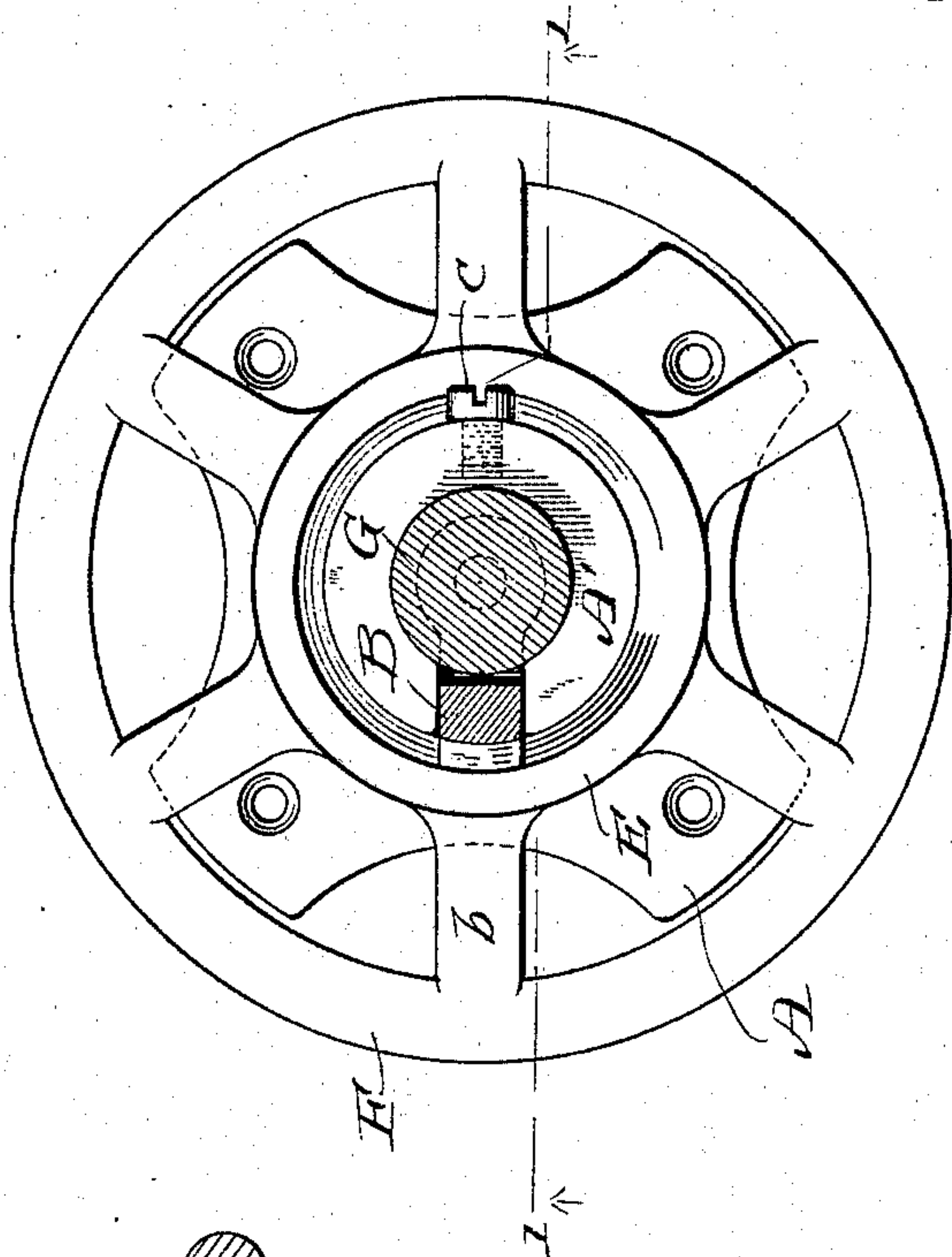
(No Model.)

H. W. BOLENS.  
CHAIR.

No. 568,127.

Patented Sept. 22, 1896.

*Fig. 2.*



*Fig. 1.*

Witnesses:  
Geo W Young  
N E Oliphant

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By H. G. Underwood  
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# UNITED STATES PATENT OFFICE.

HARRY W. BOLENS, OF PORT WASHINGTON, WISCONSIN.

## CHAIR.

SPECIFICATION forming part of Letters Patent No. 568,127, dated September 22, 1896.

Application filed March 19, 1896. Serial No. 583,858. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY W. BOLENS, a citizen of the United States, and a resident of Port Washington, in the county of Ozaukee and State of Wisconsin, have invented certain new and useful Improvements in Chairs; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to that class of chairs or analogous devices having vertical adjustable supports for pivotal seats; and it consists in certain peculiarities of construction and combination of parts hereinafter set forth with reference to the accompanying drawings, and subsequently claimed, whereby the cost of production is cheapened.

In the drawings, Figure 1 represents an elevation of my improved construction and arrangement of parts, partly in section, the section being indicated by line 1 1 in the succeeding figure. Fig. 2 represents a plan view of the structure, partly in horizontal section, on line 2 2 in the preceding figure.

Referring by letter to the drawings, A represents a chair-base casting provided with a guide-groove *b*, and this groove communicates with the bore of said casting. In loose engagement with the groove *b* of the base-casting is the vertical member B of a non-rotative support that preferably involves a top and bottom, herein shown as being horizontal arms C D, made on one piece with said vertical member as a matter of convenience and economy, the lower arm being of such contour and dimensions as not to hinder vertical movement of said support in said base-casting.

The vertical guide-engaging member of the support is notched at suitable intervals in a transverse direction to engage the screw-thread of an adjusting-nut E, that bears against the base-casting, the alternate notches and ridges being of suitable pitch. The nut is herein shown as being provided with a hand-wheel F, the latter being merely a matter of convenience.

The top or upper horizontal arm C of the support is apertured to receive the pivot-shank G of a seat-iron H, and, as herein shown, this seat-iron may be in contact with said arm when the chair is assembled.

To prevent lateral play of the adjusting-

nut and consequent binding of the same on the vertically-adjustable support, the base-casting is herein shown provided with a cylindrical upper extension A', in which the groove *b* is continued and around which said nut is rotated. As a means for preventing lift of the adjusting-nut a pin or screw *c* is shown arranged in the base-casting extension A' to extend laterally therefrom over said nut, but other suitable means may be employed for the same purpose.

By rotation of the nut E the support for the seat-iron pivot G may be vertically adjusted in the base-casting, and said pivot may be prevented from lifting out of said support by any suitable means. As one means for preventing lift of the seat-iron pivot from the vertically-adjustable support a screw *d* is shown set into the lower end of said pivot, through an aperture in the lower support-arm D, to have its head *e* in opposition to the under side of said arm. The arm D is the bottom of the vertically-adjustable support, and the seat-iron pivot is in bearing contact therewith.

It is desirable, as herein shown, to reduce the lower end of the pivot-support to the depth of its notches for a distance, in a longitudinal direction, somewhat greater than the height of the adjusting-nut, to thereby prevent said support from being run up out of said nut. This construction facilitates the assemblage of a chair shipped knockdown, it being understood that in setting up the chair there will be an engagement of the support with the nut and base-casting before it is requisite to turn said nut. It will be seen that the pivot-shank G has frictional contact with the base-casting in the bore of the same to thus compensate for the strain that would otherwise come upon the vertically-adjustable support, and said pivot-shank being within the circumference of the adjusting-nut E the hand-wheel F or leverage for said nut may be at all times of such radius as to insure easy vertical adjustment of an ordinarily heavy chair-top.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a chair-base casting, a suitably-notched non-rotative support



guided in the casting longitudinally of the same, an adjusting-nut for the support, and a seat-iron pivot that engages said support within the circumference of the nut and has  
5 frictional contact with said casting.

2. The combination of a chair-base casting, a suitably-notched non-rotative support guided in the casting longitudinally of the same, an adjusting-nut for the support, a  
10 support-engaging pivot within the circumference of the nut having frictional contact with said casting, and a seat-iron on the pivot in contact with the top of said support.

3. The combination of a chair-base casting, a suitably-notched non-rotative support guided in the casting longitudinally of the same, an adjusting-nut for the support held  
15 against lateral play and longitudinal displacement, a support-engaging pivot within the circumference of the nut having frictional contact with said casting, and a seat-iron on the pivot in contact with the top of the support.  
20

4. The combination of a chair-base casting,

ing, a suitably-notched non-rotative support 25 guided in the casting longitudinally of the same, an adjusting-nut for the support, and a seat-iron pivot that has bearing contact with the bottom of said support within the circumference of the nut as well as frictional  
30 contact with said casting.

5. The combination of a chair-base casting, a suitably-notched non-rotative support guided in the casting longitudinally of the same, an adjusting-nut for the support held  
35 against lateral play and longitudinal displacement, and a support-engaging pivot within the circumference of the nut having frictional contact with said casting.

In testimony that I claim the foregoing I  
40 have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

HARRY W. BOLENS.

Witnesses:

N. E. OLIPHANT,  
B. C. ROLOFF.