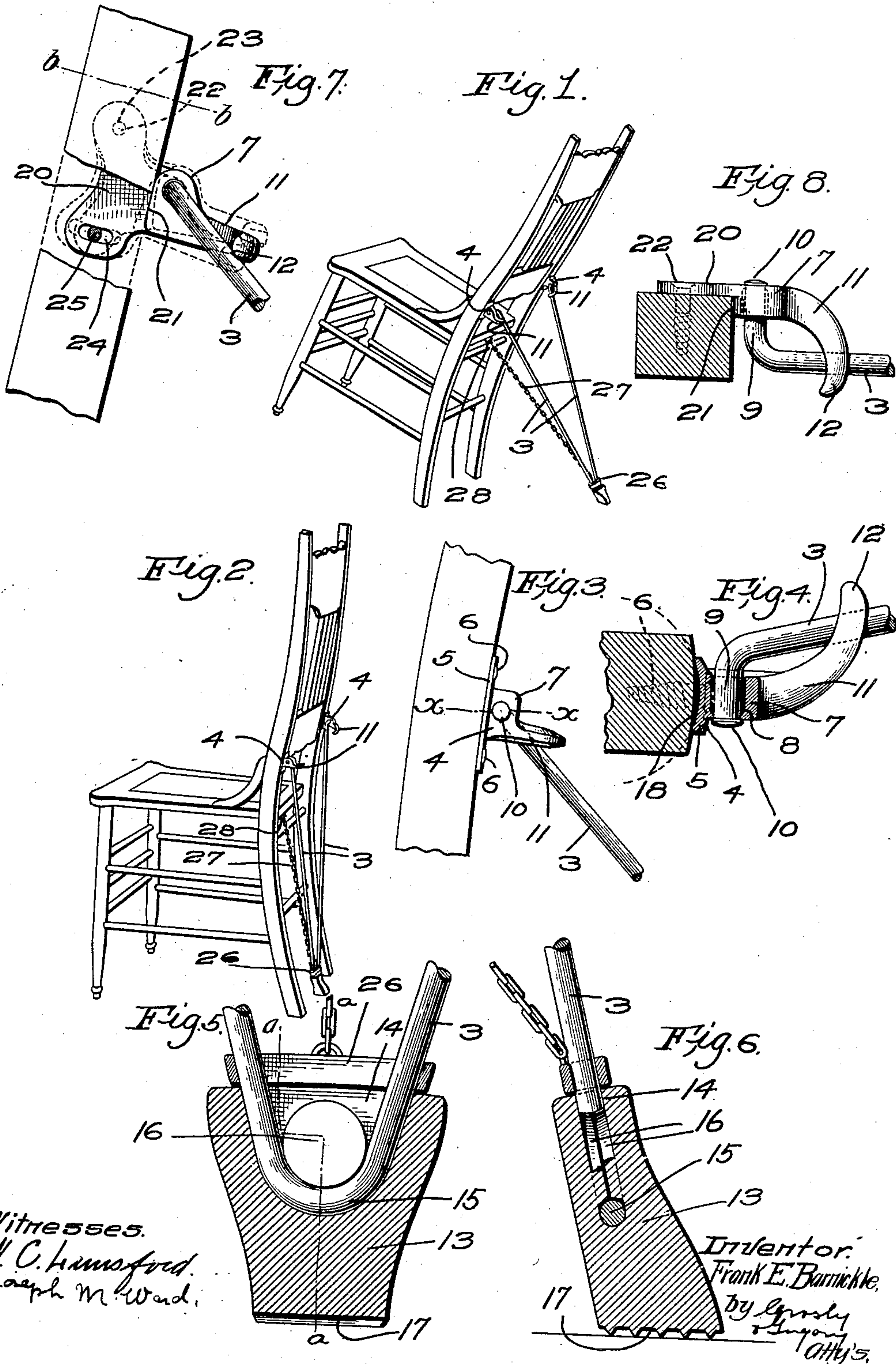


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 RECLINING ATTACHMENT FOR CHAIRS.
 APPLICATION FILED NOV. 11, 1907.

912,354.

Patented Feb. 16, 1909.



Witnesses.
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UNITED STATES PATENT OFFICE.

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RECLINING ATTACHMENT FOR CHAIRS.

No. 912,354.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed November 11, 1907. Serial No. 401,627.

To all whom it may concern:

Be it known that I, FRANK E. BARNICKLE, a citizen of the United States, residing at Rochester, county of Strafford, State of New Hampshire, have invented an Improvement in Reclining Attachments for Chairs, of which the following description, in connection with the accompanying drawing, is a specification, like numerals on the drawing representing like parts.

This invention has for its object to provide a novel attachment for chairs which is adapted to support the chair firmly in a tilted or reclining position. The device is arranged so that it can be attached to a chair without disfiguring it, and when a person is sitting in the chair having my improved attachment applied thereto, such person may tilt back in the chair and be firmly supported in a tilted position without the necessity of resting the chair against a wall or without the necessity of the person placing his feet on a desk, table or other support.

I will first describe some embodiments of my invention and then point out the novel features thereof in the appended claim.

In the drawings, Figure 1 is a perspective view of a chair having my attachment applied thereto; Fig. 2 is a side view of the chair showing the position of the attachment when it is not in use; Fig. 3 is an enlarged side view of the hinge or bracket for securing the attachment to the chair; Fig. 4 is an enlarged section on the line $x-x$, Fig. 3; Fig. 5 is a vertical sectional view through the shoe at the bottom end of the rest or support; Fig. 6 is a section on the line $a-a$, Fig. 5; Fig. 7 is a side view of a modified form of bracket for pivotally attaching the device to a chair; Fig. 8 is a section on the line $b-b$, Fig. 7.

According to my invention, the chair is held in its reclining position by a brace or support 3 which is adapted to be pivotally attached to the back of any chair having rear uprights. In the present embodiment this brace is substantially V-shape, as shown, and may be made of a piece of wire bent to the proper shape. The upper ends of the two arms of the brace or support are hinged to the chair by means of brackets 4.

In the form of the invention shown in Figs. 1 to 6, each bracket 4 has the body portion 5 which rests against the back face of the chair

and is secured thereto by suitable screws 6, which body portion is formed with the integral boss 7 having a horizontally-extending aperture 8 therein. The upper ends 9 of each of the arms of the brace are bent outwardly to form trunnions which extend through and are journaled in the apertures 8. Preferably the ends of the trunnions will be headed over slightly, as shown at 10, to prevent the trunnions from being withdrawn from the brackets when the device is in use. Extending from each bracket is a stop arm 11. Each stop arm is situated below the boss 7 and extends rearwardly from the body portion, and the end 12 of each stop arm is bent inwardly, as best seen in Fig. 4, said inwardly-bent portion 12 being situated to have engagement with the arm of the brace to limit the swinging movement thereof. The lower end of the brace or support has applied thereto a shoe 13 of rubber or other suitable material adapted to have good frictional engagement with the floor. This shoe is made with the slot or recess 14 in its upper end which is adapted to receive the apex 15 of the brace or support 3, and in order to hold the shoe in place, I preferably provide it with one or more projections 16 which extend inwardly from the walls of the slot and which are situated in the apex of the brace 3 when the shoe is applied to the brace. This construction makes one in which the shoe can be readily put in place and will be securely held in place after it has been applied. The bottom 17 of the shoe is preferably corrugated, as shown, and made on a slight inclination so that it will rest squarely against the floor when the brace is in use.

I prefer to make the face 18 of the body 5 that rests against the chair slightly hollowing, as best seen in Fig. 4, so that the brackets can be attached to any chair having rear uprights, whether the uprights are square or round in cross section. I also prefer to make the apertures 8 in the bosses larger at their inner ends than at their outer ends, the outer ends of the apertures being of a size to fit the trunnions. This construction permits of the brackets to be placed in slightly different angular positions on the chair without interfering in any way with the free swinging movement of the support. This is quite important because sometimes the backs of the chairs are warped or twisted

slightly, and sometimes the faces of the up-
rights do not stand exactly in the same
plane.

In Figs. 7 and 8 I have illustrated a modi-
fied form of the invention in which the
5 bracket is so arranged that it can be applied
to the chair at slightly different angles
whereby the position of the stop arm 11 may
be changed or adjusted so that the brace or
10 support can be swung away from the chair
more or less as desired. In this embodi-
ment of my invention the bracket is pro-
vided with the side piece 20 which is adapted
to overlie the side of the upright of the chair,
15 as plainly seen in Figs. 7 and 8, said bracket
also being provided with the rest 21 which
engages the back face of the chair leg. The
bracket is further provided with the aper-
tured boss 7 having an aperture 8 of varying
20 diameter, as above described, and with the
stop arm 11 beneath the boss and extending
rearwardly and with its end 12 curved in-
wardly, all as shown in the modification
shown in Figs. 1 to 6. In this embodiment
25 of the invention the bracket is held in place
on the chair by two screws 22, 25, one of
which passes through an aperture 23, and
the other of which extends through a slot 24.
By loosening the screw 25 the bracket can be
30 turned slightly about the screw 22, thereby
raising or lowering the stop arm slightly,
and in this way the elevation of said stop arm
may be adjusted as desired.

I will also preferably provide the brace
35 with the cross piece 26 near its lower end to
which a chain or other flexible connection 27
may be secured which chain or flexible con-
nection may also be secured to the seat of the
chair, as at 28. This chain constitutes an
40 added means for limiting the extent of back-
ward movement of the brace. In the draw-
ings I have shown this cross piece 26 as in
the form of a link which surrounds the lower
end of the brace and which may be slipped
45 on over the brace before the shoe is applied.

This link is prevented from sliding up the
brace by the V shape of the latter.

In applying my improved attachment to a
chair said attachment is placed with the
shoe 13 resting on the floor in substantial 50
alignment with the rear legs, as shown in
Fig. 2, and the brackets are then attached to
the rear uprights of the chair above the seat.
When a person desires to tilt back in his
chair, said person first sits in the chair, then 55
reaches behind the chair and swings the
brace backwardly to the limit of its move-
ment and then tilts back in the chair until
the shoe strikes the floor. Since the brace is
attached to the chair uprights above the 60
seat of the chair, as shown, a very secure and
firm support is afforded for the chair. It is
important that the brace should be pivotally
connected to the chair above the seat portion
for the reasons stated above. 65

I have not attempted to describe herein all
embodiments of my invention, but have se-
lected two preferred embodiments only for
the purpose of illustrating the same.

Having fully described my invention, what 70
I claim as new and desire to secure by Let-
ters Patent is:—

In a reclining attachment for chairs, the
combination with a support or rest present-
ing two connected arms having a divergent 75
arrangement each bent at its upper end to
form a trunnion, of two brackets for pivot-
ally connecting the support to the back of a
chair, a link loosely surrounding the support
near its apex, a shoe on said support below 80
the link, and a chain or flexible connection
connected to the link and adapted to be se-
cured to the seat of the chair.

In testimony whereof I have signed my
name to this specification in the presence of 85
two subscribing witnesses.

FRANK E. BARNICKLE.

Witnesses:

THOMAS J. DRUMMOND,
LOUIS C. SMITH.