

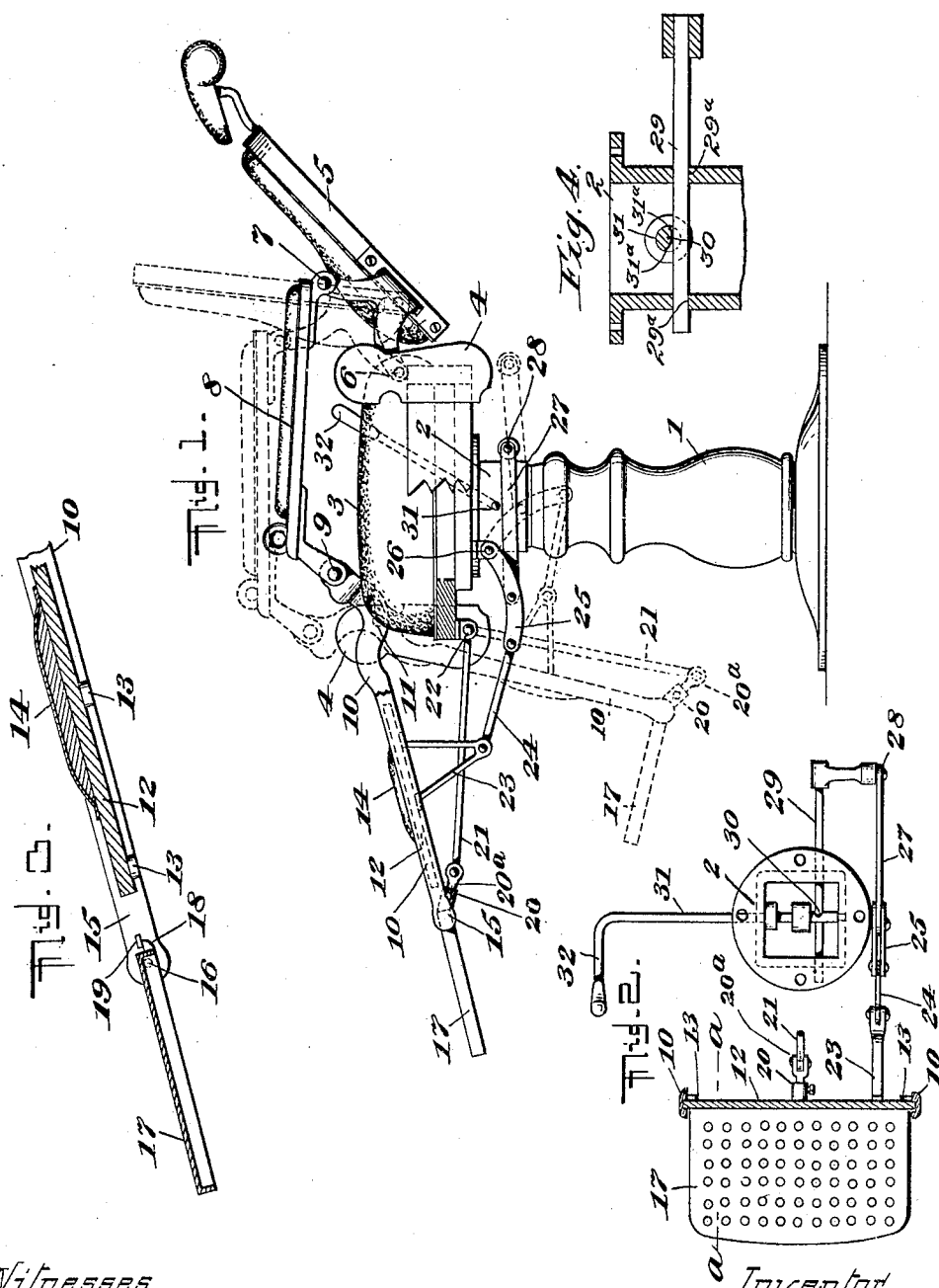
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PATENTED JAN. 7, 1908.

E. BERNINGHAUS.

BARBER'S CHAIR.

APPLICATION FILED APR. 8, 1905.



Witnesses

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UNITED STATES PATENT OFFICE.

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No. 875,885.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EUGENE BERNINGHAUS, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Barbers' Chairs, of which the following is a specification.

This invention relates to certain improvements in that class of reclining-chairs which are particularly designed for use by barbers and others and the object of the invention is to provide a chair of this general character of a simple and inexpensive nature which shall be capable of ready and convenient adjustment for accommodating reclining and sitting postures of persons using the chair and wherein is provided a leg rest or support of a novel and improved character designed for the support of the legs at points between the buttocks and feet so that persons using the chair may, when the same is adjusted to accommodate a reclining posture, rest in a more comfortable manner than is possible where no such leg-support is provided.

The invention consists in certain novel features of the construction, combination and arrangement of the several parts of the improved reclining chair and of its leg rest or support, whereby certain important advantages are attained and the device is rendered simpler, cheaper and otherwise better adapted and more convenient for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

In the accompanying drawings which serve to illustrate my invention—Figure 1 is a broken side elevation of the improved chair the parts thereof being shown in full lines as adjusted to a reclining position and in dotted lines for accommodating a sitting posture. Fig. 2 is a partial plan view showing certain of the operative parts of the improved chair adjusted to accommodate a sitting posture of the body. Fig. 3 is an enlarged fragmentary sectional view showing certain features of construction of the improved leg rest or support of the chair. Fig. 4 is an enlarged sectional detail view showing the arrangement and construction of the means for locking the parts of the

chair against movement when in adjusted position.

As shown in these views, 1 indicates the base-support of the chair which is designed to rest upon the floor in a well-known way and 2 indicates a piston or plunger arranged to play vertically in said base-support and carrying at its upper part the chair-seat 3, which is cushioned and has at its corners four upwardly-extended blocks 4, 4, the chair-back 5 being pivotally-attached at its lower part to the rearmost blocks 4, 4, so that said back may be raised and lowered in a well-known way.

6 indicates the point of attachment of the chair-back 5 to said blocks 4, 4.

8 indicates the chair-arm, one of which is arranged at each side of the chair, as usual and said arms have at their rear ends pivotal-connection as seen at 7 with the chair-back, while the forward ends of said arms have connection as seen at 9, with side-bars 10, extended along opposite sides of the improved leg rest or support of the chair, said side-bars 10 being pivoted as seen at 11 upon the forward blocks 4, 4 of the chair-seat so that the leg rest or support of which said side-bars 10 form parts may also be swung pivotally into raised or lowered positions to accommodate sitting and reclining postures of persons seated in the chair.

Between those portions of the side-bars 10, 10 which are extended forwardly and downwardly in front of the chair-seat is extended a leg-supporting means formed of a plate or piece of material of an unbroken character, as seen at 12, the opposite edge portions of which as seen in Fig. 2 are let into and held in grooves produced in the inner adjacent surfaces of the side-bars 10, 10, the grooves being extended lengthwise of said side-bars, and upon said side-bars 10, which may in certain cases be formed from metal are integral inwardly-projecting apertured lugs 13, 13, which are extended upon the under or rear side of the plate or piece 12 and serve to receive screws or the like for reinforcing the attachment of the side-bars thereto.

Upon the plate or piece 12 is arranged a transversely-extended cushion or upholstered pad 14 upon which the calves or other

parts of the limbs of persons sitting in the chair are adapted to be rested when the chair is adjusted to accommodate a reclining posture, and said cushion may be, if desired, extended over the entire surface of the plate or part 12 or may be duplicated at one or more parts without departure from my invention.

The lower ends of the side-bars 10, 10, are extended beyond the lower or outer edge of the plate or piece 12 as seen at 15 and between said extended extremities of the side-bars is pivotally-mounted a swinging foot-rest or support 17 which may be produced from metal or other material as desired and which has upon its rear edge and adjacent to its pivotal point, one or more rearwardly-projecting lugs or fingers 18, which, when said foot rest or support is moved pivotally between the side-bars to a position in line with the side-bars and plate or piece 12 in the adjustment of the chair to a reclining position, is adapted to engage and contact upon a projection upon the inner side of one or both of the side-bars as indicated at 19 in Fig. 3 in such a way as to hold said foot rest or support in rigid alinement and to prevent further pivotal-movement whereby the foot rest or support would be caused to drop or incline below the level of the leg rest or support formed of side-bars 10 and the plate or piece 12.

16 indicates the pivot-point of the foot rest or support on the extensions 15 of the side-bars 10.

20 is a socket or hollow-arm secured on the central part of the rear pivotal edge of the foot rest or support 17 and having an adjustably-held take-up connection 20^a with a link 21, which, as seen in Fig. 1, is carried rearwardly and horizontally and is pivotally-connected with the chair-seat 3 as shown at 22, the construction being such that when the side-bars 10 whereon the foot rest or support 17 is pivotally-mounted are raised and lowered, a simultaneous and corresponding pivotal-movement of said foot rest is automatically effected to bring the foot-rest into the proper position to accommodate sitting and reclining postures of the body.

On the back of the plate or piece 12, near one of the side edges thereof is secured a rearwardly and downwardly extended bracket 23, the lower or rear end of which is connected with the forward end of a link 24, the rear end of which has connection with the free lower end of a lever 25 pivoted as seen at 26 upon the under surface of the chair-seat 3 with its central portion connected with the forward end of a rod 27, the rear end of which has connection as seen at 28 with a slide 29 mounted and guided for horizontal-movement within the walls of the plunger 2 whereon the chair-seat 3 is carried.

An arrangement of lever mechanism such as above described may, if desired, be arranged at each side of the chair-seat and the respective side-bars 10 may be each connected with one of such mechanisms, but this is immaterial to my invention.

31 represents a rock-shaft mounted in the walls of the plunger 2 with a cam-surface immediately above the slide-rod 29 as seen at 30, and upon said rock-shaft is a handle 32 for use by the attendant so that the rock-shaft may be turned in its bearings to cause its cam-surface 30 to grip and bind upon the slide-rod in such a way as to securely hold said slide-rod against longitudinal-movement in its guides in the plunger 2.

The construction and arrangement of the cam-surface of rock-shaft 31 and its engagement with the slide-rod 29 for locking the parts in adjusted position is clearly illustrated in the detail view, Fig. 4, wherein 29^a, 29^a, represent bearings for the slide-rod 29 at opposite sides of plunger 2, and 30 represents the cam-surface formed by cutting out one side of the rock-shaft 31 eccentrically at such point as will be adapted, in the turning of said shaft, to come opposite to the underlying slide-rod. When the cut-out portion is immediately above the slide-rod 29, the latter may be freely moved, but when the shaft 31 is turned, the extremities or cam-like portions 31^a, 31^a, adjacent to the cylindrical perimeter of shaft 31, will come into engagement with the slide-rod to effectively lock the same against sliding-movement in its bearings in plunger 2.

In the operation of the chair, it will be apparent that the arms 8, 8 constitute link-connections between the chair-back and the side-bars 10 of the leg rest or support and when force is exerted to move the chair-back pivotally upon its connections with the seat 3, a corresponding movement of the side-bars 10 will be effected, and owing to the connection of the lever mechanism above described with said side-bars, it will be evident that the slide-rod 29 will be caused to slide in its guides in the plunger and when the chair-back and leg-support have been adjusted into the desired position, a movement of the rock-shaft 31 may be effected by means of the lever 32 whereby the cam surface 30 may be caused to grip and bind upon the slide-rod so as to effectively lock the chair in position against accidental displacement.

The improved chair constructed according to my invention is of an extremely simple and inexpensive nature and is especially well adapted for use by reason of the ease and comfort with which the limbs of persons seated in the chair are supported when the chair is adjusted to accommodate a reclining posture, and it will also be obvious from the

above description that the improved chair is capable of considerable modification without material departure from the principles and spirit of the invention and for this reason I do not desire to be understood as limiting myself to the precise form and arrangement of the several parts of the device herein set forth in carrying out my invention in practice.

Having thus described my invention, what I claim and desire to secure by Letters-Patent is—

1. A reclining-chair having a seat portion, a leg-rest pivoted at the forward part of the seat portion, a part whereon the seat portion is supported, a slide guided for movement in said seat-supporting part, a lever pivotally-mounted on the seat-supporting part and having connection with said slide, a link, one end of which is connected with the lever and the other end of which has connection with the leg-rest and a clamping device carried by the seat-supporting part for adjustable clamping-engagement with said slide.

2. A reclining-chair having a seat portion, a leg-rest pivoted at the forward part of the seat portion, a back pivoted at the rear part of the seat portion, arms eccentrically-connected with the leg-rest and back to move the parts in unison, a part whereon the seat portion is supported, a slide guided for movement in said seat-carrying part, a lever pivotally-mounted on the seat-carrying part and

having connection with said slide, a link, one end of which is connected with said lever and the other end of which has connection with the leg-rest and a clamping device carried by the seat-carrying part for adjustable clamping-engagement with said slide.

3. A reclining-chair having a seat portion, a leg-rest mounted for pivotal-movement, means comprising bracket, link, lever and cam connections for holding the leg-rest against movement when in adjusted position, a foot-rest pivotally-connected with the leg-rest, a short socket or hollow arm held upon the foot-rest, a short pin having a forked outer end and with its other end arranged to slide within said socket or arm, means for securing said forked pin in adjusted position within said hollow arm and thereby form a suitable take-up connection, and a link, one end of which has pivotal-connection with the seat and the other end of which is pivoted to the forked end of said take-up connection, said link being adapted to effect pivotal-movement of the foot-rest relatively to that of the leg-rest when the latter is moved relatively to the seat portion.

Signed at Cincinnati, Ohio, this 27th day of March, 1905.

EUGENE BERNINGHAUS.

Witnesses:

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