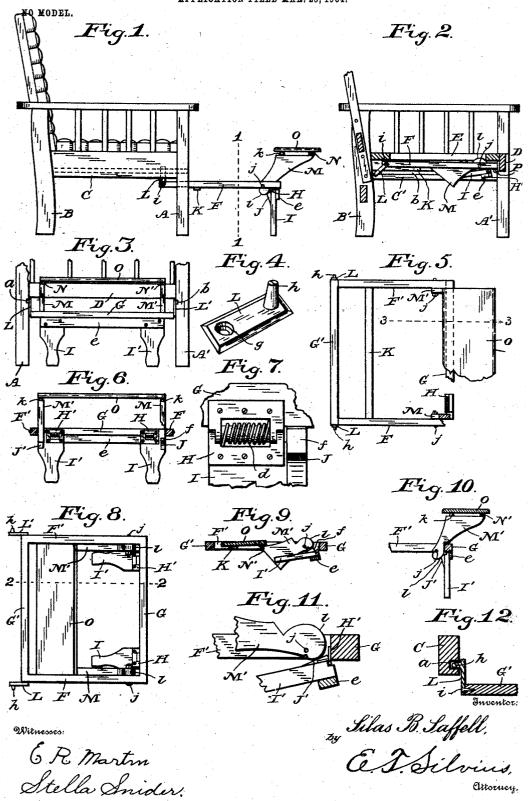
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FOOT REST FOR CHAIRS.
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UNITED STATES PATENT OFFICE.

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FOOT-REST FOR CHAIRS.

SPECIFICATION forming part of Letters Patent No. 778,074, dated December 20, 1904. Application filed March 25, 1904. Serial No. 199,897.

To all whom it may concern.

Be it known that I, SILAS B. SAFFELL, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of 5 Indiana, have invented new and useful Improvements in Foot-Rests for Chairs; and I do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and 10 to the letters of reference marked thereon, which form a part of this specification.

This invention relates to chairs, particularly of the reclining type; and it has reference especially to adjustable foot-rests thereof adapted to be folded under the chair-seats

when not in use.

The particular object of the invention is to provide strong and well-braced adjustable foot-rests that may be folded compactly when 20 desired and which may be constructed inexpensively and be durable and economical in

Other objects are to improve the construction of foot-rests and adapt them to be applied 25 in a simple manner to chair-frames and so that they may be readily detached from the chairs when desired.

With the above-mentioned and other objects in view the invention consists in an improved horizontally-adjustable folding foot-rest having folding supports; and the invention consists, further, in the novel parts and the combination and arrangement of parts, as hereinafter particularly described and claimed.

Referring to the drawings, Figure 1 is a side elevation of a chair having the improved foot-rest connected therewith and adjusted for use; Fig. 2, a vertical longitudinal sectional view of the chair-frame in a plane adjacent to 40 the right-hand side thereof and a side view of the foot-rest folded beneath the seat-frame of the chair; Fig. 3, a fragmentary front elevation of the chair-frame and the foot-rest set for use; Fig. 4, a perspective view of one of the pair of swinging sliding hangers for the rear end of the foot-rest frame; Fig. 5, a top plan of the detached foot-rest and its frame, partially broken away; Fig. 6, a vertical sec- against the under side of the member G.

tional view, as at the line 11 in Fig. 1 looking toward the right or front; Fig. 7, a frag- 50 mentary detail view showing one of the springhinges that connect the folding supports or legs of the foot-rest to the foot-rest frame; Fig. 8, a top plan view of the complete footrest detached from the chair and folded; Fig. 55 9, a vertical sectional view at the line 2 2 in Fig. 8; Fig. 10, a fragmentary sectional view at the line 3 3 in Fig. 5; Fig. 11, a fragmentary detail view showing parts, on an enlarged scale, that are seen in Fig. 9; and Fig. 12 is a 60 fragmentary detail view showing a support for the rear end of the frame of the foot-rest.

Similar reference characters in the several figures of the drawings designate like parts or

features.

In the drawings, A A' B B' designate the corner-posts and legs of the chair, CC the side rails, and D the front rail thereof, E designating the seat-frame, which may be variously formed and supported.

In a practical embodiment of the invention a pair of guides are provided at opposite sides of the chair-frame, and preferably the rails C C' are utilized for the purpose by cutting channels a b horizontally in the inner sides 75 thereof, and the channels may extend in the front posts A A', as shown herein, (rather for illustrative purposes;) but in some cases the channels may extend only to the posts. The channeled guides are designed to support 80 the rear end of the foot-rest frame in its various positions.

The foot-rest comprises a frame composed of side members FF' and front and rear members G G', rigidly connected together. A 85 pair of hinges H H', having each a spring d, are attached to the inner side of the member G, and a pair of supporting-legs I I' are attached to the hinges in such manner as to permit the springs to draw up the legs to or 90 near horizontal positions, as in Figs. 8 and 9, for instance, when the legs are unlocked. The legs are connected together by a tie-bar e, which, however, may be dispensed with in some cases, but is useful as a stop operating 95

Shoes J J' are attached to the rear sides of the legs II', each shoe having an inclined bearing-face f presented upwardly. A cross-bar K is secured to the members F and F' near 5 the member G, forming part of the foot-rest frame for supporting folded parts when not in use, as will further appear.

A pair of hangers L'L', each having a pivot-hole g and a projection h, are connect-10 ed to the outer sides of the rear end of the foot-rest frame by pivot-screws i, the projections h extending into the channels a b, in which they may either rotate or slide, thus

supporting the rear end of the foot-rest frame. Near the front of the foot-rest frame a pair of arms M M' are connected to the inner sides of the members F F' thereof by pivots j, and hinges N N' connect a foot-board O to the arms at the upper forward ends thereof, cush-20 ions k being interposed between the arms and the board. The pivoted end of each arm is formed as a cam l, coöperating with the shoes J J', especially with the faces f thereof, to lock the legs I I' in operative positions up-25 rightly.

A suitable hanger P is connected to the front rail D of the chair-frame for supporting the forward portions of the foot-rest when folded

beneath the chair-seat.

The hangers L L' may be disengaged from their guides in order to detach the foot-rest from the chair by manipulating the hangers and tilting the frame of the foot-rest, one hanger to be inverted somewhat, as in Fig. 2, 35 while the other hangs normally. In a similar manner the foot-rest may be connected to

the chair-frame. In practical use the foot-rest may be positioned as in Fig. 1 or in other horizontal po-40 sitions, as may be desired, the board O being arranged in a convenient position, the cams I of the arms M M' engaging the faces f and locking the legs I I' in upright positions, so as to support the board O under considerable

45 weights. In readjusting the foot-rest the projections h will slide in the channels a b, and the hangers L L' may have slight pivotal movements. When it is desired to fold the foot-rest, the board O may be moved radially 50 on its hinges, the arms M M' may be moved

on their pivots to the positions indicated in Figs. 8 and 9, and the board O placed on the bar K, and thus the legs I I' will be unlocked and their spring-hinges will fold them under,

55 as shown, the forward end of the foot-rest frame being at the time held up by the operator, who may then push the frame back under the seat of the chair and hang the forward end of the frame on the hanger P, and

60 if desired to elevate the rear end of the footrest frame this may be done by pushing it up so that the hangers LL' will be inverted, as in | movable frame supported at the rear end

Fig. 2. By reverse operations the foot-rest may be readjusted for use, as in Fig. 1.

Having thus described the invention, what 65

I claim as new is-

1. A chair including a main frame, a folding foot-rest comprising a movable frame supported at the rear end thereof by the main frame, hinges attached to the movable frame, 70 legs attached to the hinges, springs cooperating with the movable frame and also with the legs, arms pivoted to the movable frame and having cams cooperating with the legs, a footboard, hinges connecting the foot-board to the 75 arms, and a stop for the legs cooperating with the movable frame, and a hanger for the forward end of the foot-rest when folded.

2. A chair including a main frame, guides in the main frame, a foot-rest frame provided So with a pair of pivoted hangers mounted in the guides, hinges attached to the foot-rest frame, legs attached to the hinges, stops for the legs, a spring to draw the legs toward the foot-rest frame, and foot-board arms pivoted 85 to the foot-rest frame and having cams cooperating with the legs to hold them against the

3. A chair including a main frame, guidechannels in the main frame, a foot-rest frame, 90 a pair of hangers pivoted to the foot-rest frame and having projections extending into the channels, hinges attached to the foot-rest frame, legs attached to the hinges, foot-board arms pivoted to the foot-rest frame and hav- 95 ing cams cooperating with the legs, and a

spring cooperating with the legs.

4. In a chair, the combination with a main frame having guides, of a pair of hangers detachably connected slidingly and pivotally 100 with the guides, a movable frame pivotally attached to the hangers, hinges attached to the movable frame, legs attached to the hinges, arms pivoted to the movable frame and having cams cooperating with the legs, a foot- 105 board supported by the arms, a stop for the legs, a spring cooperating with the legs, and a hanger for the forward end of the movable frame.

5. In a chair, the combination with a main 110 frame, of a folding foot-rest comprising a movable frame supported at the rear end thereof by the main frame, spring-hinges attached to the movable frame, legs attached to the hinges, arms pivoted to the movable frame 115 and having cams cooperating with the legs, a foot-board, hinges connecting the foot-board to the arms, a hanger for the forward end of the movable frame, and a support attached to the movable frame on which the foot-board 120 may rest when the foot-rest is folded.

6. In a chair, the combination with a main frame, of a folding foot-rest comprising a thereof by the main frame, spring-hinges attached to the movable frame, legs attached to the hinges and having shoes secured thereto, arms pivoted to the movable frame and having cams cooperating with the shoes of the legs, a foot-board, hinges connecting the foot-board to the arms, a stop for the legs cooperating with the movable frame, and a hanger

for the forward end of the foot-rest when folded.

In testimony whereof I affix my signature in presence of two witnesses.

SILAS B. SAFFELL.

Witnesses:

FRANK WILSON, E. R. MARTIN.