W. E. LATIMER.

EXTENSION FOOT REST.

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902,092.

Patented Oct. 27, 1908.

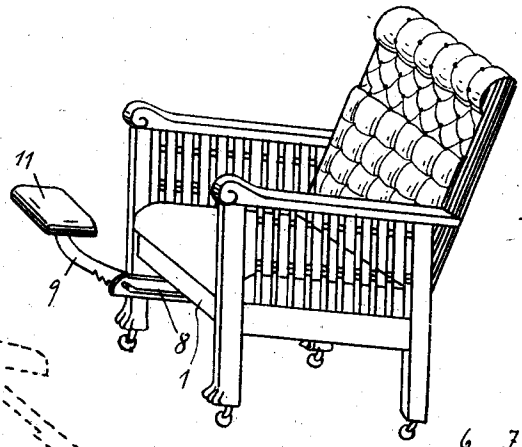


Fig. 1.

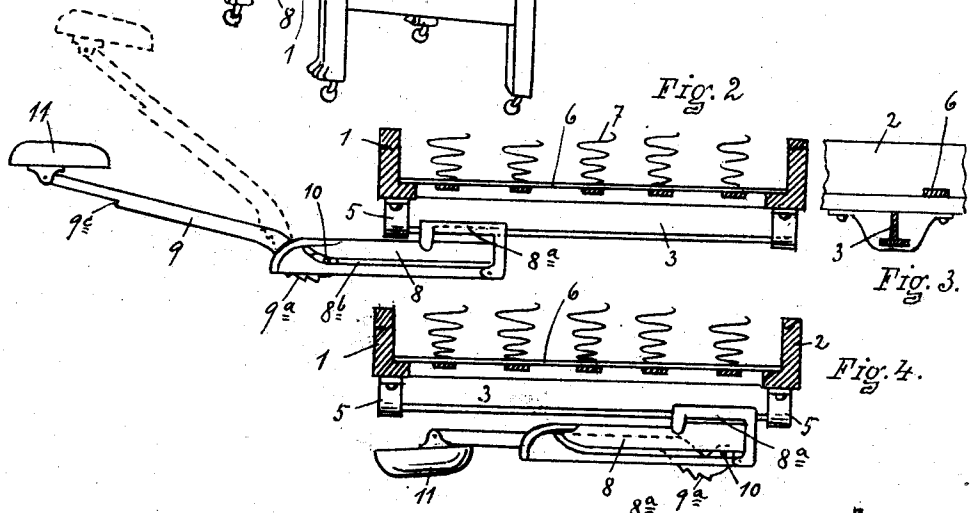


Fig. 2.

Fig. 3.

Fig. 4.

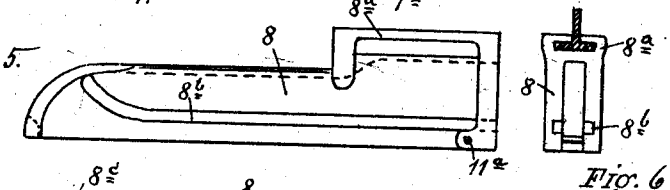


Fig. 5.

Fig. 6

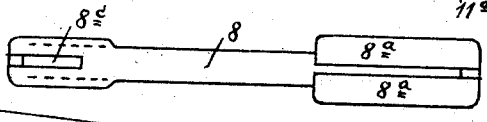


Fig. 7.

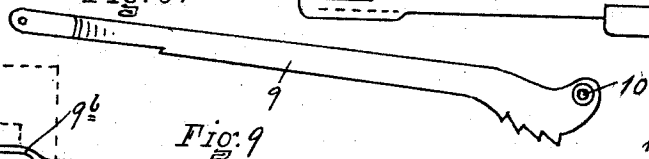


Fig. 8.

Fig. 9



Fig. 10.

WITNESSES

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EXTENSION FOOT-REST.

No. 902,092. Specification of Letters Patent. Patented Oct. 27, 1908.

Application filed February 15, 1907. Serial No. 357,498.

To all whom it may concern:

Be it known that I, WILLIAM E. LATIMER, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Extension Foot-Rests; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The object of my present invention is to provide an extension and adjustable foot rest for chairs which is compact in construction easily and conveniently operated, not liable to stick or get out of order and an unobjectionable attachment for a chair and strong and efficient.

Figure 1 shows a perspective view of a chair with my foot rest attachment applied and shown in extended position. Fig. 2 is a partial cross section of the frame with the foot rest attachment applied and shown in one of its extended positions. Fig. 3 is a detail showing particularly a cross section of the track or rail and the manner of securing it to the chair seat frame. Fig. 4 is a similar view to Fig. 2 with the foot rest attachment folded or closed and occupying its closed position under the seat frame. Fig. 5 is an enlarged detail of one of the main members of the attachment, which may be termed the sliding extension arm. Fig. 6 is an end view of the same in connection with a cross section of the rail or track. Fig. 7 is a plan view of the sliding extension arm member shown in Fig. 5. Fig. 8 is a side elevation of the other main member which may be termed the swinging extension arm. Fig. 9 is a plan view of the same. Fig. 10 shows a detail of a removable pivot.

Referring to the reference letters and figures in a more particular description, 1 and 2 indicate the front and rear rails of a chair seat frame, to the under side of which the inverted T-shaped rail 3 is secured by hangers or brackets, 5, 5. In the construction as shown bands or webbings 6 support the spiral spring 7 of the seat, although these details are not particularly important. Mounted on the rail or track 3 is the primary sliding extension arm 8, the slide or way portion of which is indicated at 8^a and is arranged at the rear end of the arm, and is arranged in a plane somewhat above that of the main body of the arm, the arrangement being such that the body of the arm can be projected forward from under the seat and parts supporting the rail or track hanger 5. The arm 8 consists in the main of two side walls between which is received the secondary swinging extension arm 9. The side walls are joined at the top as more particularly shown in Fig. 6 and have slotted openings 8^b therein, which slotted openings are given an upward turn at their forward end. The forward end of the arm 8 is provided with an opening 8^c through which passes the body of the swinging extension arm 9, and at the forward lower corner the arm is provided with a shoulder 8^d. At the shank end the arm 9 is provided with a series of ratchet teeth 9^a arranged in a curve adjacent to the pivot. The pivot is a removable piece of the form shown in Fig. 10 having reduced ends and is indicated by 10. The reduced ends of the pivot 10 fit in the slots 8^b, while the body portion fits in an opening in the shank of the arm 9. The swinging end of the arm 9 is forked as shown at 9^b in order to furnish a wider base therefor and receives the stool 11 pivoted thereon, so as to swing from a position on the top of the arm as shown more particularly in Figs. 1 and 2 to a position under the arm as shown more particularly in Fig. 4.

In assembling the parts the shank end of the arm 9 may be inserted through the opening 8^c and passed through to a position where the shank end will extend beyond the rear end of the part 8. The pivot piece 10 will then be placed in position and the arm forced forward, the ends of the pivot entering the rear ends of the slots 8^b. When thus assembled the parts are secured together by a rivet or pin 11^a, which serves as a stop for the rearward movement of the arm 9 with reference to the extension arm 8. On the underside of the arm 9 adjacent to the forward end there is provided a catch shoulder

9e adapted to engage with the shoulder 8d on the part 8.

The operation of the device may be briefly described as follows: When the foot rest is in folded position, as shown in Fig. 4, the operator takes hold of the stool 11 and draws the two parts 8 and 9 out from under the chair seat as far as the part 8 is adapted to move along the rail or track 3. The part 8 can be caused to move by reason of the catch 9e engaging with the shoulder 8d. When the part 8 has assumed its normal forward position, by slightly elevating the swinging end of the arm 9 the same may be drawn forward to its full extended position more or less as desired. The stool 11 will then be turned over on to the top of the arm and the arm 9 may be given more or less of an elevation from the plane of the arm 8 by engaging one or the other of the ratchet teeth on the shank end with the shoulder 8d of the arm 8. The stool may be brought closer to the chair seat even when in an elevated position, by sliding the extension arm 8 backwardly on the rail or track 3. When any weight is placed on the stool 11 the arrangement is such that the slide will bind on the rail or track to sufficient extent to prevent it moving too readily.

It will be noted that the construction is such as to give sufficient strength to the device and still the arms 8 and 9 each being single and mounted on a single track under the seat of the chair, there is little or no obstruction to or inconvenience given to the occupant of the chair in getting in or out thereof. In closing the foot rest attachment the swinging extension arm 9 will first be folded within the extension arm 8, and the stool 11 turned over into its inverted position when the whole may be readily slid under the seat of the chair in which it occupies a compact and unobjectionable position. The central web of the rail 3 projects above the plane of movement of the slide 8a and prevents the webbing or bands, which support the seat springs from interfering with the free sliding movement of the extension arm and other members of the foot rest attachment.

What I claim as new and desire to secure by Letters Patent is:

1. The combination in a foot rest attachment for chairs of a single rail secured to the under side of the chair seat and extending from front to rear centrally thereof, a primary extension arm provided with a slide portion at its rear mounted to slide on said rail and support the arm rigidly therefrom whereby the arm is adapted to be projected beyond the front of the seat or withdrawn thereunder and supported at all times by the rail and slide, a secondary extension arm mounted on and folding within the primary extension arm and having a pivot pin engaging in ways and adjacent to the pin having ratchet teeth adapted to engage with a catch shoulder on the primary arm and support the secondary arm in extended position of angular adjustment, and a stool mounted on the outer end of the secondary arm, substantially as set forth.

2. The combination in a foot rest attachment for chairs of a single inverted T-shaped rail attached to the under side of a chair seat and extending from front to rear centrally of the seat, a sliding primary extension arm mounted on said rail by a slide provided on the rear portion thereof and adapted to be projected beyond the front of the seat or withdrawn thereunder, a swinging secondary extension arm having a ratchet tooth segment at its shank end adapted to be received in a recess within the primary extension arm and provided with a pivot in its shank end engaging in longitudinal ways in the primary extension arm, and a reversible stool pivotally mounted on the projecting end of said secondary extension arm, substantially as set forth.

3. The combination in a foot rest attachment for chairs of a single rail secured to the underside of the chair seat and extending from front to rear centrally thereof, a primary extension arm provided with a slide portion at its rear engaged on said rail and suspending the arm therefrom, and rigidly supporting it thereby, said arm having a longitudinal slide or way therein, a secondary extension arm mounted on and folding within the primary extension arm and having a pivot pin engaging in said ways and having adjacent to said pin a set of ratchet teeth arranged in a curved line and adapted to engage with a fixed catch shoulder on the primary arm and support the secondary arm in extended positions of angular adjustment, and a stool mounted on the outer end of the secondary arm, substantially as set forth.

4. The combination in a foot rest attachment for chairs of a single rail secured to the underside of the chair seat and extending from front to rear centrally thereof, a primary extension arm provided with a slide portion at its rear engaging slidably on said rail and supporting the arm rigidly suspended therefrom, whereby the arm is adapted to be projected beyond the front of the seat or withdrawn thereunder and supported at all times by the rail and slide, said arm being recessed longitudinally and provided with longitudinal grooves affording ways, a secondary extension arm mounted on and adapted to fold within the recess in the primary extension arm and having at one end a pivot pin engaging in said ways in the primary arm and having adjacent to the pin a set of ratchet teeth arranged in a curve

and adapted to engage with a catch shoulder on the primary arm and support the secondary arm in extended positions of angular adjustment, and a stool mounted on the outer end of the secondary arm, substantially as set forth.

In witness whereof, I have affixed my signature, in presence of two witnesses, this 4th day of Feb'y 1907.

WILLIAM E. LATIMER.

Witnesses:
E. S. HESSE,
JAMES H. MERWIN.