(No Model.)

S. HAYWARD.

CHAIR.

No. 375,448. Patented Dec. 27, 1887.

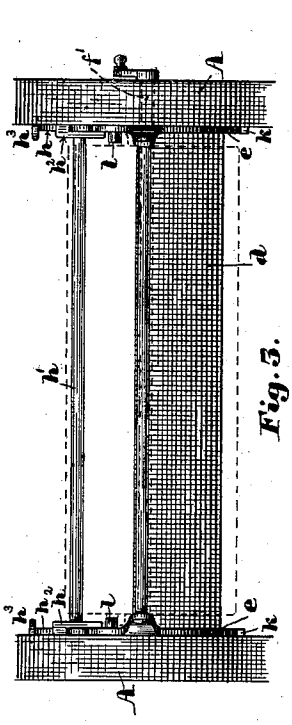


Fig. 3.

Fig. 1.

Fig. 2.

Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

SAMUEL HAYWARD, OF BOSTON, MASSACHUSETTS.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 375,448, dated December 27, 1887.

Application filed August 27, 1887. Serial No. 248,040. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL HAYWARD, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Chairs, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to chairs provided with leg rests or supports; and it consists in certain novel features of construction, arrangement, and combination of parts, which will be readily understood by reference to the description of the drawings and to the claims, in which my invention will be particularly pointed out.

Figure 1 of the drawings is a vertical section of a chair embodying my invention with the leg-rest extended and the seat removed, but having its outline shown in dotted lines. Fig. 2 is a similar section with the leg-rest retracted beneath the seat, the outline of which is shown only by dotted lines. Fig. 3 is a partial front elevation with the leg-rest and seat removed, and Fig. 4 is an end elevation of the leg-rest.

In the drawings, A A are the side frames of the chair, connected together by the tie-bars *a*, *b*, *c*, and *d* and supported by the legs B B. To the inner surfaces of the sides A A are pivoted the curved arms *e e*, having formed upon their pivotal ends segments of gear-wheels *e' e'*, with the teeth of which the teeth of the pinions *f f*, mounted upon the shaft *f'*, engage, as shown in Figs. 1 and 2. The opposite or free ends of the curved levers or arms *e e* are expanded to form approximately a T shape, and each has pivoted to one arm of the T the leg-rest C, and has formed upon the other arm of said T the hook *g*, with which the latch *h* engages to hold said lever in the position shown in Fig. 1, said latches being mounted upon the rocker-shaft *h'*, having bearings in the stands h^2, secured to the inner faces of the side frames, A A, as shown in Figs. 1 and 2. The latch *h* is made to engage with the hook *g* by the reaction of the spring *i*, and is provided with a thumb-pad, h^3, by pressing upon which said latch may be disengaged from the hook *g*, when the leg-rest will drop by the force of gravity into the position indicated in dotted lines in Fig. 1.

A secondary latch, *j*, is pivoted to the stand h^2 and connected at one end to the latch *h*, so as to be operated by the same spring and the same pressure of the thumb or finger, and is provided at its other end with a hook to engage the hook *k* on the curved arm *e* when said arm is moved into the position shown in Fig. 2.

The arms *e e* are each provided with an inwardly-projecting lug, *l*, with the under side of which a similar lug, *m*, on each end of the leg-rest C engages when said arms *e* are in the position shown in full lines in Fig. 1, whereby the leg-rest C is maintained in the inclined and raised position shown in full lines in Fig. 1.

When the leg-rest is not desired for use, the latch *h* is detached from engagement with the hook *g*, thereby permitting the leg-rest C to fall of its own weight into the position shown in dotted lines in Fig. 1. The occupant then rotates the pinion-shaft *f'* by means of the crank D, (see Fig. 3,) to move the arms *e e* into the position shown in Fig. 2, during which operation the lugs *m* on the ends of the leg-rest come in contact with the under sides of the fixed cams *n*, secured to the inner faces of the frames A A, thereby causing the leg-rest to assume the horizontal position shown in Fig. 2, at which time the latch *j* engages with the hook *k* to lock said leg-rest in such position.

The operation of my invention will be readily understood from the foregoing without further description here.

The dotted lines *o p q* indicate the outlines of the seat, removed in order the better to illustrate the working parts of the locking devices.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In combination with a chair frame and seat, a pair of pivoted arms, each provided with a segment of toothed gear, an inwardly-projecting lug, and locking hooks or shoulders, a leg-rest pivoted to the free ends of said levers and provided upon its end with an outwardly-projecting lug adapted to engage with the lugs on said levers, a fixed cam located beneath the chair-seat in position to engage with the lug on said leg-rest, a revoluble shaft carrying pinions to engage with the segmental gears on said pivoted arms, and a compound

latch for locking said leg-rest in either of two positions, substantially as described.

2. The combination, with a chair frame and seat, of the levers *e e*, provided with a segment of gear-teeth, the leg-rest C, pivoted to the free ends of said levers and provided with the lugs *m m*, the cams *n*, the shaft *f'*, the pinions *f f*, the crank D, the latches *h* and *j*, the spring *i*, and the hooks or shoulders *g* and *k*, all constructed, arranged, and adapted to operate substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 23d day of August, A. D. 1887.

SAMUEL HAYWARD.

Witnesses:
N. C. LOMBARD,
WALTER E. LOMBARD.