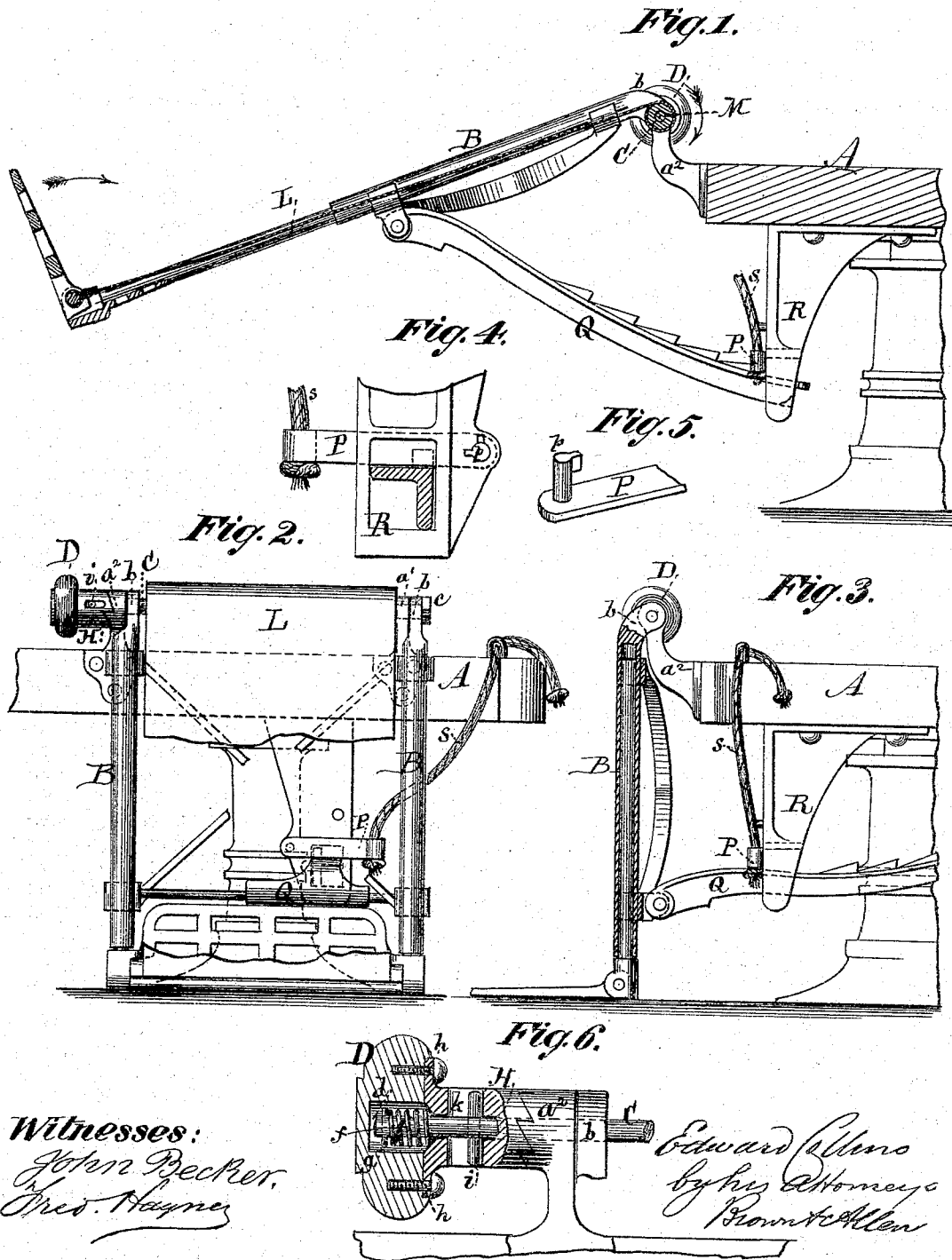


E. COLLINS.
Foot-Rests for Chairs.

No.156,772.

Patented Nov. 10, 1874.



UNITED STATES PATENT OFFICE.

EDWARD COLLINS, OF NEW YORK, N. Y.

IMPROVEMENT IN FOOT-RESTS FOR CHAIRS.

Specification forming part of Letters Patent No. 156,772, dated November 10, 1874; application filed September 15, 1874.

To all whom it may concern:

Be it known that I, EDWARD COLLINS, of New York, in the county and State of New York, have invented certain Improvements in Foot-RESTS for Chairs, of which the following is a specification:

My invention relates to certain improvements on the foot-rests for which Letters Patent No. 134,733 were granted to me January 14, 1873, in which the foot-rest is composed of two parts, connected and held at different lengths by means of an apron secured to one of the parts, and passing over a roller on the other part.

The invention consists, first, in the peculiar construction and arrangement of a stop for operating the roller and apron above referred to; and, secondly, in the peculiar construction and arrangement of a pawl and a notched bar for holding the foot-rest at different angles of inclination.

In the accompanying drawing, Figure 1 is a vertical section, showing my improved foot-rest attached to a chair and in an elevated position. Fig. 2 is a front view, showing the foot-rest hanging vertically downward. Fig. 3 is a vertical section of the same. Fig. 4 is a detail view, partly in section, of the pawl and notched bar. Fig. 5 is a separate view of the pawl. Fig. 6 is a detail view of the clutch and knob for operating the apron.

The chair A may be of any suitable construction. To the front edge of the chair-seat are attached two lugs, a^1 a^2 , with eyes formed in their outer portions. The tubes B B, which form part of the foot-rest, have their upper ends attached to perforated lugs b b . A rod, C, passes through the perforated lugs b b and a^1 a^2 , and the foot-rest is thus hinged to the chair, as described in my patent aforesaid. At one end of the rod C may be a bolt-head or a nut, c , and at the other end is a handle or knob, D, which may be attached to the rod in any suitable manner. In the drawing it is represented as formed with an axial recess, d , which receives the end of the rod C, and a coiled spring, f , surrounding said end. A pin, g , passes through the end of the rod, and prevents displacement of the spring. The shank H of the knob is formed with a flange, h , and is attached to the knob by screws passing

through said flange, so as to confine the spring f between the shank and the pin g . A pin, i , passes through the rod C, and its projecting ends work in a slot, k , running transversely through the shank, so that the rod will turn with the knob, but allow the knob to slide longitudinally on the rod. At the end of the shank H is formed a series of ratchet-teeth, which engage with a corresponding series of teeth formed on the lug a^2 . The rod C carries a roller, M, to which is attached the upper end of the apron L, the lower end being attached to the lower part of the frame of the foot-rest in a similar manner to that shown in my patent aforesaid. The shank formed with the ratchet, engaging with the ratchet on the lug a^2 , acts as a stop to prevent the rod C from turning, and the apron from unrolling, thus performing the same office as the pawl and ratchet shown in my patent aforesaid.

When the apron is rolled up and the foot-rest contracted to its shortest dimensions, if it is desired to lengthen out the foot-rest, the handle or knob D is pulled outward so as to release the ratchets from engagement with each other, and then turned so as to unroll the apron and allow the lower part of the foot-rest to slide out of its own weight or be pressed outward by the feet of the occupant of the chair. When the foot-rest is extended, and it is desired to contract it, the knob is turned in the opposite direction, so as to roll up the apron on the roller, the spring f tending to keep the ratchets engaged with each other at all times, except when disengaged by pulling out the knob.

In my patent before referred to, the foot-rest is adjusted and held at different angles of inclination by means of a pivoted bar attached to the foot-rest, and provided on its lower edge with notches engaging with a staple or bar under the seat. In order to prevent the noise resulting from the contact of the notches with the staple or bar, I now form the notches on the upper edge of the pivoted bar, leaving the lower edge free to run smoothly. The pivoted bar is attached to the under side of the foot-rest in a similar manner to that described in my patent aforesaid, and passes backward through the lower portion of a brace, R, which is attached to the under side

of the seat A. The lower edge of the bar runs smoothly and noiselessly over the lower portion of the brace, and the upper edge is provided with notches for engagement with a pawl, P, having one end pivoted to the brace R, and the other end provided with a cord, s, or a rod or wire for raising it. The pawl P is attached to the brace R by a key-joint, the pivot p being formed with a projection like a key-bit, and inserted in a hole of corresponding shape in the brace, while the pawl is held in an upright position, and then turned down so as to lock the parts. When the foot-rest is raised from a vertical position, the bar Q slides smoothly through the brace R, and the pawl P drops of its own weight as the ratchet-teeth successively pass under it, and thus holds the foot-rest at any angle of inclination at which it may be placed, as shown in Fig. 1. When it is desired to lower the foot-rest, the pawl P is raised by means of the cord s, so as to release it from the ratchet and allow the bar Q to pass back through the brace to the position

shown in Fig. 3. The foot-rest is held in any position between that shown in Fig. 1 and that shown in Fig. 3 by the engagement of the pawl and ratchet-bar.

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

1. The combination, with the chair having the lugs a^1 a^2 , of the rod C, apron L, and the knob D, having the shank H with its ratchet-teeth for engagement with the ratchet-teeth on the lug a^2 , substantially as described, for the object specified.

2. The combination, with the section B, of the foot-rest of a chair, of the pivoted bar Q, having the ratchet formed on its upper edge, the pawl P pivoted to the brace R, and the cord or rod S, as and for the purpose described.

EDWARD COLLINS.

Witnesses:

GEO. W. MCADAM,
JAMES PATTERTON.