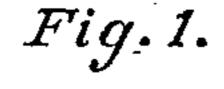
C. H. LATHROP & J. M. FOWLES.

Improvement in Spring-Seats.

No. 130,922.

Patented Aug. 27, 1872.



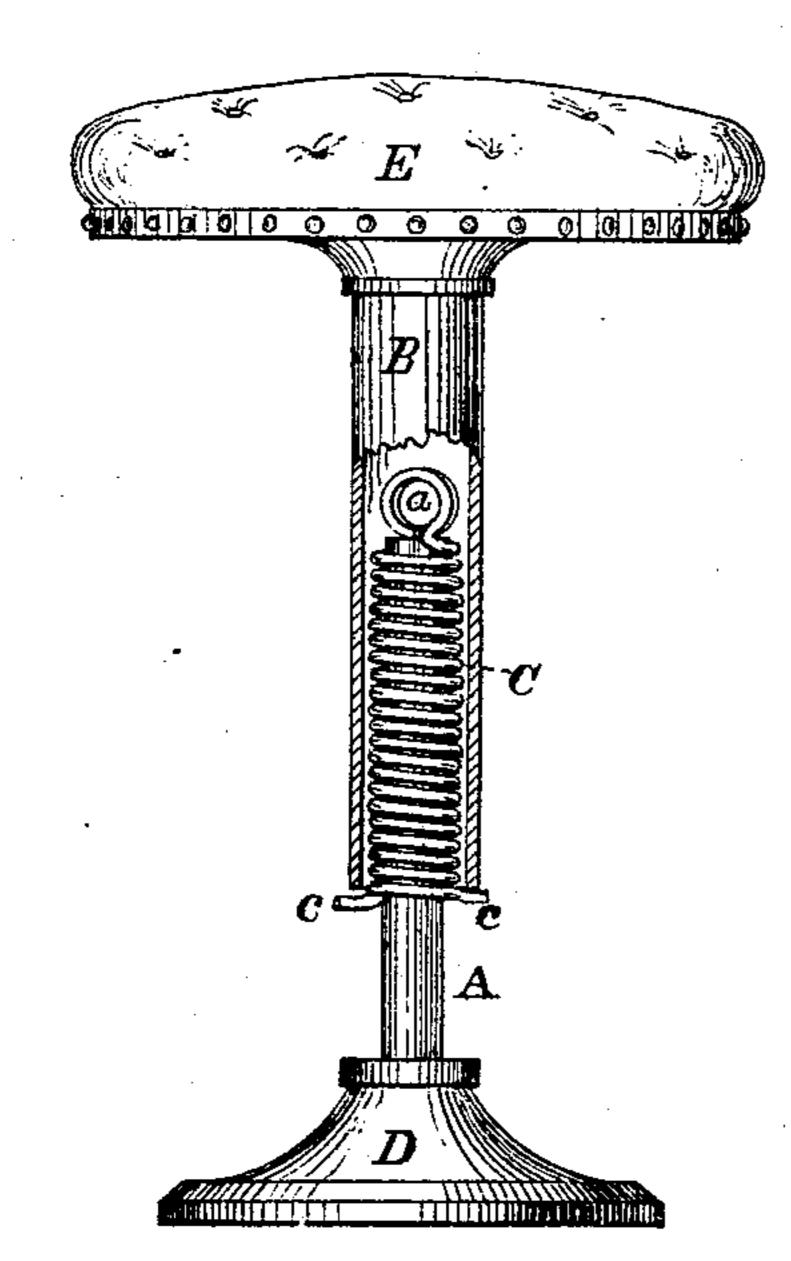
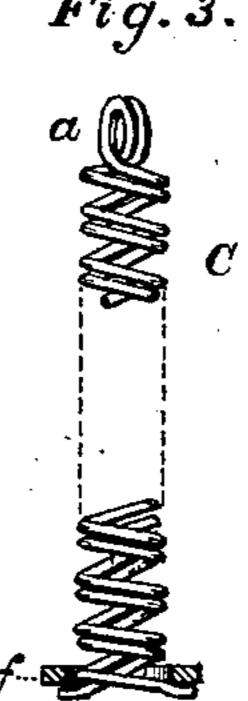
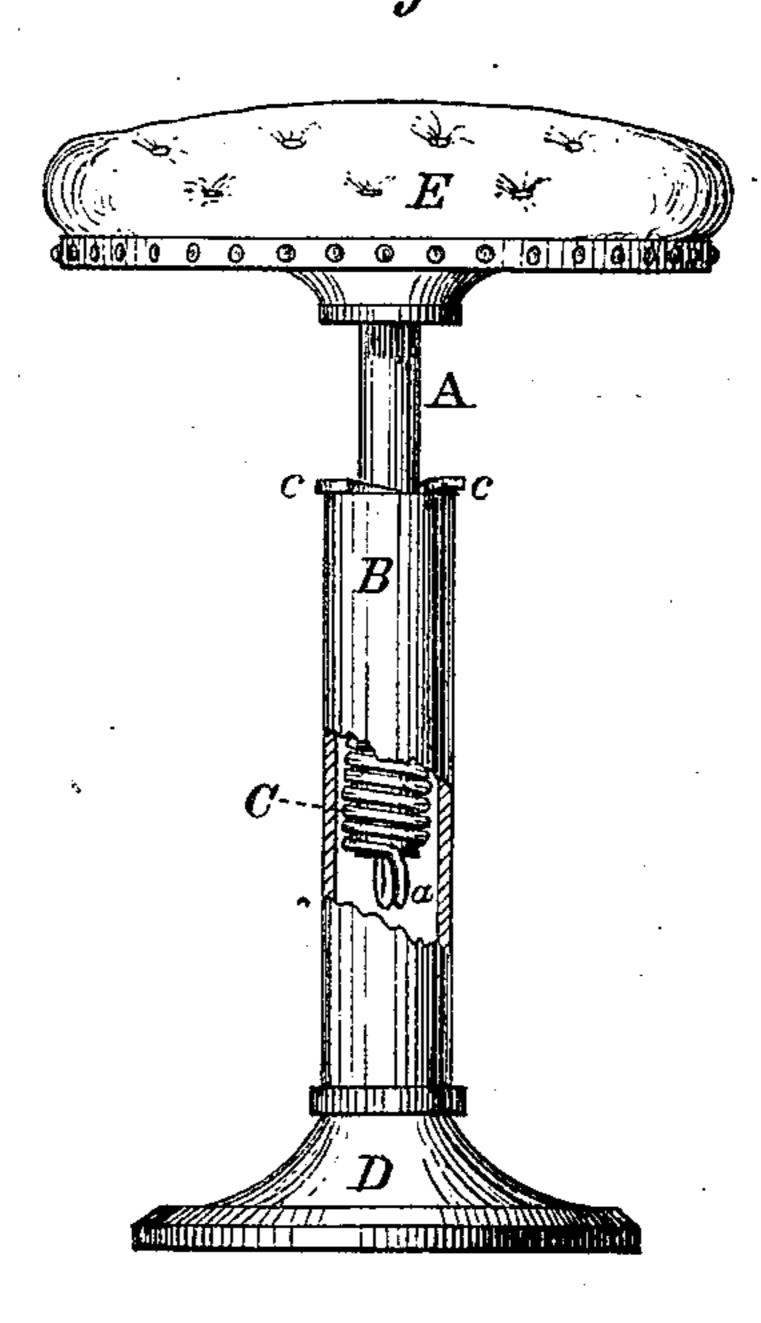


Fig. 3.





Witnesses:

D. D. R.

Inventor:

Chaucy le Lathrofe. Per Parker & Fraser, altigo

UNITED STATES PATENT OFFICE.

CHANCY H. LATHROP AND JOHN M. FOWLES, OF JERSEY CITY, N. J.

IMPROVEMENT IN SPRING-SEATS.

Specification forming part of Letters Patent No. 130,922, dated August 27, 1872.

SPECIFICATION.

Be it known that we, CHANCY H. LATHROP and JOHN M. FOWLES, both of Jersey City, in the county of Hudson and State of New Jersey, have invented an Improved Spring-Seat, of which the following is a specification:

It is the object of our invention to furnish a spring-seat of small cost and simple construction, adapted to house and office chairs, stools, and seats for various other purposes; and it consists in the employment of a coiled spring formed as hereinafter described, to act by distension, in combination with an inclosed standard or spindle, and an inclosing tube or case, said spring being provided with a neutral coil or coils at one end, to form a bearing against the head of the standard, and with a hook or hooks at the opposite end to engage with the inclosing cylinder.

As shown in the drawing, Figure 1 is an elevation of a stool mounted with our improved spring. Fig. 2 is a like view with the spring inverted, showing the inclosing-case below, (being in both views broken away to show the spring;) and Fig. 3 is a separate view of the spring removed.

We construct the spring C for this purpose, preferably of two strands of wire, though a greater number may sometimes be used with advantage, wound in close parallel coils. The head a consists of what we term neutral coils, as they do not contribute to the elasticity, their office being to form a bearing for the rod or standard A, through the end of which the supported weight acts upon the coils of the spring to distend them. The strands at their opposite ends are bent outwardly, forming hooks c c, which engage with the extremity of the cylinder or case B, and form the counter-

bearings. When the strands are two or more in number these hooks are placed on opposite sides or at uniform distances apart, giving an equal bearing to the spring; and a ring or washer, f, may be interposed with advantage, preventing unequal wear and friction when the cylinder is revolved. E is the cushion and D the base, or other suitable support, to which the rod A or the cylinder B is connected, it being optional which is attached to it, the operation being the same in the one method, shown in Fig. 1, as in the reverse, as represented in Fig. 2. The elastic effect is attained by the separation or distension of the coils by which the action is not limited, as in the case of those springs formed with open coils to act by compression, in which the action is abruptly stopped by the coils coming in contact with one another. The spring being formed of duplex strands admits of smaller wire being used, reducing the labor and cost of manufacture, gives a greater degree of elastic action or distension, is softer and more yielding and more durable than if made of a single strand, qualities which especially adapt it for the purpose designed—that of a spring-seat.

We claim as our invention— The spring C provided with the head-connection a, in combination with the rod A, cylinder B, seat E, and base D, with or without the packing f, all constructed and arranged as herein shown and set forth.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

CHANCY H. LATHROP. JOHN M. FOWLES.

Witnesses:
J. Fraser,
Chas. M. Higgins.