(No Model.)

C. A. ADAMS & F. B. PETERS.

SPRING ATTACHMENT FOR CHAIRS.

No. 452,686. Patented May 19, 1891.

Fig. 2.

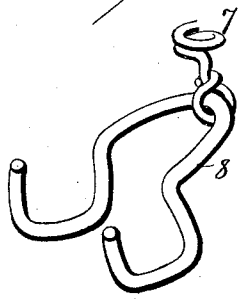

Fig. 1.

Witnesses
E. Nottingham
G. F. Downing.

Inventor
C A Adams.
F B Peters.

By their Attorney
H A Seymour.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CLARENCE A. ADAMS AND FRANZ B. PETERS, OF LINCOLN, NEBRASKA.

SPRING ATTACHMENT FOR CHAIRS.

SPECIFICATION forming part of Letters Patent No. 452,686, dated May 19, 1891.

Application filed January 23, 1890. Serial No. 337,779. (No model.)

To all whom it may concern:

Be it known that we, CLARENCE A. ADAMS and FRANZ B. PETERS, of Lincoln, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Spring Attachments for Chairs; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an improvement in spring attachments for chairs, and particularly to that class of chairs used by barbers and generally known to the trade as "barber-chairs," the object being to provide a simple device capable of quick attachment to chairs, which will sustain the weight of the occupant, holding the chair at different inclinations, and assist the operator in raising and lowering the chair to the required position.

With this end in view our invention consists in certain novel features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional view of a chair, showing our improved spring attachment applied thereto; and Fig. 2 is a detached view of the attachment.

The numeral 1 represents the body or support of the chair, to which is hinged the top 1^a. These parts are of the usual construction and require no further description. They are furnished, respectively, with cross bars or braces 3 and 2, as shown, after the usual manner, and our improved attachment is preferably applied to them, although it may be attached at different places—as, for instance, at the corners, sides, or even at the back of the chair, if desired. The attachment consists of a close spiral spring 7, made of the finest Bessemer steel, a hook 8, connected to it at one end, and a stem or rod 5 at the opposite end. The hook 8 consists of a double-pronged hook made of wire or other material, with its ends spread some distance apart to grasp and take a firm hold on one of the cross-bars, as 3, or other part of the chair-body at two different points. The upper end of this double hook, or that portion which joins or connects the two hooks, is offset or bent inwardly a short distance, as shown, and this portion passes through an eyelet in the end of the spiral spring, thus throwing the spring inward some distance. The rod or stem 5 at the other end is pivotally connected with the upper end of the spring, and the free end of this rod or stem is screw-threaded. An angle-iron or bracket 4 is secured to the top of the chair conveniently to cross-bar 2, and this bracket is furnished with a hole adapted to receive the stem or rod 5. A thumb-screw or other device 6 is screwed on the end of this stem or rod and adapted to be turned to regulate the tension of the spring.

It will be seen by the construction that by forming the attachment of three parts 5, 7, and 8, hinged or pivoted together, the greatest freedom of movement is admitted, and in this manner several beneficial results are accomplished, and, first, if one part becomes broken or worn, it may be quickly renewed without a renewal of the other part; secondly, as the pull on the spring is always straight, no unpleasant noise results from operating the spring, as is frequently the case in similar attachments in which a shearing draft is brought to bear on the spring. Again, the construction of the attachment is such that it may be easily and quickly applied or removed from the chair.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of our invention, and hence we do not wish to limit ourselves to the exact construction herein set forth; but,

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A spring attachment for chairs, consisting, essentially, of a spiral spring, a screw-threaded stem pivotally connected with one end of the spring and having a thumb-nut thereon by which its tension is regulated, and a double hook having loose and pivotal connection with its other end, substantially as set forth.

2. The combination, with a chair made in two parts hinged together, one part having

a cross-bar and the other having an angle-plate or similar device secured thereto, of a spring connection consisting of a spiral spring, a screw-nut, and a double hook composed of wire bent to embrace the cross-bar and its shank offset to throw the adjacent end of the spring a considerable distance back of the cross-bar, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 30th day of December, 1889.

CLARENCE A. ADAMS.
FRANZ B. PETERS.

In presence of—
HENRY E. DAWES,
O. W. LANE.