(No Model.)

L. STUCK.

LOWERING MECHANISM FOR DENTISTS' CHAIRS.

No. 332,626. Patented Dec. 15, 1885.

Fig. 1.

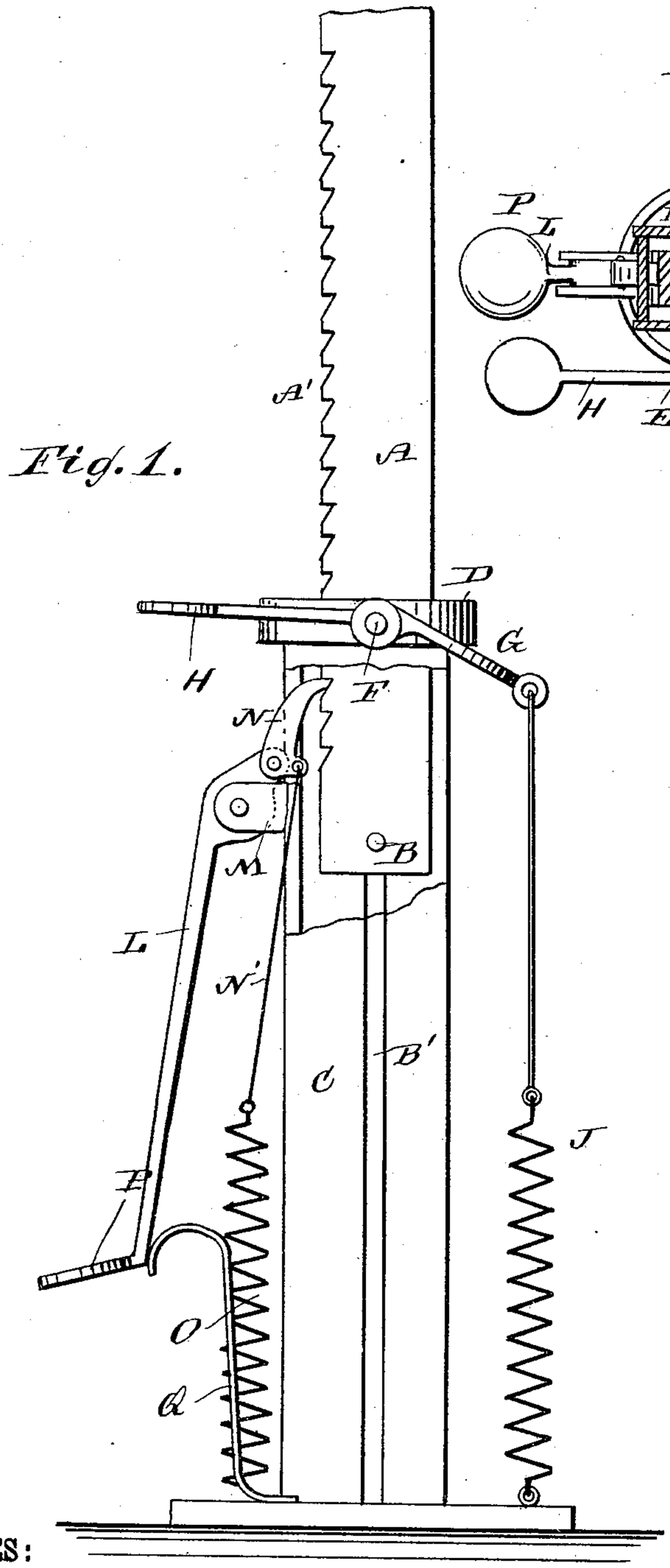

Fig. 2.

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LOWERING MECHANISM FOR DENTISTS' CHAIRS.

SPECIFICATION forming part of Letters Patent No. 332,626, dated December 15, 1885.

Application filed May 19, 1885. Serial No. 166,050. (No model.)

To all whom it may concern:

Be it known that I, LEVI STUCK, of Hart, in the county of Oceana and State of Michigan, have invented certain new and useful Improvements in Lowering Mechanism for Dentist-Chairs, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved dentist's chair, which can be raised and lowered very easily and locked at any desired height.

The invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side view of my improved raising and lowering mechanism for dentists' chairs. Fig. 2 is a sectional view of the same.

The bar A is provided with downwardly-inclined teeth A′ on one edge, and at its bottom it is provided with pins B, which pass into vertical guide-slots B′ in upright pieces C at the sides of the said bar. On the upper ends of the side pieces, C, a ring, D, is held, which has two diametrically-opposite nuts, E, in which two screws, F, are held to turn, which have their outer ends fastened to a U-shaped lever, G, having an arm, H, on the end of one shank, and having the middle of its cross-piece connected by a wire with a spring, J, which pulls downward, and is secured to the base of the apparatus. Clamping-plates K are held loosely on the inner ends of the screws F in such a manner that the screws can turn in them and move them to and from the sides of the bar A, the said clamping-plates being about four inches long. A lever, L, is pivoted on jaws M of the uprights C, and to the said lever a pawl or dog, N, is pivoted, which is connected by a rod or wire, N′, with a spring, O, on the base. A plate, P, is secured on the end of the lever L, and rests against the upper end of a spring-stop, Q, when the lever is swung down.

The operation is as follows: To raise the bar A, which supports and carries the seat, the outer end of the lever L is pressed down by the foot, causing the dog N to slide up and grip on the teeth A′ and raise the bar A. In this manner the bar can be raised more or less by swinging the lever a greater or less number of times. The spring O pulls that end of the lever L to which the dog N is pivoted down, thereby raising the outer end. The plates K are pressed against the sides of the bar A by the screws F. When the seat is to be lowered, the arm H is depressed, whereby the screws F, fastened to the U-shaped lever G, are turned in such a manner as to move the plates K slightly from the sides of the bar A, permitting the bar A to slide downward. As soon as the arm H is released, the spring J, acting on the lever G, swings it downward, and thereby the screws F are turned to press the plates K against the sides of the bar A, which is thus locked in place. The screws F need have but very slight movement in the direction of their length, and but very little swing of the lever G is required. The bar A is slightly tapered from its upper to its lower end, which taper, however, is so slight that it cannot be shown in the drawings. If the bar were of uniform thickness from the top to the bottom, it would drop its entire length the moment it was released. To prevent this the taper has been provided.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with uprights, of a tapered sliding bar, clamping-plates at the sides of the sliding bar, screws acting on the clamping-plates, and a lever to which the screws are secured, substantially as herein shown and described.

2. The combination, with uprights, of a tapered sliding bar, clamping-plates at the sides of the bar, screws acting on the clamping-plates, a lever to which the screws are secured, and an arm on said lever, substantially as herein shown and described.

3. The combination, with an upright, of a tapered sliding bar, clamping-plates at the side of same, screws acting on the clamping-plates, a lever to which the screws are fast-

ened, and a spring connected with the lever, substantially as herein shown and described.

4. The combination, with the uprights C, of the ring D on the same, which ring has nuts E, the screws F in the nuts, the lever G, to which the screws are secured, the sliding bar A, the clamping-plates K at the sides of the same held on the inner ends of the screws, and of the arm H, and the screw J, substantially as herein shown and described.

LEVI STUCK.

Witnesses:
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