

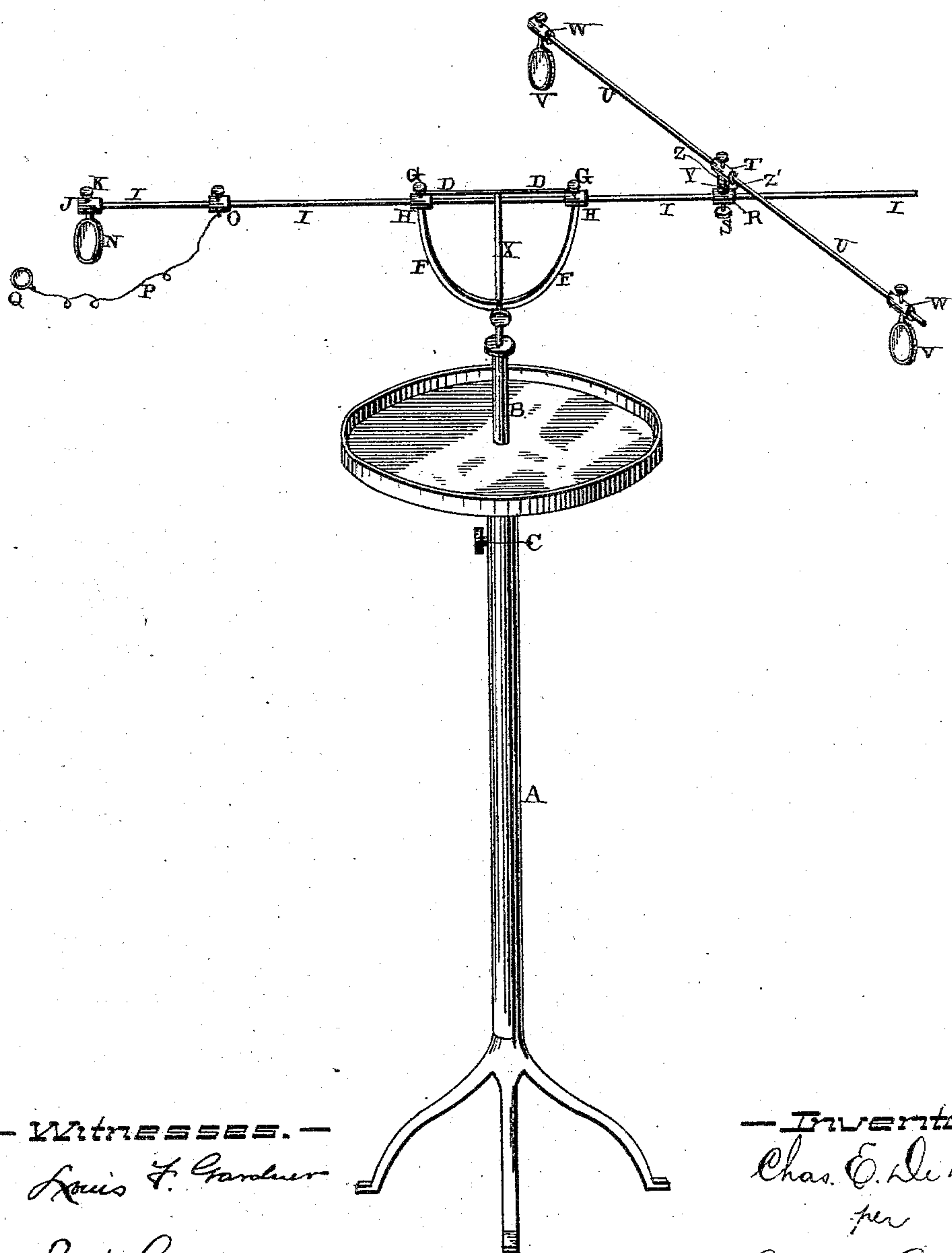
(No Model.)

C. E. DE BOW.

LARYNGOSCOPE.

No. 281,033.

Patented July 10, 1883.



— Witnesses. —

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# UNITED STATES PATENT OFFICE.

CHARLES E. DE BOW, OF ALBION, MICHIGAN.

## LARYNGOSCOPE.

SPECIFICATION forming part of Letters Patent No. 281,033, dated July 10, 1883.

Application filed January 8, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. DE BOW, of Albion, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Laryngoscopes; and I 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 pertains to make and use it, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to an improvement in laryngoscopes; and it consists in the combination of a suitable base or support provided with an adjustable frame, through which passes a horizontally-sliding rod provided with a lens at one end, with a second adjustable rod which carries a mirror at each of its ends, as will be more fully described hereinafter.

The object of my invention is to provide a cheap and simple apparatus by means of which light can be directed directly into a person's mouth while the teeth are being operated upon, and thus enable the dentist to do much better and more correct work.

The accompanying drawing represents an apparatus in perspective embodying my invention.

A represents a suitable hollow base or stand-ard, in which a supporting-rod, B, is vertically adjustable, and which rod is held in any desired position by means of the set-screw C.

Upon the rod A, at any suitable distance above the top of the base, is formed a small table, such as is generally used by dentists to hold their tools while fixing teeth.

Upon the top of the rod X, socketed in the top of the rod B, is clamped a suitable spring, D, which is connected at its ends by means of the set-screw G with the ends of the curved frame F. This frame F may either pass through a hole made through the rod B, or it may pass through a suitable keeper which is secured to the side of the rod, and through which keeper passes a suitable set-screw for the purpose of holding the part F in any desired position.

Upon each end of the part F is formed a suitable guiding-tube or holder, H, for the rod I to pass through. This rod I is horizontally adjusted back and forth through the guides H, and is held in any desired position by means of the set-screw C. Upon one end of this rod I is a suitable sliding holder, J, which is held in any desired position by means of a set-screw, K, and which holder has the lens N se-

cured to it by means of a ball-and-socket joint. This lens is adjustably secured to the holder, so that it may be turned in any direction for the purpose of directing the light directly into the person's mouth. Also placed upon the rod I is a suitable sliding holder, O, which has connected to it by means of a cord, wire, or chain, P, a small magnifying-mirror, Q, the object of which is to reflect the light from the lens N to any part of the mouth.

Placed upon the rod I, toward its outer end, is an adjustable holder, R, which is held in any desired position by means of a set-screw, S, and upon the top of which holder is pivoted a second holder, T, the holder R having a stud, Y, on its upper side, and the holder T having a sleeve, Z, projecting from its lower side for that purpose. The sleeve Z has a set-screw, Z', for clamping the holder R to the holder T at any desired angle. Through the holder T slides the rod U, having a mirror, V, attached to each of its ends. These mirrors are attached by a ball-and-socket joint to the sliding adjustable holders W, and serve to reflect either natural or artificial light from any source or direction through the lens N into the mouth, the rod U being adjustable in every direction, and the mirrors V, being universally adjustable in any direction, will catch the light from any source near the dentist's chair and reflect it in any desired direction.

By means of the construction above described, a flood of light can be directed into the person's mouth, and enable the dentist to do better work and with greater rapidity than with the usual small looking-glass alone.

Having thus described my invention, I claim—

1. The combination of the standard B, provided with the adjustable frame F, the holder H, with the adjustable rod I, set-screws G, and the holder J, having the lens N attached to it, substantially as shown.

2. The combination of the rod I, a suitable support therefor, and provided with an adjustable lens, N, with the rod U, a suitable holder for supporting it upon the rod I, and the adjustable mirrors V, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. DE BOW.

Witnesses:

WM. A. LANE,  
JAMES M. HIGBY,