

(No Model.)

G. ERMOLD.
LARYNX TUBE.

No. 478,582.

Patented July 12, 1892.

FIG.1



FIG.2

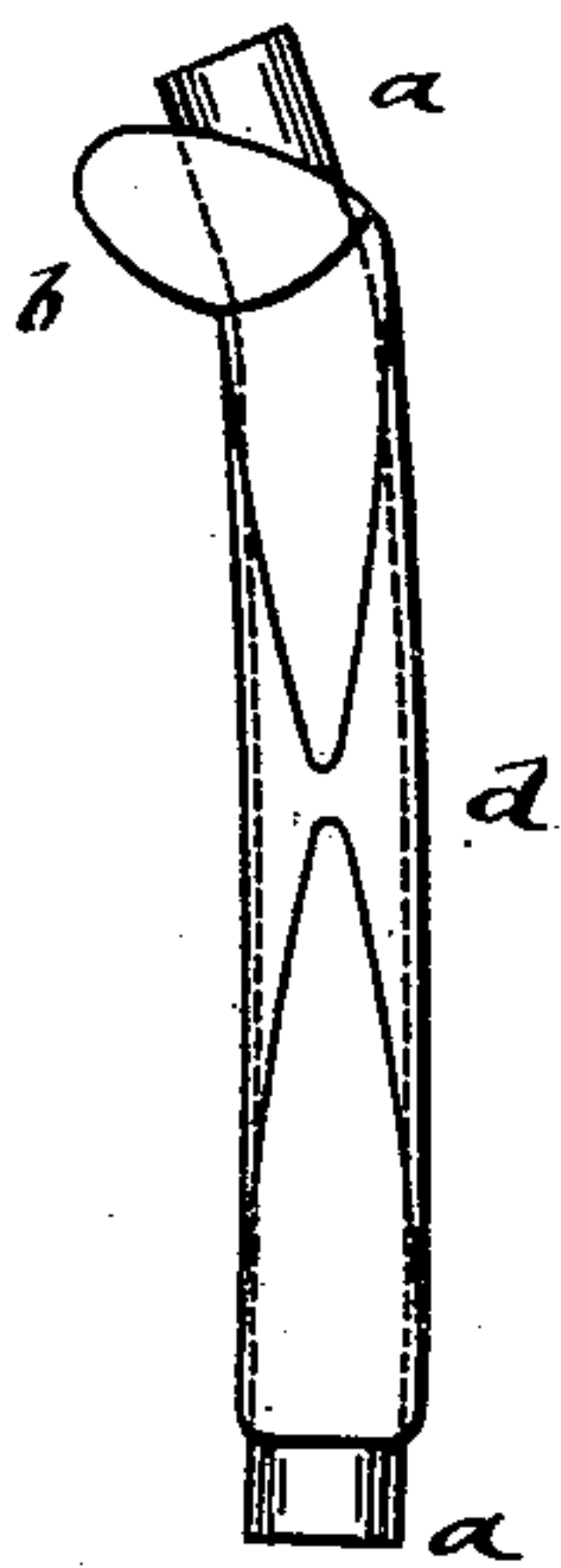


FIG.3



FIG.4

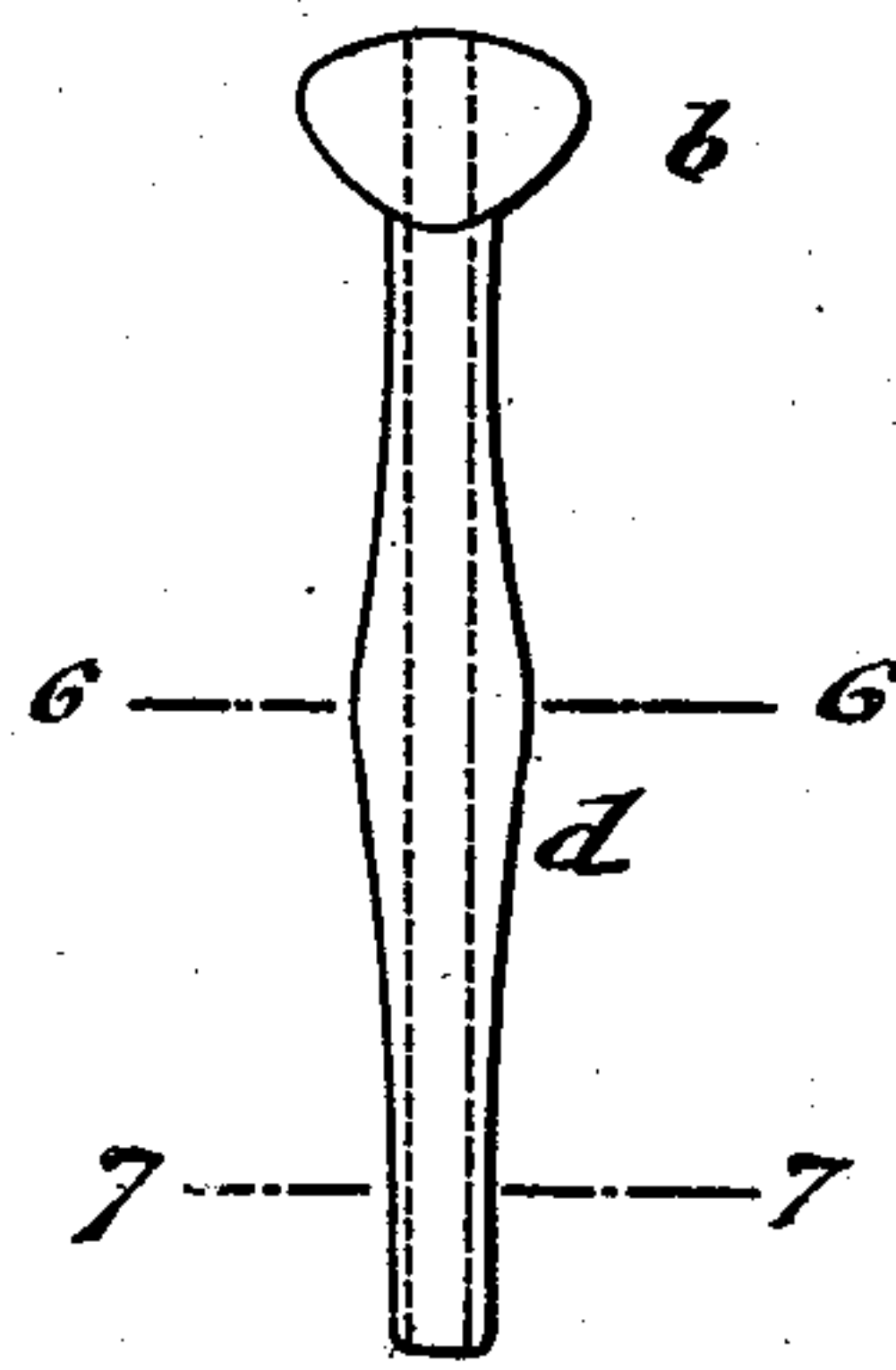


FIG.5

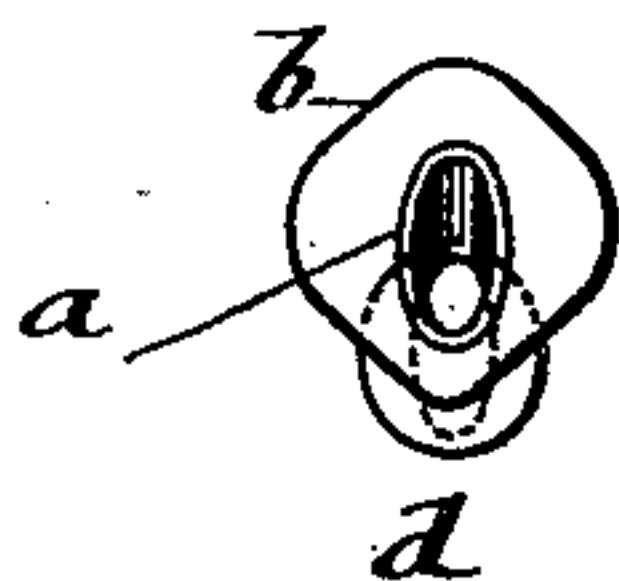
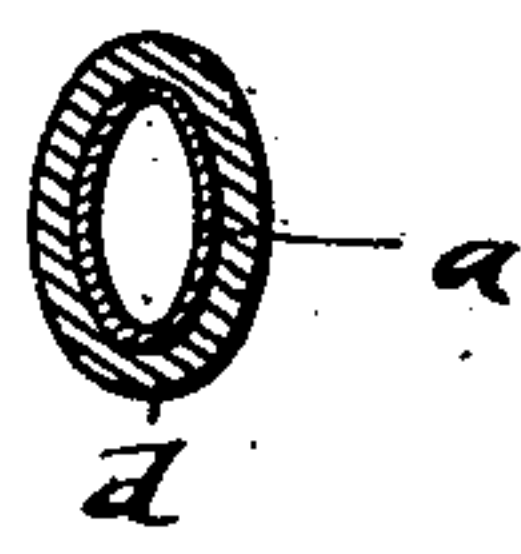


FIG.6



FIG.7



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE ERMOLD, OF NEW YORK, N. Y.

LARYNX-TUBE.

SPECIFICATION forming part of Letters Patent No. 478,582, dated July 12, 1892.

Application filed May 16, 1891. Renewed December 10, 1891. Serial No. 414,650. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ERMOLD, a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented certain new and useful Improvements in the Manufacture of Intubation-Tubes for the Larynx, of which the following is a specification.

This invention relates to the manufacture of intubation-tubes for the larynx, known as "O'Dwyer tubes," as they were originally proposed by Dr. Joseph O'Dwyer, of New York, for the treatment of diseases of the larynx, such as diphtheria, &c., and as fully described by Dr. Dillon Brown in the *Archives of Pediatrics* of January, 1891, the object of my invention being to reduce the expense of manufacturing said tubes without deteriorating the quality and correct shape of the same; and the invention consists of the process herein described of making intubation-tubes for the larynx by placing a sheet-metal tube of greater length than the intubation-tube to be produced in a mold, then casting the head and shank of the intubation-tube around the same, and, lastly, cutting off the projecting ends of the interior tube or core.

The invention consists, secondly, of an intubation-tube for the larynx composed of an interior obtusely-bent tube of sheet metal and an enlarged head and shank of cast metal.

In the accompanying drawings, Figures 1, 2, and 3 represent side elevations, showing the different stages of the manufacture of my improved intubation-tube. Fig. 4 is a front view of the same; Fig. 5, a top view; and Figs. 6 and 7 are horizontal sections, respectively, on lines 6 6 and 7 7, Fig. 4, drawn on a larger scale.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, *a* represents a sheet-metal tube of oval cross-section and made of silver or other non-corrosive metal, which tube is bent so as to form an obtuse angle at its upper end. The tube *a* is made of somewhat larger length than the length of the

intubation-tube to be produced. The tube *a* is placed into a suitable mold, which corresponds to the exact size and shape of the intubation-tube to be produced. The head *b* and shank *d* of the intubation-tube are then cast around the interior tube or core *a*. The intubation-tube is then removed from the mold and the projecting ends of the interior tube or core *a* are cut off close to the head *b* and to the lower end of the shank *d*. The intubation-tube is then finished by removing the rough parts and by polishing and gilding the same as desired.

By the process described the intubation-tubes, which heretofore were made entirely by hand, requiring skilled workmen, can be manufactured at greatly reduced expense, so as to facilitate the more general adoption of the same by the medical profession, with the additional advantage that all the tubes made in a mold of a certain size are exactly alike in size and contour.

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

1. The process herein described of making intubation-tubes, which consists in placing a tube or core of sheet metal of greater length than the intubation-tube to be produced into a mold; secondly, casting the metal body of the intubation-tube around the interior tube or core; thirdly, cutting off the projecting ends of the tube or core, and, lastly, finishing the tube, substantially as set forth.

2. An intubation-tube for the larynx, consisting of an interior tube or core of sheet metal having an obtusely-bent upper end and an exterior body of cast metal around said core, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GEO. ERMOLD.

Witnesses:

PAUL GOEPEL,
A. M. BAKER.