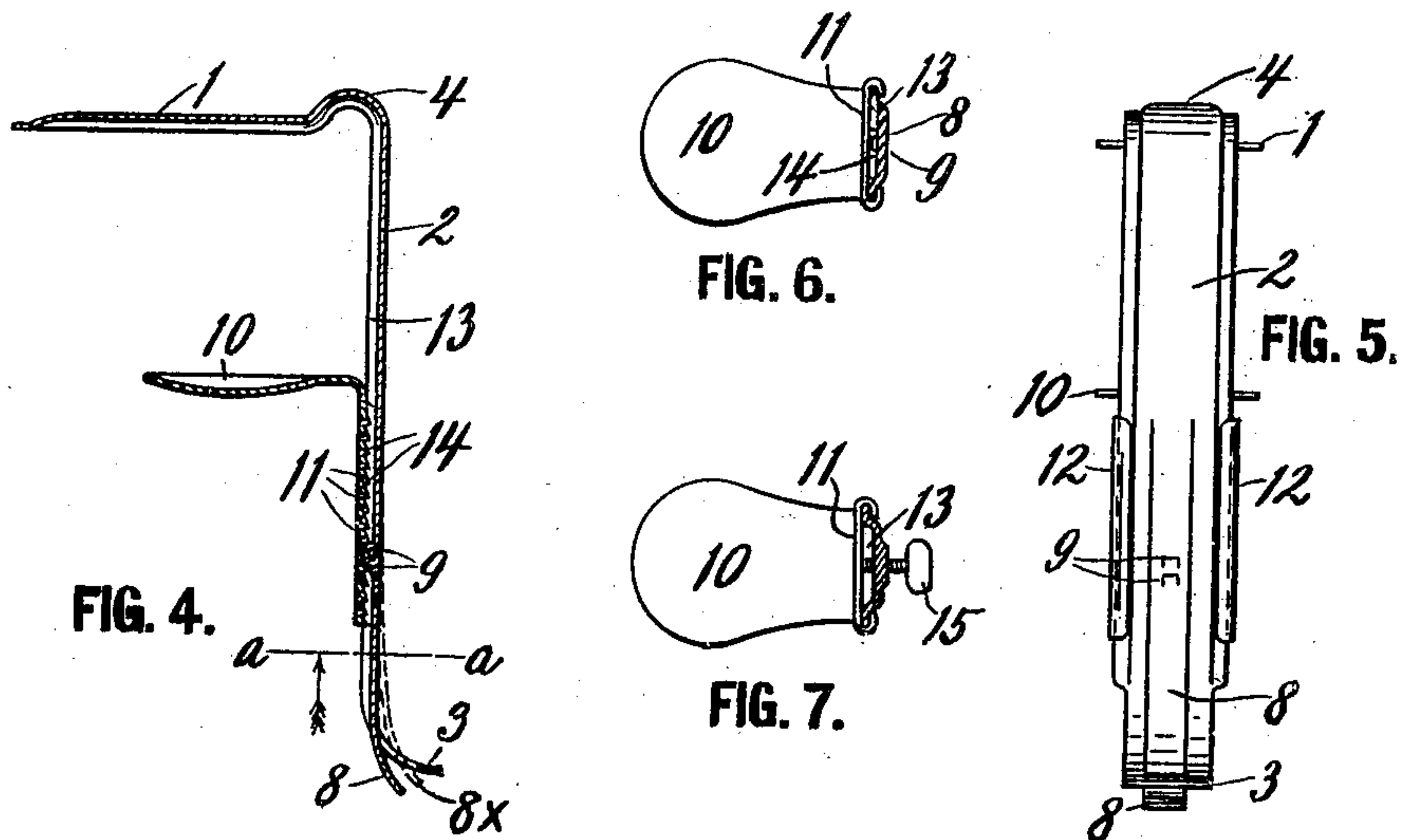
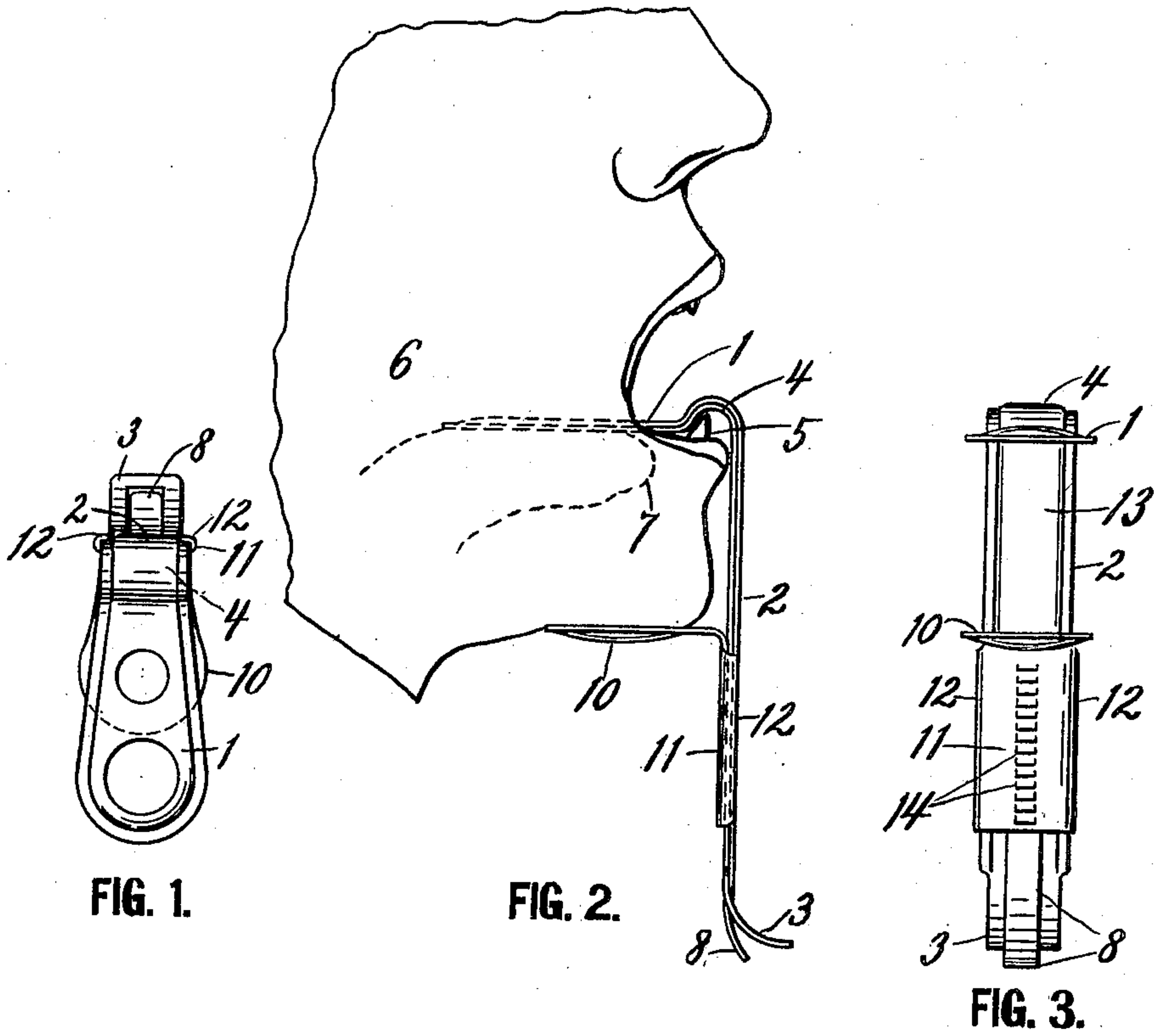


E. HUBBELL.
TONGUE DEPRESSOR.
APPLICATION FILED JUNE 10, 1908.

914,415.

Patented Mar. 9, 1909.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EUGENE HUBBELL, OF ST. PAUL, MINNESOTA.

TONGUE-DEPRESSOR.

No. 914,415.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed June 10, 1908. Serial No. 437,720.

To all whom it may concern:

Be it known that I, EUGENE HUBBELL, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented a new and useful Tongue-Depressor, of which the following is a specification.

This invention relates to the kind of surgical instruments known as tongue-depressors, and the object is to provide a self-retaining tongue-depressor, that is, one which will hold the tongue depressed as long as desired without the surgeon or physician having his hand on it. This object I attain by the novel construction and arrangement of parts illustrated in the accompanying drawing, in which—

Figure 1 is a top view of the instrument. Fig. 2 is a side elevation of the instrument shown as applied to the tongue and chin of a patient. Fig. 3 is a rear elevation of the instrument looking as from left to right in Fig. 1. Fig. 4 is a vertical central section through Fig. 3. Fig. 5 is a front elevation of the instrument. Fig. 6 is a cross section of the lower part of the instrument as on the line *a—a* in Fig. 4. Fig. 7 is a modification of Fig. 6.

Referring to the drawing by reference numerals, 1 designates the plate usually concaved and perforated, adapted to be placed upon the tongue of a patient when the tongue is to be depressed out of the way for looking into a patient's throat to examine the tonsils and other parts. This plate is provided at its outer end with a depending flat handle 2 having its lower end curved outward at 3. The junction of the plate and the handle is arched upward at 4 to clear the lower front teeth 5 of the patient 6 as can be clearly seen in Fig. 2 where the tongue 7 is held as shown in dotted line as depressed by the plate 1, the arch engaging the inner side of the teeth to prevent ejection of the plate and the handle 12 touches the lip of the patient to hold the depressor against inward movement on the tongue.

In the lower half of the handle 2 is struck up, or otherwise provided, a spring arm 8 having its lower end slightly curved outward and the rear side of its body provided with a few upwardly facing ratchet teeth 9 (see Fig. 4) and is normally disposed rearwardly of the handle.

10 is a slightly cup-shaped or concaved plate, smaller than the plate 1, and adapted to take hold under the chin of the patient. This chin-plate is formed with a downwardly extending slide 11 having its side edges 12 curved over the edges of the handle 2 so as to slide thereon, and said edges are offset toward the slide whereby the handle is stiffened and presents a groove 13 for the spring arm 8 and its ratchet teeth and also for a ratchet rack 14 provided along the middle of the slide 11 for the teeth 9 to engage. Said teeth 9 and 11 are preferably formed by stamping or embossing them upon the member holding them as can be seen by the marks 9 and 14 in Figs. 3 and 5 which are the impressions made by the punches in forming teeth upon the reverse sides of the metal. The grooved form of the handle extends also over the arch 4 and along the plate 1, to stiffen them.

In the use of the device the plate 1 is placed upon the tongue, pressed downward by means of the handle 2 whereupon the chin plate 10 is pushed upward into contact with the chin, where the teeth of the rack 14 and the teeth 9 of the spring arm 8 hold it firmly until the tongue depressor is to be removed, when the spring arm is sprung to the position 8^x in Fig. 4, which disengages its teeth from the rack and lets the chin plate drop with its slide 11 down to the hook 3 or as far as necessary to fully release the chin and thereby the entire device.

In the modification Fig. 7 is shown how a thumb-screw 15 may be threaded through the handle and by pressure of its end upon the slide 11 will hold it at any desired elevation. When such screw is employed the handle is solid as the spring arm is dispensed with.

Having thus described my invention, what I claim is:

1. A tongue depressor comprising a tongue-depressing plate and a handle extending at an angle from one end thereof, a slide on the handle, a chin plate carried by the slide and adapted to take hold under the chin of the patient, and means for holding said slide secured at different places on the handle, said means consisting of a ratchet rack on the slide and a spring-arm on the handle and provided with teeth for engaging the rack.

2. As an improved article of manufacture a tongue depressor comprising a tongue-de-

pressing plate and a handle extending from one end thereof, a slide on the handle, a chin plate carried by the slide and adapted to take hold under the chin of the patient, and means for holding said slide secured at different places on the handles, said means consisting of a ratchet rack on the slide and a spring-arm on the handle and provided with teeth for engaging the rack, said spring-arm

being made integral with the handle by 10 punching a tongue in the latter.

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

EUGENE HUBBELL.

Witnesses:

A. M. CARLSEN,
P. F. BERGMAN.