

Jan. 4, 1927.

1,613,373

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COMBINED SUCTION TUBE AND TONGUE DEPRESSOR

Filed July 1, 1924

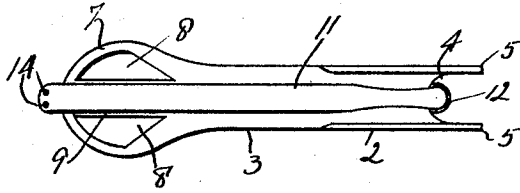


Fig. 1

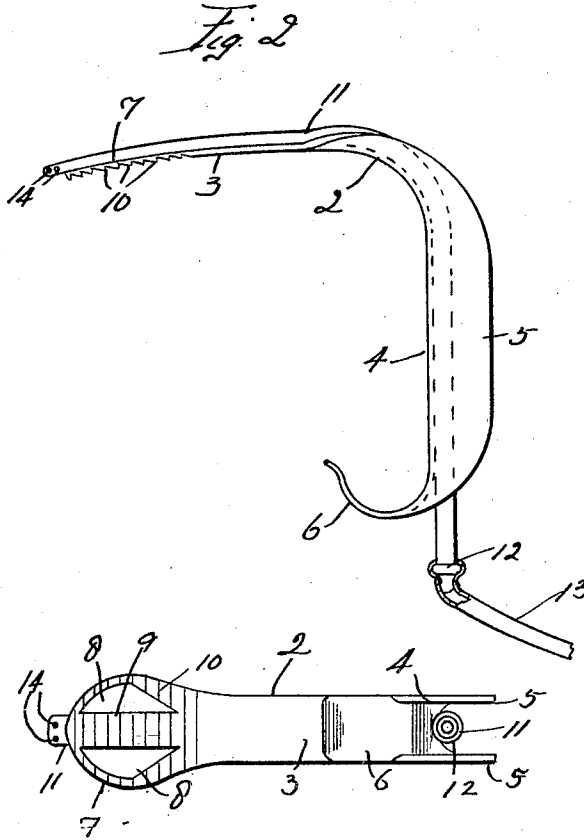


Fig. 2

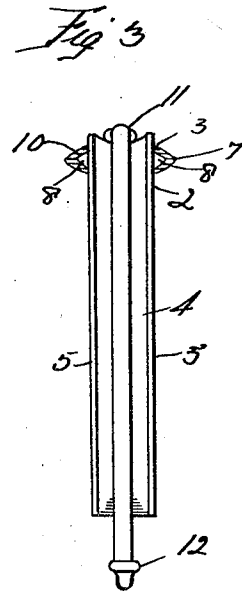


Fig. 3

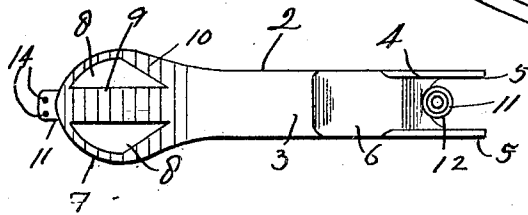


Fig. 4

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Patented Jan. 4, 1927.

1,613,373

UNITED STATES PATENT OFFICE.

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COMBINED SUCTION TUBE AND TONGUE DEPRESSOR.

Application filed July 1, 1924. Serial No. 723,432.

My invention relates to new and useful improvements in a combined suction tube and tongue depressor, which is particularly adapted for use by physicians or surgeons when inspecting or operating upon the throat of a patient and has for its primary object to provide an exceedingly simple and effective device of this character which when in use will make visible the greatest amount of space possible for the removal of tonsils or the carrying out of other operations in the throat and at the same time will extract saliva, mucus or blood that may accumulate so as to keep the field of operation clear and prevent the patient from swallowing the secretion or drawing the same into the lungs.

Another object of the invention is to provide a tongue depressor of unique construction which will include means to prevent the tongue from being drawn away from the blade of the device and means for partially housing the suction tube.

A further object of the invention is to provide the handle portion of the depressor with a hook like stop to prevent the depressor from accidentally slipping from the operator's hand.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains, may understand how to make and use the same, I will describe its construction in detail, referring by numerals to the accompanying drawing forming a part of this application, in which:—

Fig. 1 is a plan view of the combined suction and tongue depressor embodying my invention.

Fig. 2 is a side elevation thereof showing a piece of hose, partly in section, attached to the suction tube.

Fig. 3 is an end view of Fig. 2 with the hose removed.

Fig. 4 is a bottom plan view of the device.

In carrying out my invention as here embodied, 2 represents the tongue depressor preferably made of sheet metal and which includes a blade 3 and handle 4 the latter lying substantially at right angles to the former. The handle portion is provided with flanges 5 on the sides, thus providing a grip-

ping portion of substantially concavo-convex formation in cross section so as to conveniently fit the hand of an operator. These flanges are bent up from the metal of the depressor as will be obvious from Figs. 1 and 2 and the space between the flanges provides a housing for a portion of the suction tube as will be hereinafter more fully explained. The lower extremity of the handle 4 is turned back to provide the hook like stop 6 to prevent accidental withdrawal of the device from the operator's hand.

The blade 3 is substantially flat and has an enlargement 7 at or adjacent its outer extremity and in this enlargement are formed the spaced apertures 8 of substantially triangular shape so that when the depressor is forced down upon the patient's tongue fleshy portions of the tongue will enter the apertures and prevent the blade from slipping. The apertures 8 being spaced apart will form a rib 9 and the underside of this rib as well as adjacent portions of the blade proper are serrated as at 10, said serrations resembling saw teeth and these serrations will assist in holding the tongue steady and prevent it from being withdrawn from the blade of the depressor or said blade slipping about over the tongue.

A suction tube 11 is fixed to the blade and handle along their center lines with one end protruding beyond the outer extremity of the blade and the other end extending below the lower extremity of the handle and that end which projects below the handle is provided with an enlargement or boss 12 whereby a rubber tube 13, or its equivalent may be readily connected with the suction tube, said rubber tube or hose 13 being connected with a suitable pneumatic suction apparatus when the device is in use. The major portion of the suction tube 11 overlying the blade 3 is flattened so as to be substantially oval shape in cross section thereby reducing the front or vertical space occupied by this part of the suction tube. The end of this suction tube that protrudes beyond the outer end of the blade is closed except for a plurality of perforations 14 through which the saliva, mucus and blood is drawn into the suction tube.

From the foregoing description it will be seen that by inserting the blade 3 of the instrument into the opened mouth of a patient the tongue may be depressed and held in a steady position out of the way of the oper-

ator and the instrument itself may be firmly held in the desired position because of the relation of the handle to the blade and the hook like stop 6.

5 The rubber tube or hose 13 being connected with a suitable pneumatic or suction device such as a suction bulb or pump, the saliva, mucus, and blood arising in the throat and mouth will be drawn into the
10 suction tube 11 through the openings or perforations 14, thus keeping the throat and mouth free of the interfering matters so that the physician or surgeon may operate
15 greatly relieving the suffering of the patient.

Of course I do not wish to be limited to

the exact details of construction as herein shown as these may be varied within the limits of the appended claim without departing from the spirit of my invention. 20

Having thus fully described my invention, what I claim as new and useful is:—

A surgical instrument for use in throat operations and adapted to be held in the
25 hand of the operator, including a flat blade, a handle thereon, and a suction tube permanently fixed to said blade and handle with its apertured extremity projecting beyond
30 the distal end of the blade.

In testimony whereof, I have hereunto affixed my signature.

FOSTER A. BECK, M. D.