O. M. GLENN.

SURGICAL INSTRUMENT.

APPLICATION FILED FEB. 21, 1917.

1,286,287. Patented Dec. 3, 1918.

FIG. 1.

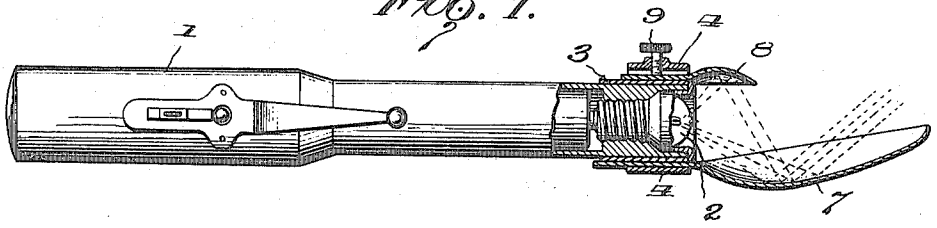


FIG. 4.

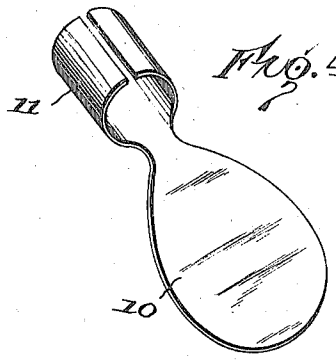


FIG. 2.

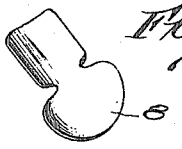


FIG. 3.



FIG. 5.

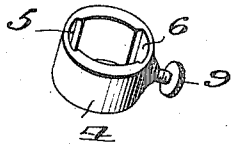


FIG. 8.

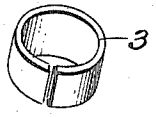
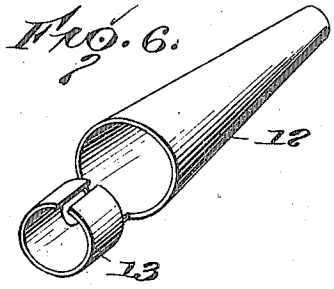


FIG. 6.



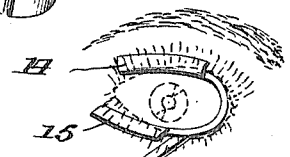
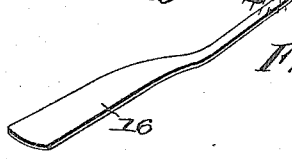


FIG. 7.



Inventor

Olive M. Glenn

By Edward E. Clement

Attorney

UNITED STATES PATENT OFFICE.

OLIVE MESSICK GLENN, OF WASHINGTON, DISTRICT OF COLUMBIA.

SURGICAL INSTRUMENT.

1,286,287. Specification of Letters Patent. Patented Dec. 3, 1918.

Application filed February 21, 1917. Serial No. 150,153.

To all whom it may concern:

Be it known that I, OLIVE MESSICK GLENN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Surgical Instruments, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to surgical instruments and has for its object the provision of means for readily attaching and detaching a speculum to a pocket flashlight, to enable an examination to be made of the throat, ear, nose or eye.

Another object is to provide a combined tongue depressor and light reflector that can be readily attached to and detached from a pocket flashlight which a surgeon may use not only to depress a patient's tongue, but to illuminate the throat for inspection.

With these objects in view, the invention consists in the construction, arrangement and combination of parts hereinafter described and particularly pointed out in the claims, it being understood that I do not intend to limit myself to the details of construction.

The invention is illustrated in the accompanying drawings in which—

Figure 1 is a side view, partly in section, of a speculum attached for an examination of the mouth and throat.

Figs. 2 and 3 are perspective views of the reflectors of Fig. 1.

Fig. 4 is a similar view of a modification which may be used in connection with the battery casing of Fig. 1.

Fig. 5 is a perspective view of a collar for attaching the reflectors of Fig. 1.

Fig. 6 is a perspective view of an ear and nose speculum.

Fig. 7 is a similar view of an eye speculum.

Fig. 8 is a perspective view similar to Fig. 5 showing a form of split ring which may be employed with the collar.

Referring to the drawings, 1 designates the casing of a pocket battery. Seated in one end of said casing is a light bulb 2, and surrounding the end of the casing is a split ring 3 to provide a surface flush with the flange or beading of the light bulb, which rests against the end of the casing, as shown in Fig. 1. Surrounding the ring 3 is a collar 4 having on its inner surface two diagonally opposite longitudinal grooves 5 and 6 to receive the tongues of the reflectors 7 and 8 respectively. The collar 4 and the reflectors 7 and 8 may be securely clamped in position by a set screw 9.

The reflectors 7 and 8 are preferably concaved, and have polished inner surfaces so that some of the rays of light will be reflected, as indicated in Fig. 1, thus insuring ample illumination of the roof of the mouth and of the throat when the device is used for an examination of the throat. When used for such purpose, the larger reflector 7 serves to depress the tongue so that the operator may have an unobstructed view of the throat. The smaller reflector 8 serves to reflect the rays of light which strike it downwardly upon the larger reflector 7, these rays being in turn reflected by the latter upon the roof of the mouth.

In Fig. 4 I have shown a modification in which the tongue depressor and reflector 10 is made flat, and with an integral split ring 11 adapted to be slipped over the ring 3, and to be frictionally held thereon against turning.

Fig. 6 shows an ear and nose speculum 12, having an integral split ring 13 adapted to be slipped over the ring 3. The body of the speculum is preferably conical with the base, or larger opening at the end at which it is attached to the casing 1. The rays of light from the bulb 2 will be concentrated by the speculum and directed into the nose or ear, the operator having an unobstructed view through the speculum.

In Fig. 7 the light reflecting surfaces 14 and 15 are secured together and so formed as to adapt the speculum to an examination of the eye. To the frame is attached a tongue 16 by which the speculum may be clamped to the casing 1, by means of the collar 4.

The several devices above described provide a ready and simple means for attaching and detaching the desired form of speculum to the battery casing. The latter is of such form as to be carried in the pocket, the speculum being detached if desired.

What I claim and desire to secure by Letters Patent of the United States is—

1. The combination with a self-contained pocket electric lamp of a tubular form having a detachable lamp-socket adapted to be inserted into one end of the tube form by

means of a finger hold in the form of a bead or flange of greater diameter than the bulb end of said tube form, of a spring collar surrounding the bulb end of said tube form and having an outside diameter not less than that of said flange, a clamping collar arranged to be slid over said flange onto said spring collar and having diametrically opposite recesses in its inner face, a reflecting tongue depressor and a reflector having holding tongues or shanks arranged to be inserted into said recesses between the said collars, and a set screw carried by said clamping collar.

2. In a device of the class described, the combination of a source of light, a tongue depressor having a reflecting surface, and a light screen having a reflecting surface, said tongue depressor and screen being arranged on opposite sides of said source of light with their reflecting surfaces toward each other, substantially the entire reflecting surface of said tongue depressor being exposed to the light radiating from said source, and said reflecting screen being so arranged in relation to the source of light and the tongue depressor as to cause the upwardly directed light rays from the source to be reflected downwardly to the middle portion of the tongue depressor.

In testimony whereof I affix my signature.

OLIVE MESSICK GLENN.