

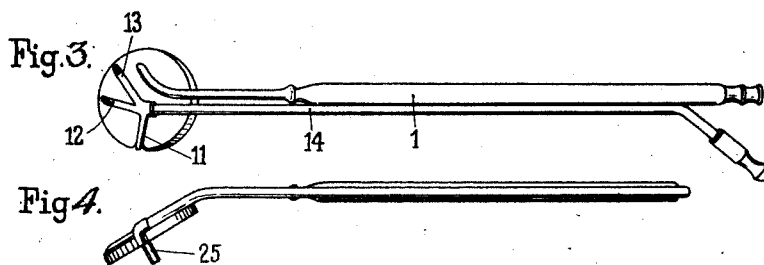
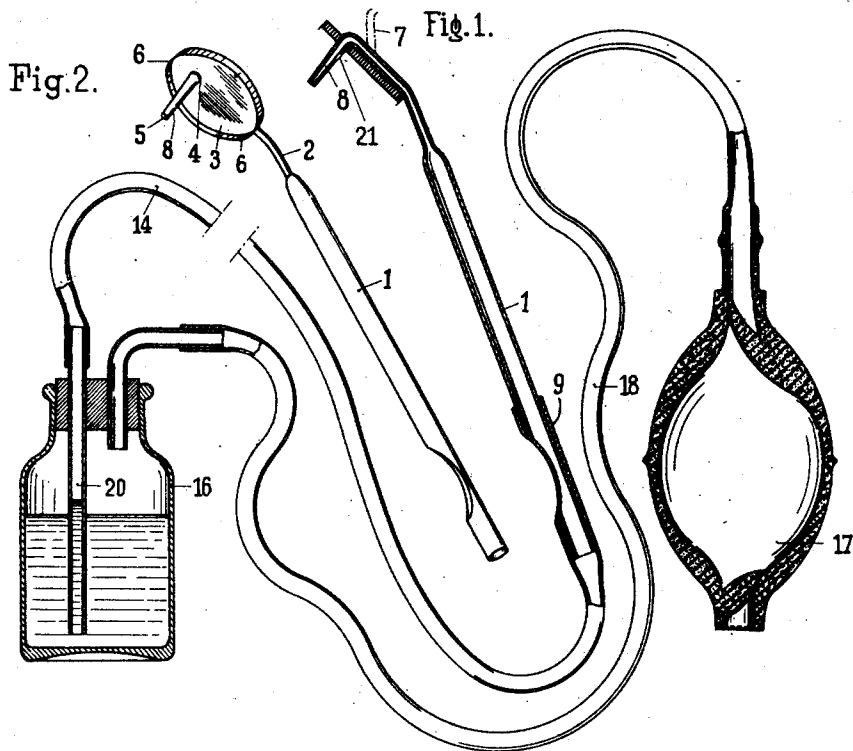
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MOUTH MIRROR

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By R. B. Singer, Atty.

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MOUTH MIRROR.

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My invention relates to improvements in mouth mirrors, and one of the objects of the improvements is to provide a mirror which is equipped with a nozzle for ejecting a suitable fluid containing medical substances while boring the tooth, the said mirror being held within the mouth of the patient for observing the work of the dentist and throwing the said fluid into the cavity of the tooth. I have found that thereby the pain caused when boring the tooth by the rotation of the drill and the heat thereof is relieved, the cool air or liquid containing an anodyne preparation relieving the pain by cooling the drill and by rendering the tooth insensible.

Another object of the improvements is to provide the mirror with passages for ejecting the saliva, which passages open either at the rear face or at the margin of the mirror. Finally, an object of the improvements is to provide a mirror in which means are provided for flushing and cleaning the surface of the mirror in the course of the use thereof, and with this object in view my invention consists in providing the said nozzle for injecting a fluid into the cavity with lateral bores adapted to direct a part of the said fluid over the surface of the mirror.

For the purpose of explaining the invention several examples embodying the same have been shown in the accompanying drawing, in which the same reference characters have been used in all the views to indicate corresponding parts. In said drawing,

Fig. 1 is an elevation partly in section showing my improved mirror and means for injecting a fluid,

Fig. 2 is a detail perspective view showing the mirror and its handle separate from the fluid ejecting means,

Fig. 3 is an elevation looking from the rear of the mirror and showing another modification, and

Fig. 4 is a top-plan view of Fig. 3.

In the example shown in Figs. 1 and 2 the mouth mirror 3 is mounted on a tubular stem 2 and handle 1, and it is provided with a hole 4 for the passage of an ejecting nozzle 8 therethrough. As shown in Fig. 2, the said nozzle is made integral with the tubular stem 2. But I wish it to be understood that I do not limit myself to this feature and that in some cases the nozzle is removably secured to the tubular stem. The fitting of the mirror has been indicated by the numeral 6. For supplying medical preparations or liq-

uids to the nozzle 8 a flask 16 and a rubber ball 17 are provided, the said rubber ball being connected with the top part of the flask 16 by a flexible tube 18, and the tubular handle 1 being connected with the bottom part of the flask by a flexible tube 9 and a pipe 20. Therefore, when operating the ball 17, the liquid contained within the flask 16 is supplied through the tubular handle 1 and stem 2 and ejected through the mouth 5 of the nozzle 8, the mirror being held within the mouth so that the liquid is thrown into the cavity of the tooth.

In some cases I provide one or more lateral holes 21 in the nozzle 8 in position for ejecting a part of the fluid across the mirror, the said liquid or gaseous fluid expanding on the surface of the mirror and cleaning the same.

In the modification shown in Figs. 3 and 4 the construction of the nozzle 25 is similar to the construction shown in Figs. 1 and 2, the said nozzle being passed through a hole made in the mirror. In addition nozzles 11, 12 and 13 are provided at the rear face and the margin of the mirror, the said nozzles being adapted to draw the saliva through a pipe 14 fixed to the handle 1. In some cases the pipe 14 is formed in the handle 1.

While in describing the invention reference has been made to particular examples embodying the same I wish it to be understood that my invention is not limited to the constructions shown in the drawing, and that various changes may be made in the general arrangement of the apparatus and the construction of its parts without departing from the invention.

I claim:

1. An apparatus of the class described, comprising a mirror, a tubular handle fixed to the rear side of said mirror, a nozzle connected with said handle and passed through a hole made in said mirror and located in position for injecting a fluid into the cavity of the tooth being bored.

2. An apparatus of the class described, comprising a mirror, a handle on which said mirror is mounted, a nozzle for injecting a suitable fluid at a part adjacent the mirror, and means connected with the mirror for ejecting saliva.

In testimony whereof I hereunto affix my signature.

ROBERT FUST.