

(No Model.)

W. M. SHARP.
DENTAL MOUTH GLASS.

No. 546,195.

Patented Sept. 10, 1895.

Fig. 1.

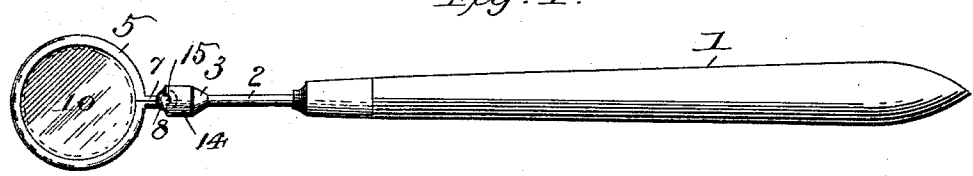


Fig. 2.

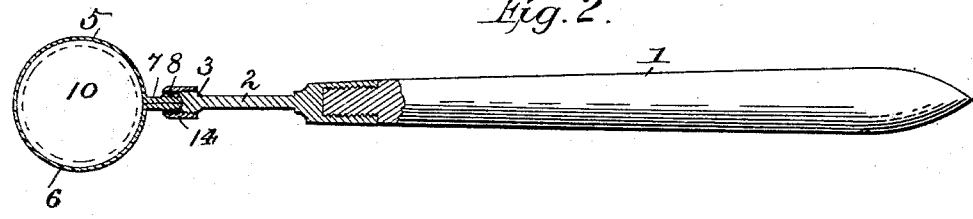


Fig. 3.

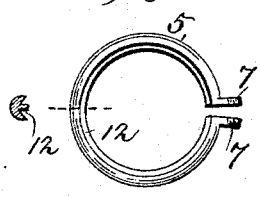
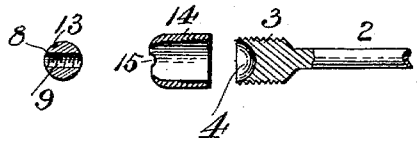


Fig. 4. Fig. 5. Fig. 6.



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UNITED STATES PATENT OFFICE.

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DENTAL MOUTH-GLASS.

SPECIFICATION forming part of Letters Patent No. 546,195, dated September 10, 1895.

Application filed June 11, 1895. Serial No. 552,398. (No model.)

To all whom it may concern:

Be it known that I, WARREN M. SHARP, a subject of the Queen of Great Britain, and a resident of Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Dental Mouth-Glasses; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in dentists' mouth glasses or mirrors for inspecting the teeth and gums and aiding in the operation of filling the teeth.

In such instruments as ordinarily constructed the mirror is set in a metal bezel and the margin or edges of the same tightly burnished on the glass. The shank of the handle is rigidly fixed to the handle, so that to change the angle of the glass the shank has to be bent to the proper inclination, which is very difficult to accomplish without defacing the bezel and otherwise injuring the device.

The object of my invention is to provide an improved construction of such instruments, whereby the glass or mirror may be readily removed and replaced by another when desired without requiring the aid of a skilled mechanic.

It is also an object to provide a base and socket connection for the handle-shank and bezel, so that the mirror may have a universal movement, enabling it to be adjusted at any angle desired, means being provided for holding it securely in its adjusted position.

The invention consists in the novel construction and combination of parts, hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a dental mouth glass or mirror constructed in accordance with my invention. Fig. 2 is a horizontal section of the same. Fig. 3 is a view of the bezel, detached, and the mirror removed. Fig. 4 is a longitudinal sectional view of the ball-bearing. Fig. 5 is a longitudinal sectional view of the follower. Fig. 6 is a similar view of the shank.

All of the above views are exaggerated or enlarged beyond the usual size, so as to more clearly illustrate the construction.

In the said drawings, the reference-numeral 1 designates the handle, and 2 the shank secured thereto, formed at its inner end with an enlarged screw-threaded head 3, having a socket 4 formed in the end to receive the ball-bearing hereinafter described.

The numeral 5 designates the bezel, consisting of a semicylindrical split ring having an interior annular groove 6. The ends of this ring are bent outward at an angle, forming two tapering lugs 7, which are screw-threaded exteriorly.

The numeral 8 designates a ball having a central screw-threaded aperture 9 corresponding with the said lugs, and is adapted to engage with said lugs to draw them together, whereby the mirror 10 may be tightly clamped by the bezel and retained in place therein. This mirror may consist of a single silvered glass disk, or two may be used, placed back to back in the bezel, and one of which may be a plain mirror and the other a magnifying-mirror, or a single mirror may be employed in connection with a metallic disk. When two mirrors, or a mirror and a metal disk are used the bezel is formed with a septum 12 for preventing contact of the same, thus obviating any liability of the silvering being injured. The outer end of the ball is formed with a nick 13, for the reception of a screw-driver, by which the ball may be screwed upon the lugs.

The numeral 14 designates a sleeve, screw-threaded interiorly, to engage with the correspondingly-formed head of the shank 2, and the outer end is upset, forming an annular flange, which engages with the ball and holds it therein. The said outer end of the follower is also formed with two or more notches 15, with which the lugs 7 are adapted to engage, thus preventing the same from rotating, whereby the head 3 may be screwed into the sleeve to engage with the ball by turning the handle 1.

In using the device the proper glass is inserted in the bezel and clamped therein by screwing the ball upon the lugs, which draws them together or toward each other, the said ball having first been inserted in the sleeve.

The head 3 is now inserted in the inner end of the sleeve and screwed therein by turning the handle 1, the lugs 7 engaging with the notches in the sleeve and preventing it from rotating.

An instrument constructed as above will be found very efficient in use, as the mirror may be readily removed and replaced by others when desired, and by simply loosening the sleeve the mirror may be adjusted at any angle desired and then held in such adjusted position by again tightening the sleeve.

While I have described my invention as being a mouth-glass for dental purposes, still I do not wish to be confined to such use, as it may be employed to advantage with various descriptions of instruments used by physicians, surgeons, and others which are provided with reflectors or mirrors.

Having thus fully described my invention, what I claim is—

1. The combination with the bezel consisting of the grooved semi-cylindrical split ring formed with screw-threaded lugs, of the ball bearing having a central screw-threaded aperture engaging therewith, the screw-threaded sleeve and the shank formed with a screw-

threaded head engaging therewith; substantially as described.

2. The combination with the bezel consisting of a grooved semi-cylindrical split ring formed with screw-threaded lugs, and the ball bearing formed with a screw-threaded aperture engaging therewith, of the screw-threaded sleeve having a flange at the outer end and formed with notches, and the shank having a screw-threaded head formed with a socket with which the ball engages; substantially as described.

3. The combination with the bezel consisting of the grooved semi-circular ring formed with an annular central septum, and with screw-threaded lugs, and the mirror, of the sleeve engaging with said lugs and the handle connected therewith; substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WARREN M. SHARP.

Witnesses:

R. W. MEEKER,
J. P. ROSS.