

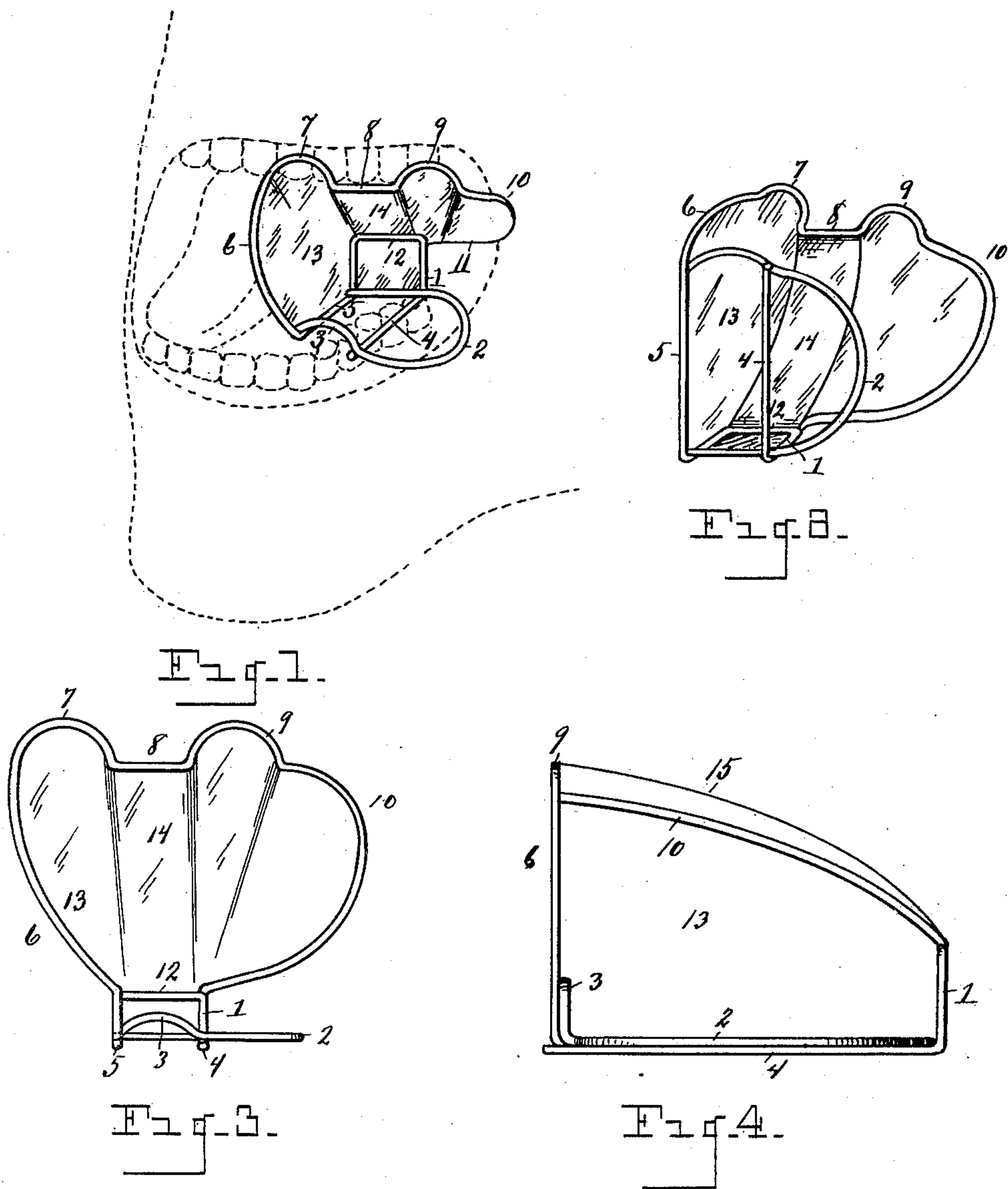
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Patented Feb. 4, 1902.

W. HARE.
DENTAL MOUTH PROP AND MIRROR.

(Application filed June 20, 1901.)

(No Model.)



WITNESSES.
C. E. Goslin
W. G. Bradford.

INVENTOR.
William Hare
By R. B. Whelan & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM HARE, OF AUGUSTA, ILLINOIS.

DENTAL MOUTH PROP AND MIRROR.

SPECIFICATION forming part of Letters Patent No. 692,281, dated February 4, 1902.

Application filed June 29, 1901. Serial No. 66,604. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HARE, a citizen of the United States, residing at Augusta, in the county of Hancock, State of Illinois, have invented certain new and useful Improvements in Mouth Props and Mirrors for Dental Use; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

15 This invention relates to a mouth prop and mirror for dental use, and the construction herein shown is an improvement upon the device covered by Letters Patent No. 667,441, issued to me on the 5th day of February, 1901.

20 The invention consists in the association and combination of parts hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a simple and efficient device of the character described in which the arrangement is such as to enable the apparatus to be securely held in the mouth by the teeth of the person being operated upon and reflect a strong light into the cavity of the tooth being filled.

30 The above object is attained by the association of parts illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing my improved device in the mouth of a patient, the mouth and teeth being indicated by dotted lines. Fig. 2 is a perspective view looking through the bottom toward the top of the device. Fig. 3 is a front elevation. Fig. 4 is a side elevation.

40 Referring to the characters of reference, 1 designates the frame of the device, which may be made of any suitable material, but is preferably formed of some non-corrosive metal strand adapted to be bent into the shape required. Formed in said frame is a laterally-extending bracket or cheek-retractor 2, which describes the arc of a circle and at the front is curved upwardly, as at 3. The arms 4 and 5 stand parallel a suitable distance apart and form the bottom of the frame. The arm 5 at

its point of junction with the curved portion 3 at the front of the frame extends upwardly, as at 6. The upwardly-extending portion 6 curves outwardly and at its upper end, as at 7, which curve extends laterally and downwardly to form a depression 8, thence the frame curves upwardly at 9, and thence downwardly and laterally to form the upper cheek-retractor 10, which projects nearly in alignment with the lower retractor 2. The frame then curves inwardly, as at 11, and joins the upwardly-turned end of the arm 4, which is connected with the upwardly-turned end of the bar 5 by the cross-bar 12, forming the rear end of the frame. The top and side of the frame, as well as the rear end, are covered with a suitable material, which carries upon its inner face a mirror or is provided with a reflecting-surface, so as to produce a side mirror or reflector 13 and a top mirror or reflector 14. The covering 15 in the top is depressed to conform to the depression 8 in the frame, so that a channel is made in the top of the frame to receive the upper teeth of the patient. This upper channel in the frame is in vertical alinement with the curved or arched portion 3 at the bottom of the frame, which forms a channel for engagement by the lower teeth, whereby the device may be securely retained in the mouth of the patient by closing the teeth thereon.

The form of the inner side of the frame is such that the mirror or reflector 13 is concaved, whereby it is calculated to concentrate the reflected light more strongly upon the teeth being operated upon. The under surface of the top reflecting portion is calculated to throw the light downwardly onto the teeth, so that sufficient light is afforded when the device is placed in the mouth of a patient to enable the operator to perfectly execute the work.

It will be seen that because of the shape and construction of the device when it is placed in the mouth the cheek is held away from the teeth by the projecting brackets or retractors 2 and 10, while the tongue is held from contact with the teeth by the outer side of the mirror 13 and the frame, while the teeth are exposed through the opening between the parallel arms 4 and 5. It will also be observed

that the shape of the device is such that when placed in the mouth it serves as a prop to hold the mouth open. The construction is such that the frame is open at the front and outer
5 side, so that easy access to the teeth is afforded.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

- 10 1. In a device for the purpose set forth, the combination of a mouth-prop comprising a wedge-shaped frame open on its outer side and provided on its inner side with a concaved reflector, the top of the device also hav-
15 ing a reflecting under surface and being provided in its upper face with a channel for the reception of the teeth, the bottom portion of the frame having an arch for the reception of the lower teeth and the frame having two

projecting brackets for holding the cheek 20 from the teeth.

2. In a device for the purpose set forth, the combination of a tapering or wedge-shaped frame, having a concaved reflector on its inner side and being open at its outer side, the top 25 of said frame having a channel formed therein for the upper teeth, the lower part of the frame having a curved portion for the reception of the lower teeth, the under side of the top having a reflecting-surface and the later- 30 ally-projecting cheek-retractors at the top and bottom.

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIAM HARE.

Witnesses:

CLARK REAUGH,
W. H. MEAD.