

No. 667,441.

Patented Feb. 5, 1901.

W. HARE.
DENTAL MOUTH PROP AND MIRROR.

(Application filed July 16, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

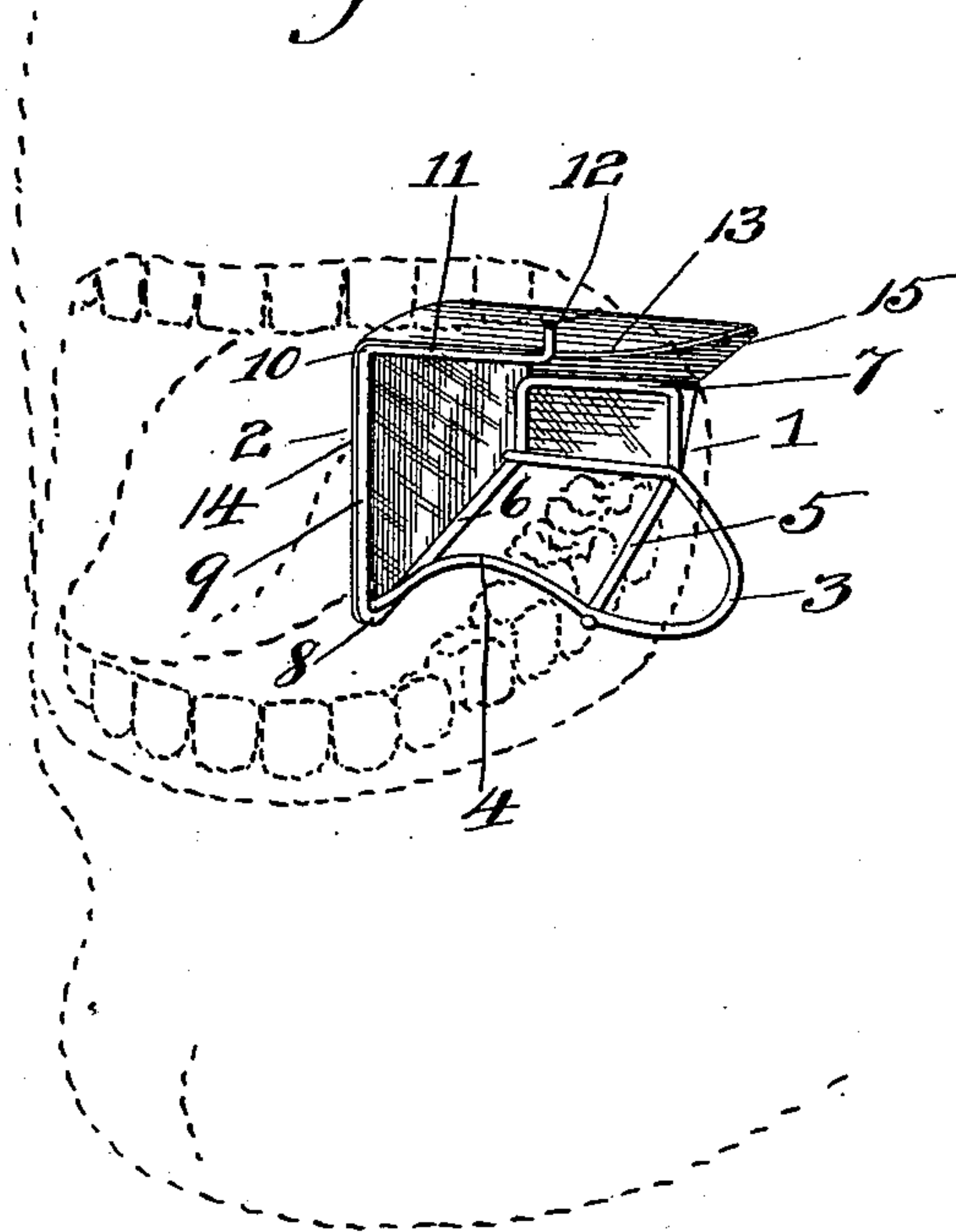
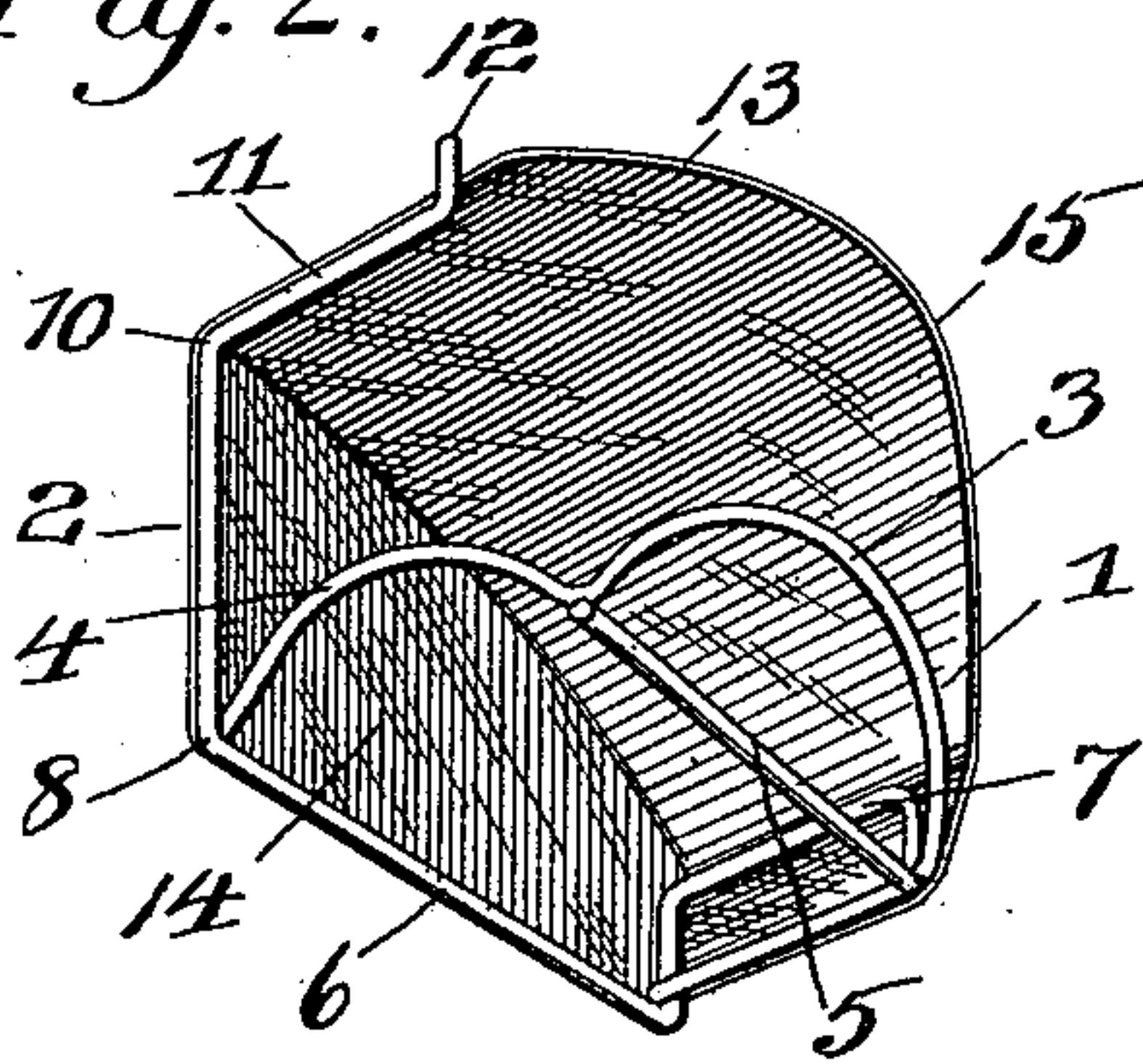


Fig. 2.



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2 Sheets—Sheet 2.

Fig. 3.

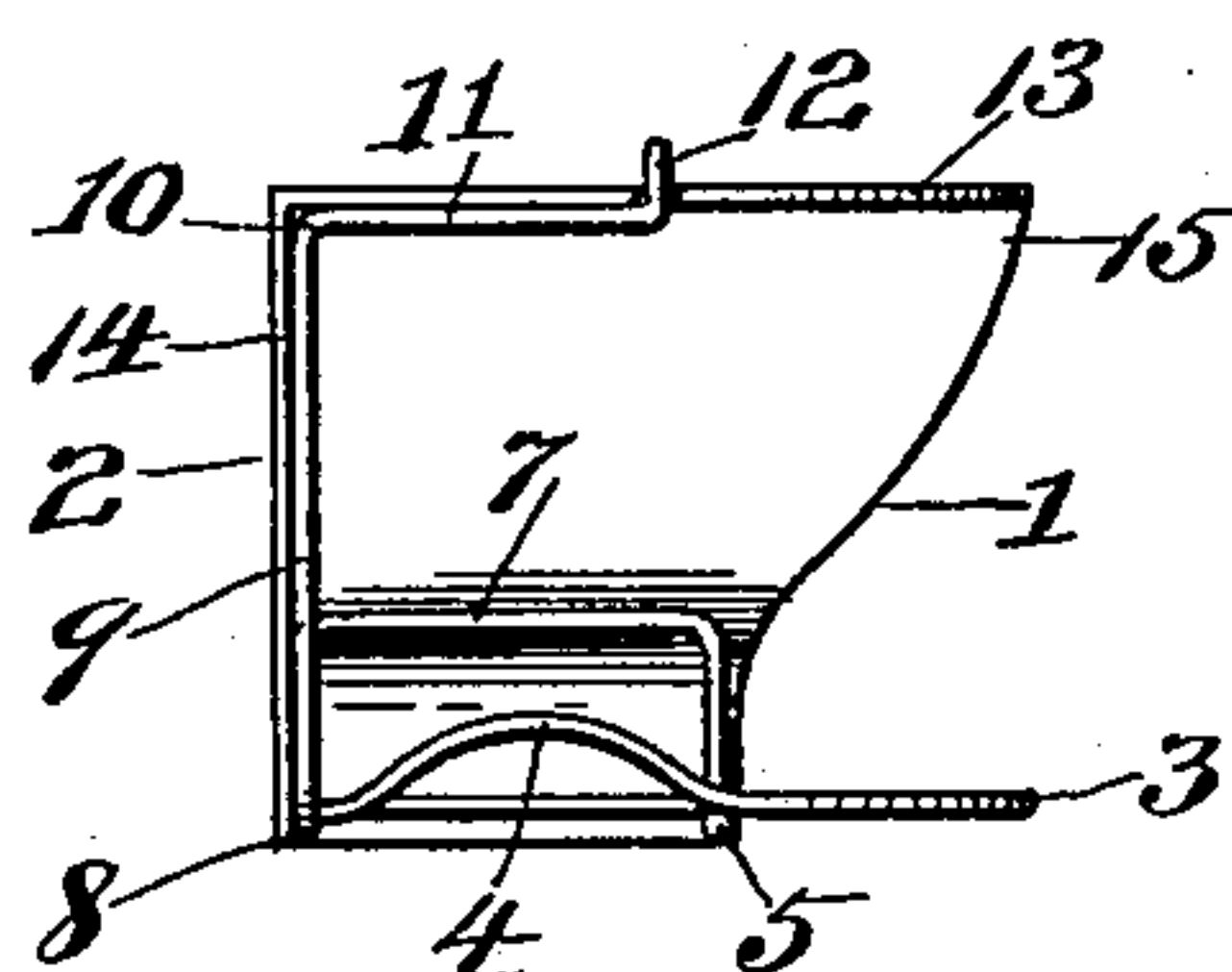


Fig. 4.

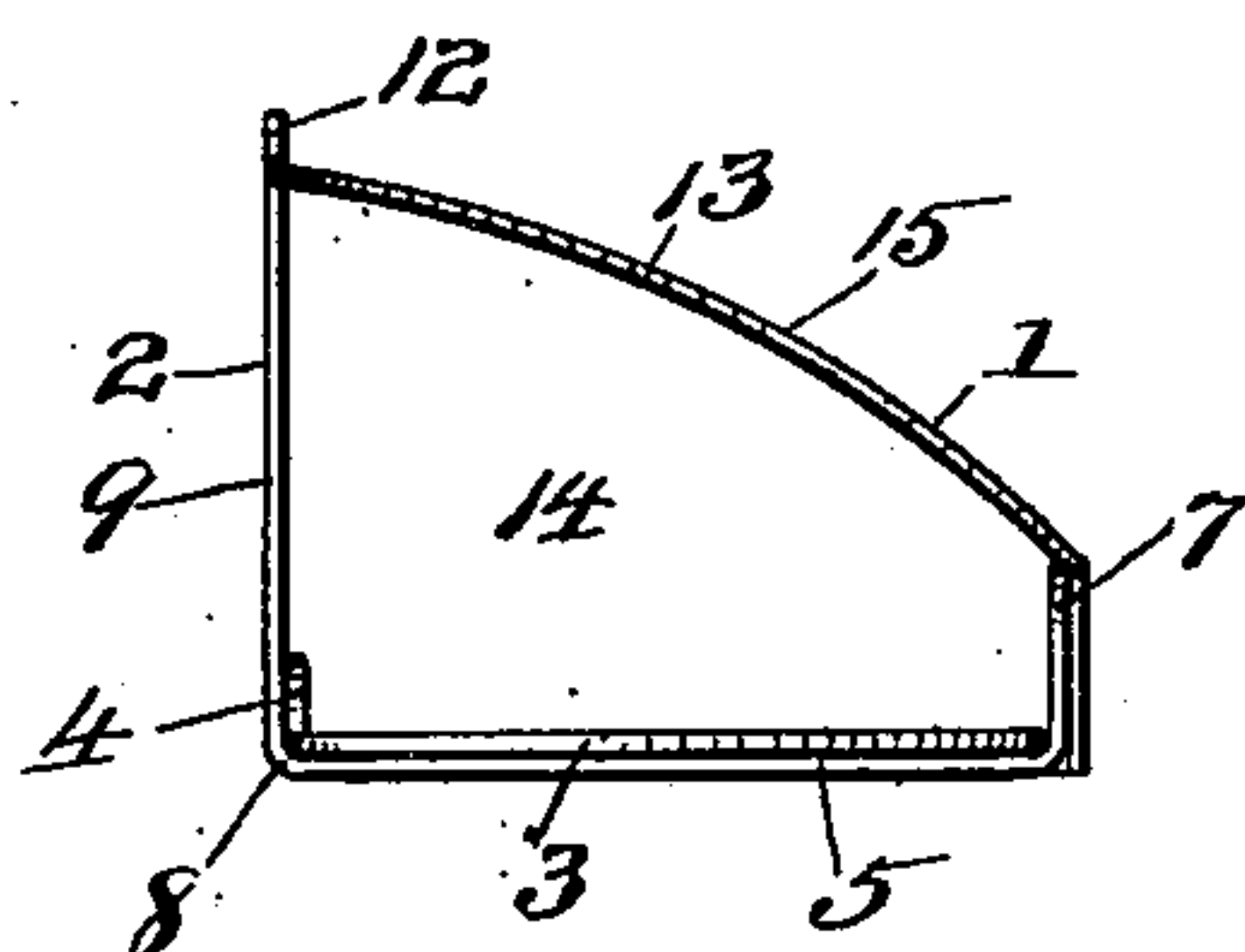


Fig. 5.

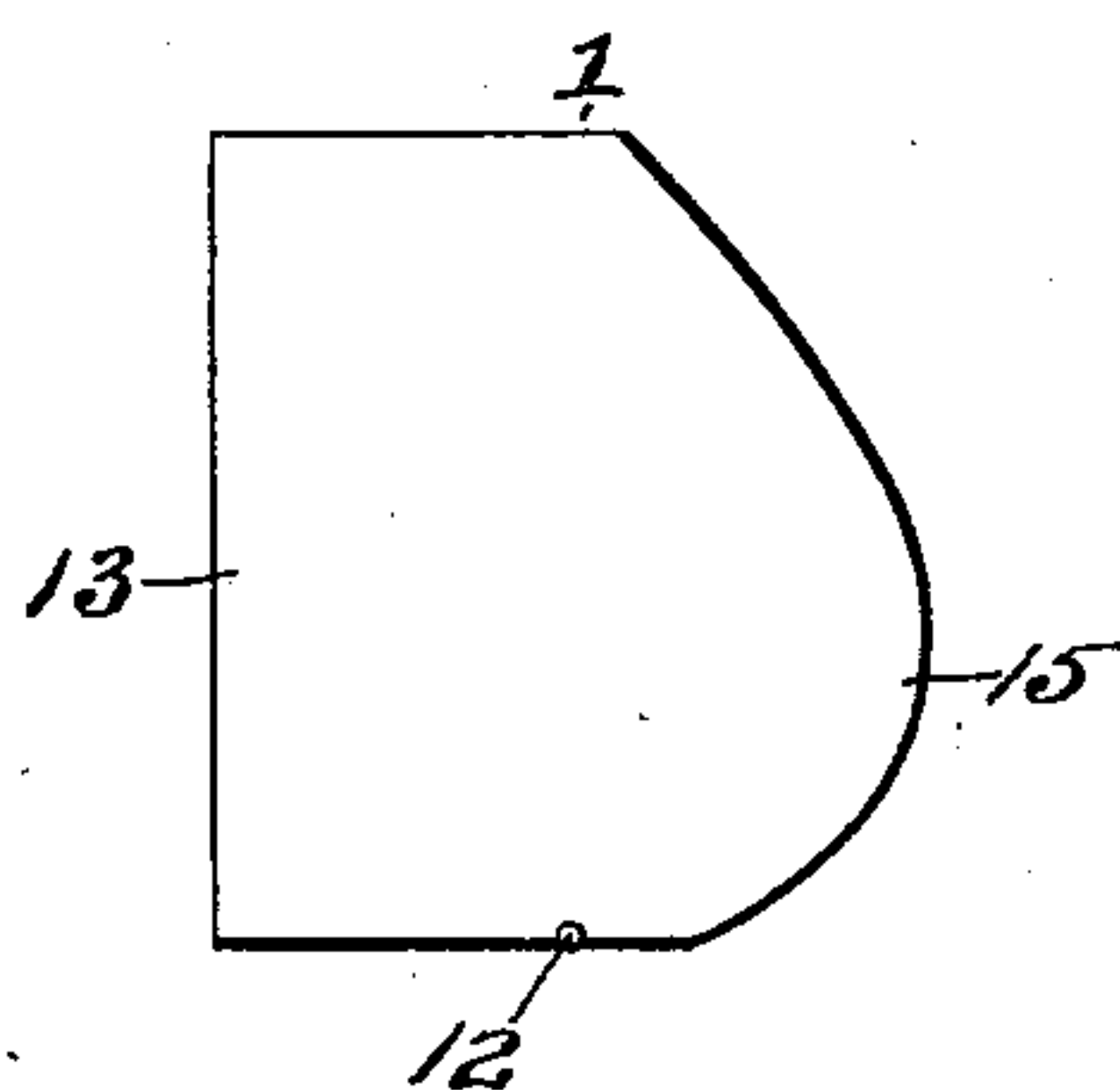
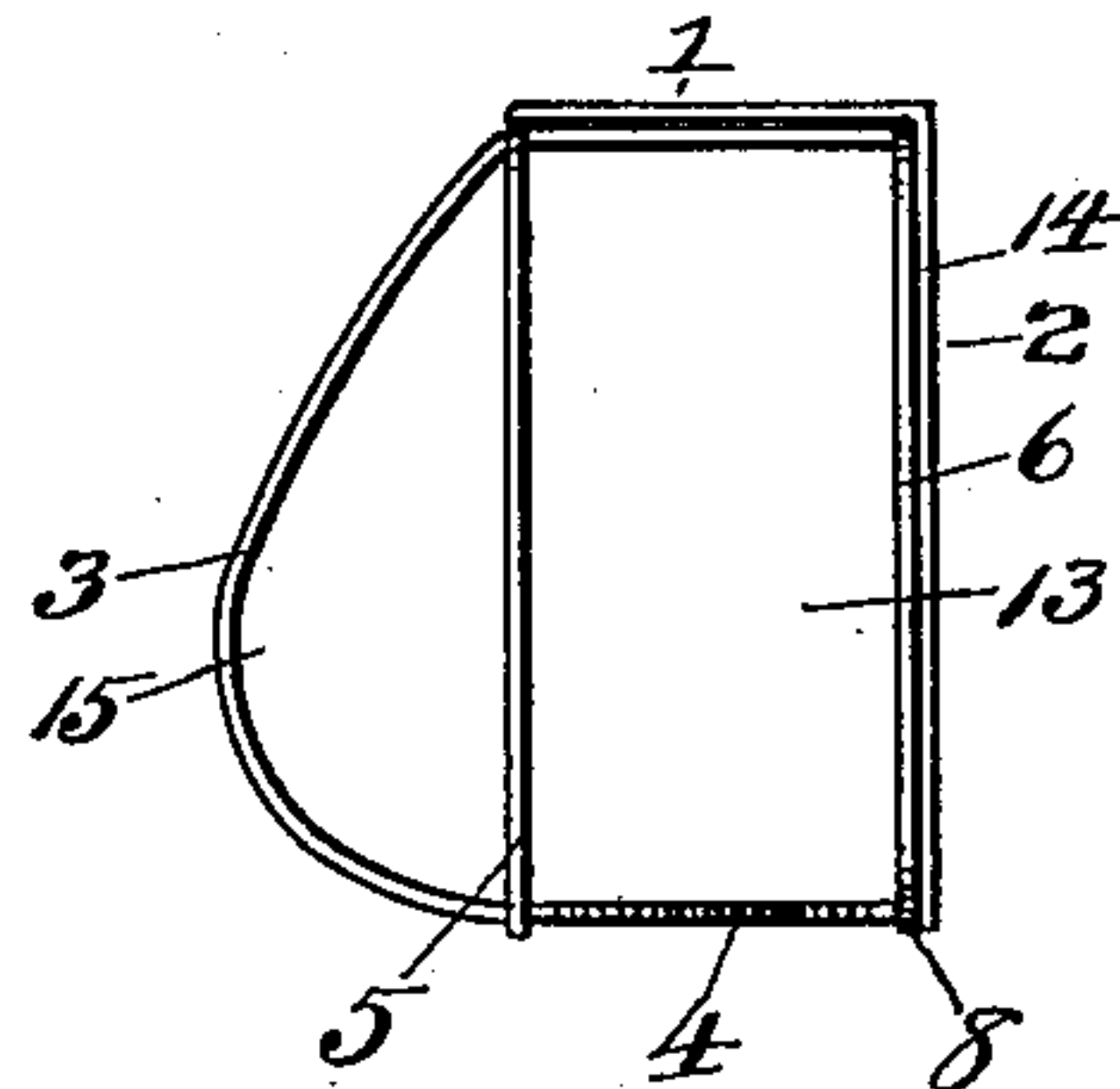


Fig. 6.



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UNITED STATES PATENT OFFICE.

WILLIAM HARE, OF CAMDEN, ILLINOIS.

DENTAL MOUTH PROP AND MIRROR.

SPECIFICATION forming part of Letters Patent No. 667,441, dated February 5, 1901.

Application filed July 16, 1900. Serial No. 23,791. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HARE, a citizen of the United States, residing at Camden, in the county of Schuyler and State of Illinois, have invented certain new and useful Improvements in Dental Mouth Props and Mirrors, of which the following is a specification.

My invention relates to improvements in a mouth prop and mirror for dentists' use in examining the teeth and operating on the same.

The invention consists in the features and combination of features, as hereinafter more fully described and claimed.

The object of my invention is to provide a dental mouth prop and mirror which is simple and inexpensive in construction and easy to manipulate and which will hold the jaws and lips apart, the cheek and tongue out of the way, and reflect light onto the cavity of the tooth during the operation of filling the same, and to retain the mouth prop and mirror in the mouth without the operator holding it, thus giving him the free use of both of his hands during an operation, which greatly facilitates his work.

Referring to the drawings, Figure 1 is a perspective view showing my invention as it appears when in use in the mouth; Fig. 2, a detail perspective view of the same. Fig. 3 is a front elevation, Fig. 4 a side elevation, Fig. 5 a top plan view, and Fig. 6 a bottom plan view.

In the drawings, in which like numerals of reference denote like parts throughout the several views, 1 represents the mouth prop and mirror, and 2 the frame thereof, made, preferably, of steel, silver, or gold wire; but it may be made of any suitable material. Said frame consists of a laterally-extending curved bracket or cheek-retractor 3, having its front end curved upward and formed into an arch 4, and horizontal arms 5 and 6, turned up, as at 7, at their rear ends and secured to the cheek-retractor. The arm 6 is bent at 8 and turned upward at its forward end to form a vertical arm 9, and said vertical arm 9 bent at 10 and formed into a horizontal arm 11, which terminates in an upwardly-projecting lug 12. 13 and 14 are mirrors made of glass, polished aluminium, tin, hard rubber, hard rubber lined with glass, silver, or other suitable reflecting material for the purpose of re-

flecting light onto the top and sides of the teeth. The mirror 13 is made preferably curved or concave, extends out laterally to form a cheek-retractor 15, corresponding in shape to the cheek-retractor 3, and is secured at one end to the rear ends of the arms 5 and 6 and at its opposite end to the horizontal arm 11. The mirror 14 is made preferably straight and at a right angle to the mirror 13 and is secured at its top and rear edges to the mirror 13 and at its front edge to the vertical arm 9, and not only reflects light onto the teeth, but keeps the saliva or moisture caused by the breath away from the teeth being operated on. These mirrors and the frame are secured together by means of solder, rivets, or in any other suitable manner.

In use the cavity should first be prepared, the mouth prop and mirror then placed in the mouth, with the arch 4 in front over the teeth of the lower jaw, on which it rests, the cheek-retractors keeping the cheeks out of the way, the back of the mirror 14 bearing against the side of the tongue and protecting the same from injury, and a little cotton placed between the frame and mirror and the tongue to take up moisture. Then by closing the jaws the teeth of the lower jaw will engage the arch 4 and the teeth of the upper jaw will engage the lug 12, and thereby hold the mouth prop and mirror securely in place. Two mouth props and mirrors are used, one for the right and the other for the left side of the mouth, the one shown in the drawings being adapted for the left side thereof.

The construction of the mouth prop and mirror may be changed somewhat without departing from the spirit of my invention, and therefore I do not wish to be limited to the exact construction herein shown and described.

Having thus described my invention, what I claim is—

1. A dental appliance consisting of a mouth-prop open at one side and provided with a reflecting-surface at the opposite side, a reflecting-surface at the top, and a cheek-retractor at the bottom, substantially as shown and described.

2. A dental appliance consisting of a mouth-prop open at one side and provided with a straight reflecting-surface at the opposite

side, a concave reflecting-surface at the top having a cheek-retractor, and a frame at the bottom having a cheek-retractor, substantially as shown and described.

5 3. A dental appliance comprising a mouth-prop provided with a reflecting-surface, a frame having longitudinal arms, one of said arms turned up at the front and then turned laterally, and the other arm provided with a
10 frame having a cheek-retractor at the side and an arch at the front, substantially as shown and described.

4. A dental appliance comprising a mouth-prop provided with a reflecting-surface, and a
15 frame having an upwardly-extending arm provided with an arm at an angle thereto having a lug, substantially as shown and described.

5. A dental appliance comprising a mouth-prop provided with a reflecting-surface at the top and side, a frame attached thereto provided with a lug which projects above the top reflecting-surface and is adapted to be engaged by the teeth and retain said mouth-
25 prop in position in the mouth, substantially as shown and described.

6. A dental appliance comprising a mouth-prop provided with a reflecting-surface, a frame comprising horizontal arms, one of said
30 arms extending upward vertically at the front and then turned horizontally and its end turned up to form a lug, and the other horizontal arm provided with a lateral cheek-retractor, substantially as shown and described.

35 7. A dental appliance comprising a mouth-prop provided with a reflecting-surface hav-

ing a cheek-retractor, a frame having longitudinal arms, one of said arms extending along the lower edge of the reflecting-surface turned up vertically at the front and then
40 turned laterally along the front edge of said reflecting-surface, and the lower arm having a frame secured thereto provided with a cheek-retractor, substantially as shown and described.

8. A dental appliance comprising a mouth-prop provided with a reflecting-surface, a frame comprising horizontal arms bent upward into an arch at their rear ends, one of the said arms-turned upward vertically at the
50 front, then turned horizontally and its end turned up to form a lug, and the other horizontal arm provided with a lateral cheek-retractor at one side, and an arch at its front, substantially as shown and described.

9. A dental appliance comprising a mouth-prop provided with a reflecting-surface at the rear, a concave reflecting-surface at the top having a lateral cheek-retractor, a straight reflecting-surface at one side, a frame pro-
60 vided with a cheek-retractor at the side and a curved portion or arch at the front, and a frame provided with a lug adapted to be engaged by the teeth and retain said mouth-prop in position in the mouth, substantially
65 as shown and described.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

WILLIAM HARE.

Witnesses:

HOMER DORSETT,
R. H. MEAD.