

No. 735,762.

PATENTED AUG. 11, 1903.

W. HARE.

DENTAL MOUTH PROP, MIRROR, AND TONGUE PROTECTOR.

APPLICATION FILED SEPT. 10, 1902.

NO MODEL.

Fig. 1.

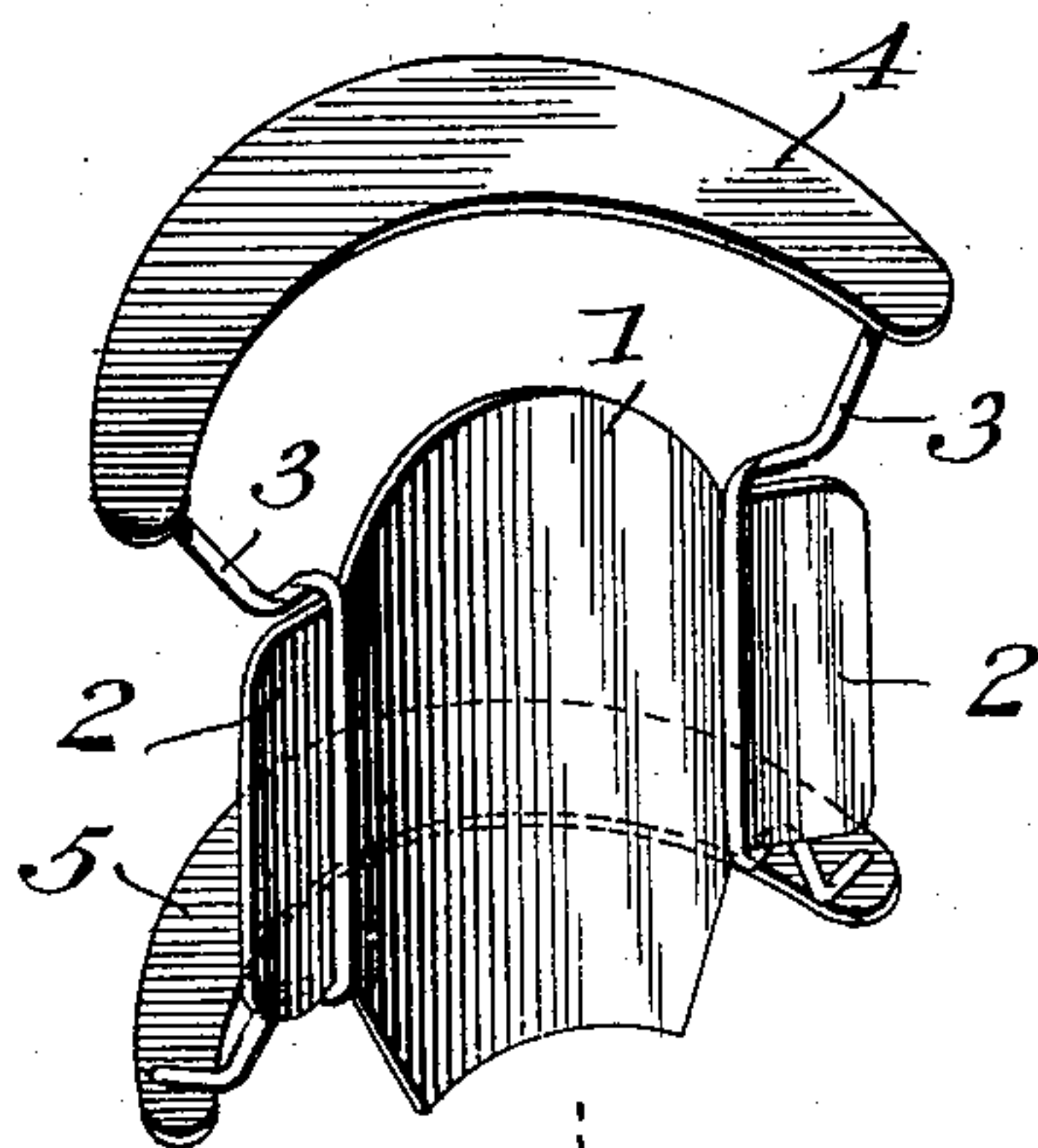


Fig. 5.

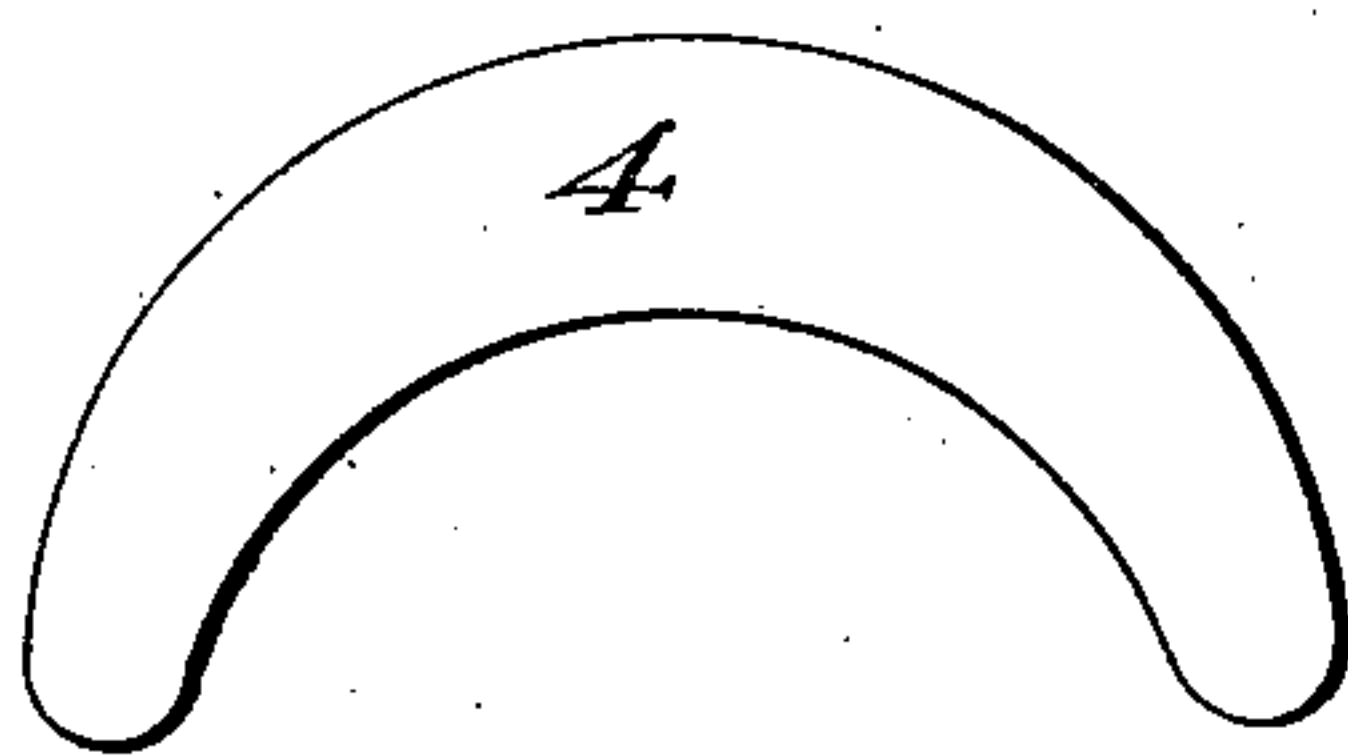


Fig. 4.

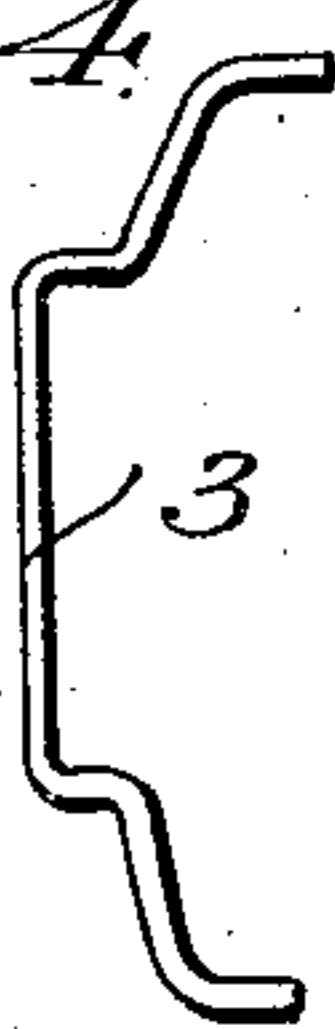


Fig. 3.

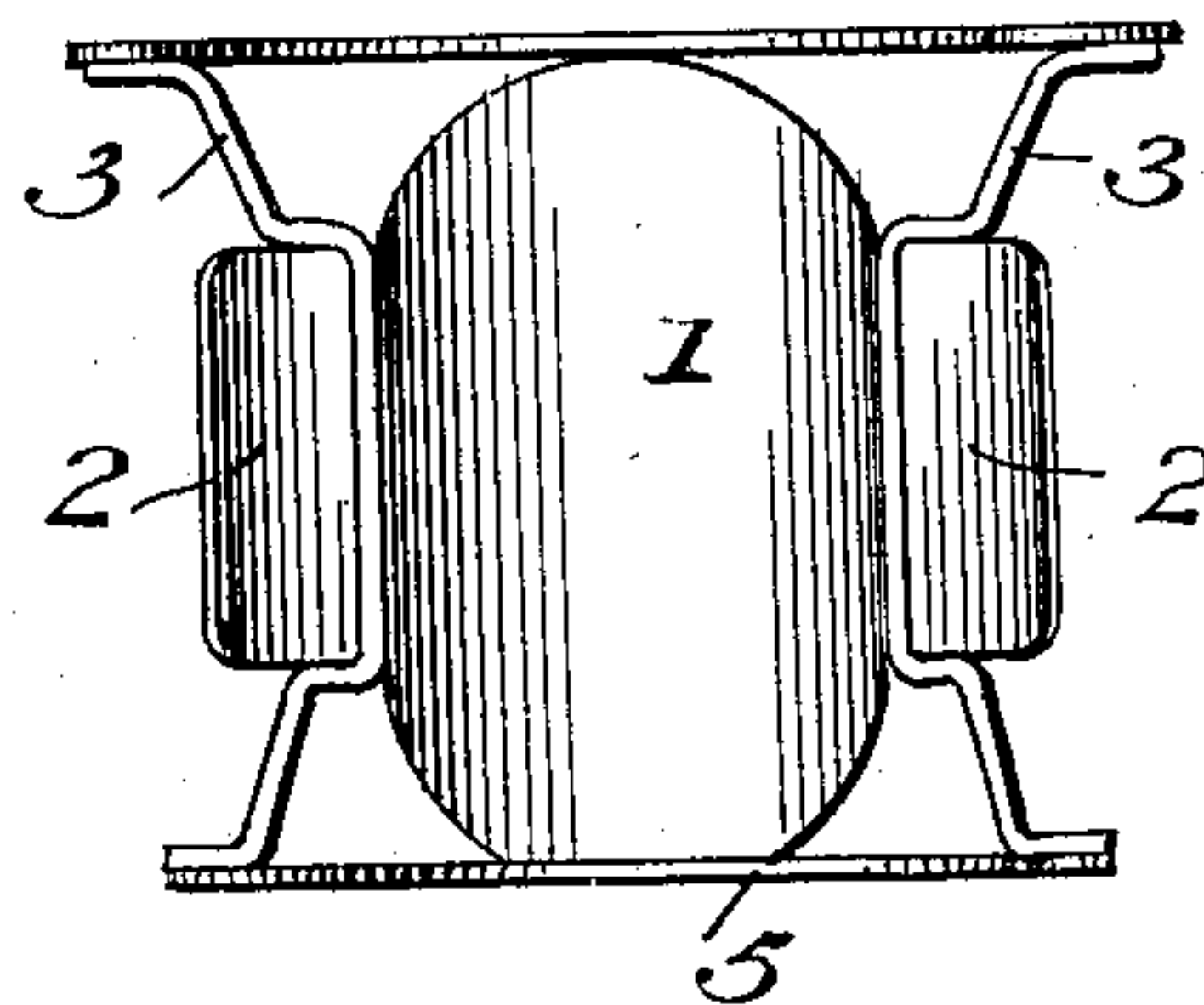
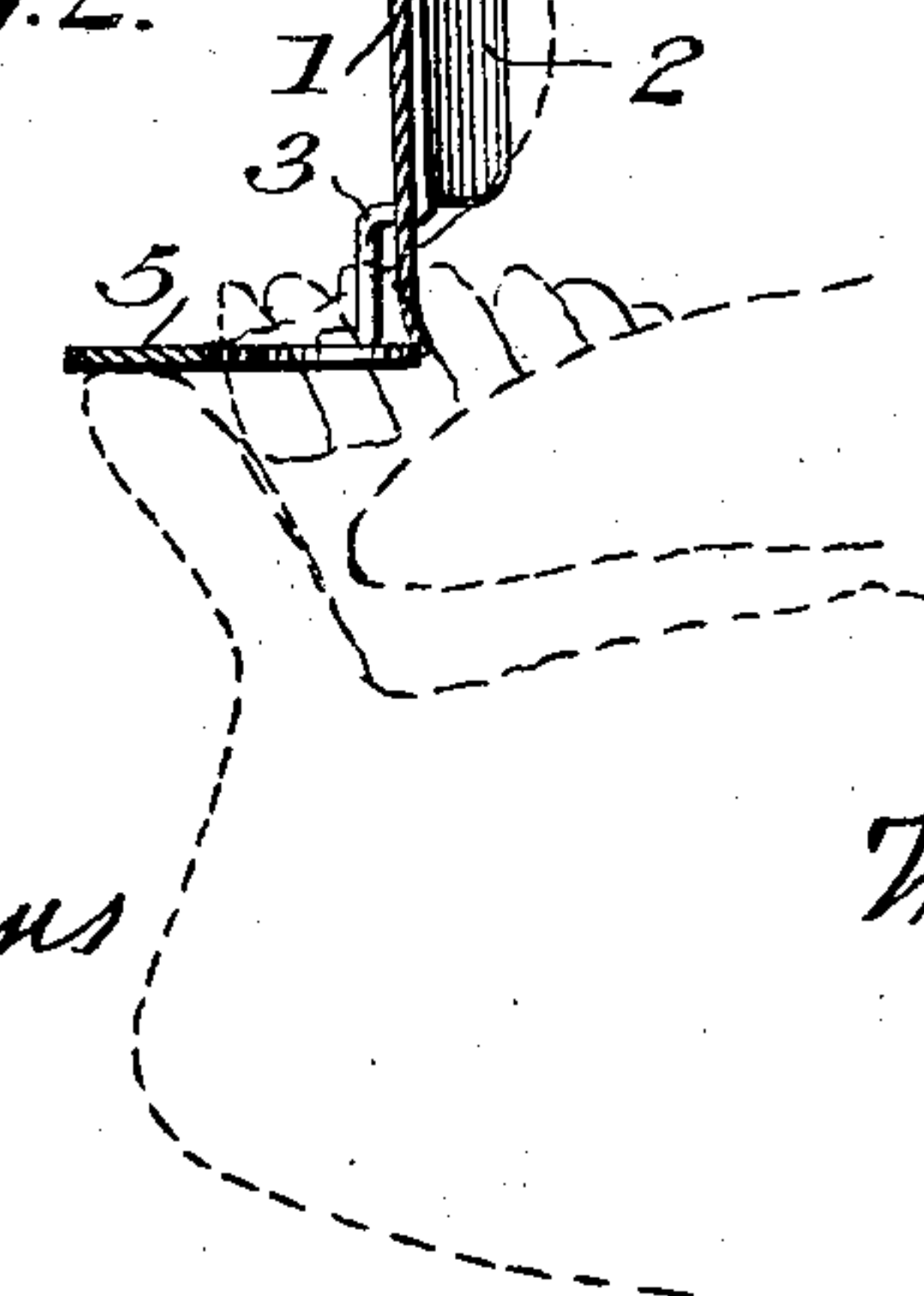


Fig. 2.



Witnesses:

Frank B Williams  
Henry C Butter

Inventor:

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# UNITED STATES PATENT OFFICE.

WILLIAM HARE, OF DANVILLE, ILLINOIS.

## DENTAL MOUTH-PROP, MIRROR, AND TONGUE-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 735,762, dated August 11, 1903.

Application filed September 10, 1902. Serial No. 122,869. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM HARE, a citizen of the United States of America, residing at Danville, in the county of Vermilion and State of Illinois, have invented certain new and useful Improvements in a Combined Mouth-Prop, Tongue-Protector, and Lip-Distender 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.

This invention relates to a combined mouth-prop, lip-distender, and tongue-protector for dental use; and it consists in the construction and arrangement of parts hereinafter more fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a dental instrument of simple and inexpensive construction wherein the arrangement is such as to enable the mouth to be propped open for the purpose of allowing the dentist to work upon the front teeth, said device having means for distending the lips and for protecting the tongue during said operation.

The above object is attained by the structure illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the instrument embodying my invention. Fig. 2 is a vertical transverse section showing the instrument in position in the mouth of the patient, the jaws and teeth of the patient being indicated by dotted lines. Fig. 3 is a rear elevation of the instrument. Fig. 4 is an elevation of one of the wire brackets employed to connect the several parts. Fig. 5 is a plan view of one of the lip-distenders.

Referring to the characters of reference, 1 designates a mouth-prop, which is a thin plate formed of suitable metal concavo-convex in cross section and oval at the ends. Projecting laterally from the opposite sides of said plate are the wings 2, which form the props adapted to be engaged by the teeth of the jaws for holding the mouth open when the instrument is placed therein. Mounted upon said wings near their point of connection with the plate 1 are the brackets 3. Suitably mounted upon the upper ends of said brackets is a

curved plate 4, adapted to serve as a distender or support for the upper lip when the instrument is placed in the mouth. Mounted in like manner upon the lower ends of said brackets is a curved plate 5, adapted to engage and hold the lower lip away from the teeth in the manner of the upper plate 4 and as clearly shown in Fig. 2.

The instrument is placed in the mouth so that the teeth of the upper and lower jaws will engage the wings 2 to securely hold the instrument in place. This position brings the plate 2 within the mouth in the rear of the teeth, holding the tongue from contact with the teeth being operated upon and preventing injury to the tongue by the tool of the dentist. Said plate 1 also serves to protect the teeth upon which work is being done from the moisture in the breath. The position of the prop in the mouth is such that the upper and lower plates 4 and 5, carried by the brackets 3, engage and distend the lips, so as to hold them away from the teeth and allow the dentist to operate upon the teeth in the front of the mouth without interference from the lips. The natural tendency of the jaws when open is to close, and this improved prop relieves the jaws from the strain of the effort to hold them open, as the wings 2 allow the teeth to bear firmly thereon yet maintain the jaws sufficiently separated to facilitate the work.

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

1. In a device for dental use, the combination of a suitable mouth-prop having lateral wings for the engagement of the teeth and the horizontal lip-distenders mounted upon said mouth-prop adapted to engage the lips when the device is in position in the mouth.

2. In a dental instrument, the combination of a plate adapted to protect the tongue, having lateral wings which serve as props adapted to be inserted between the teeth, brackets mounted upon said plate, and the curved lip-distenders secured to the ends of said brackets.

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

WILLIAM HARE.

Witnesses:

GEO. HEINZMAN,  
HENRY C. CUTTER.