

(Model.)

V. W. GILBERT.
SPECULUM.

No. 557,664.

Patented Apr. 7, 1896.

FIG. 1.

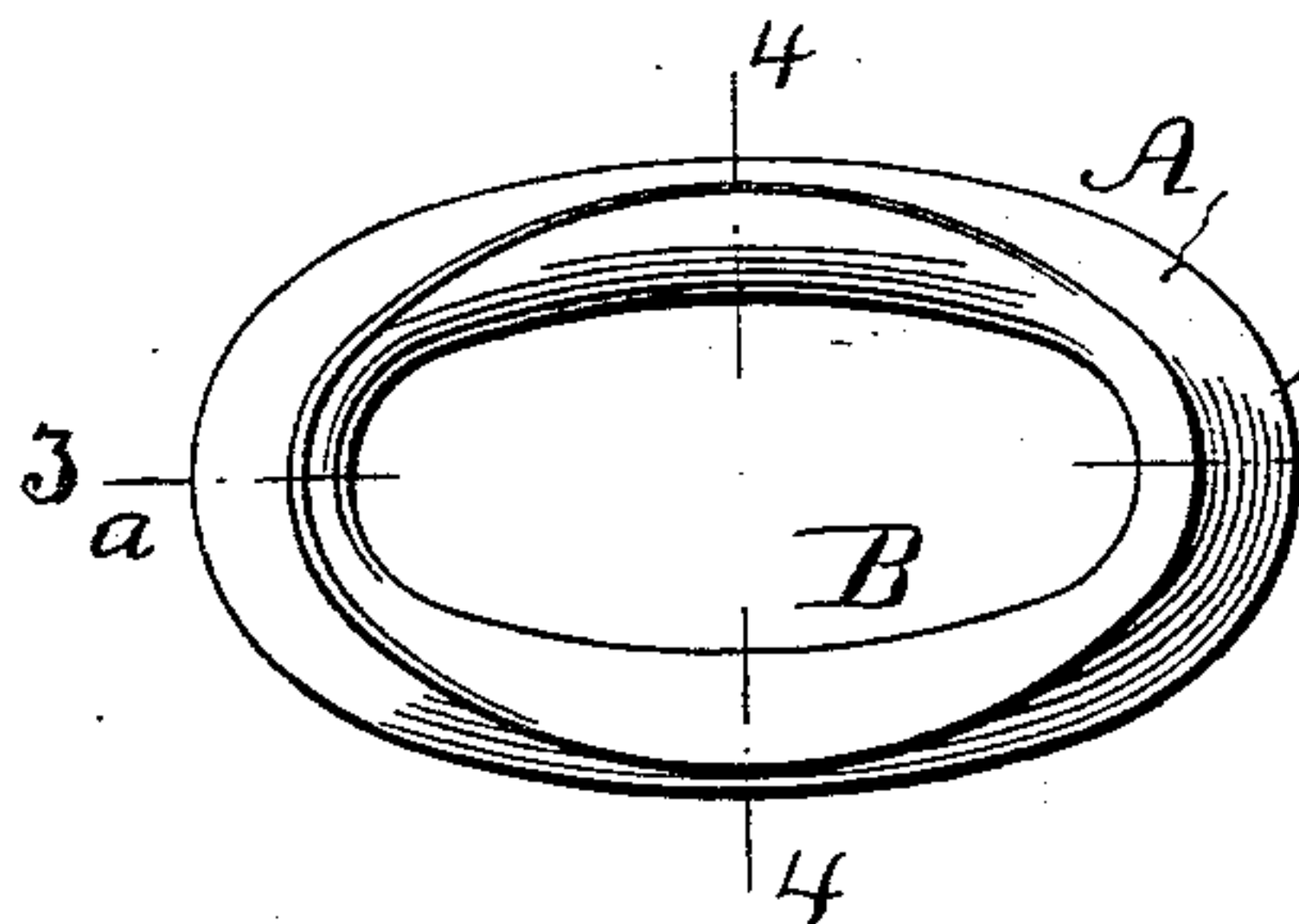


FIG. 2.

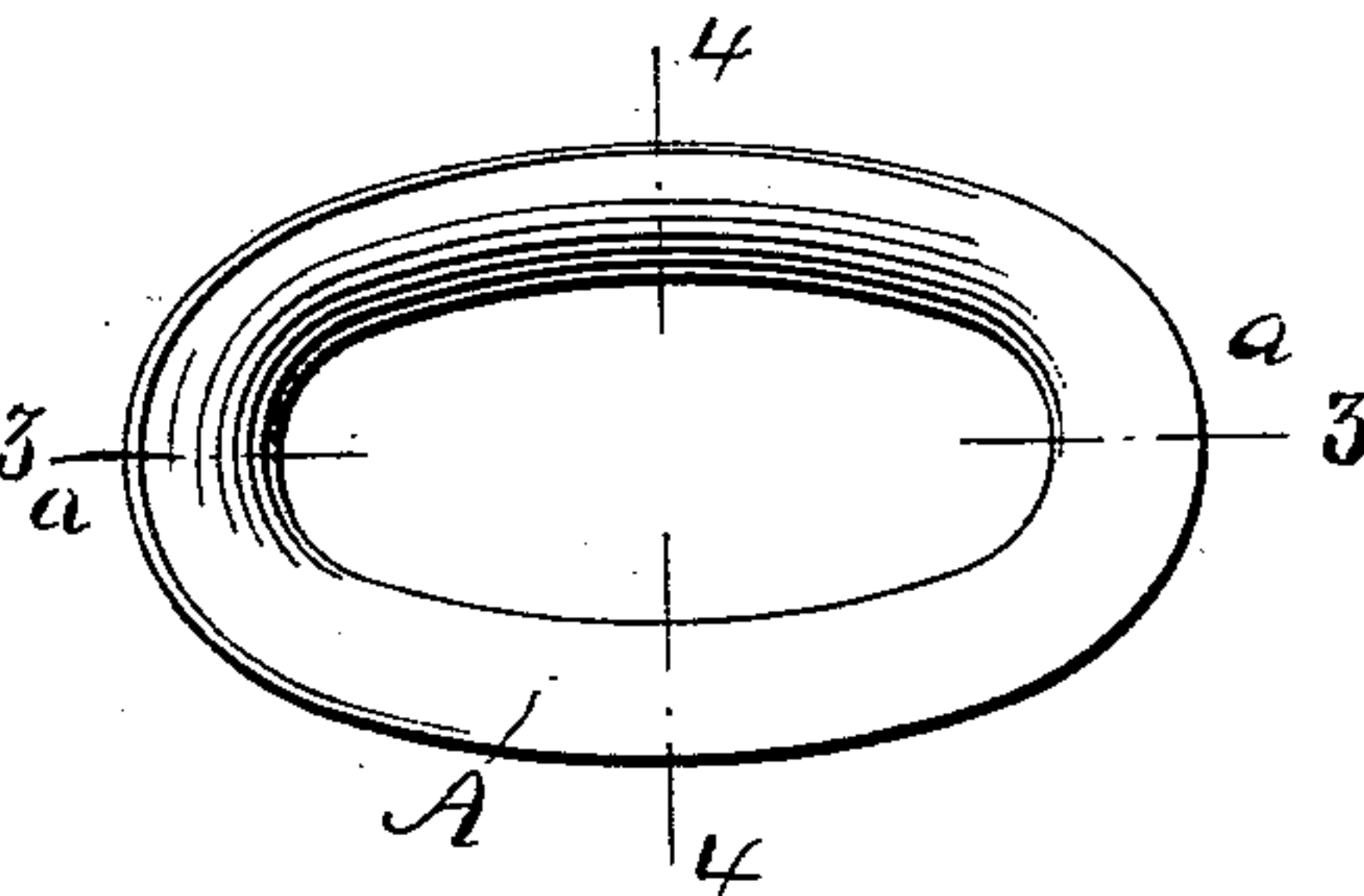


FIG. 3.

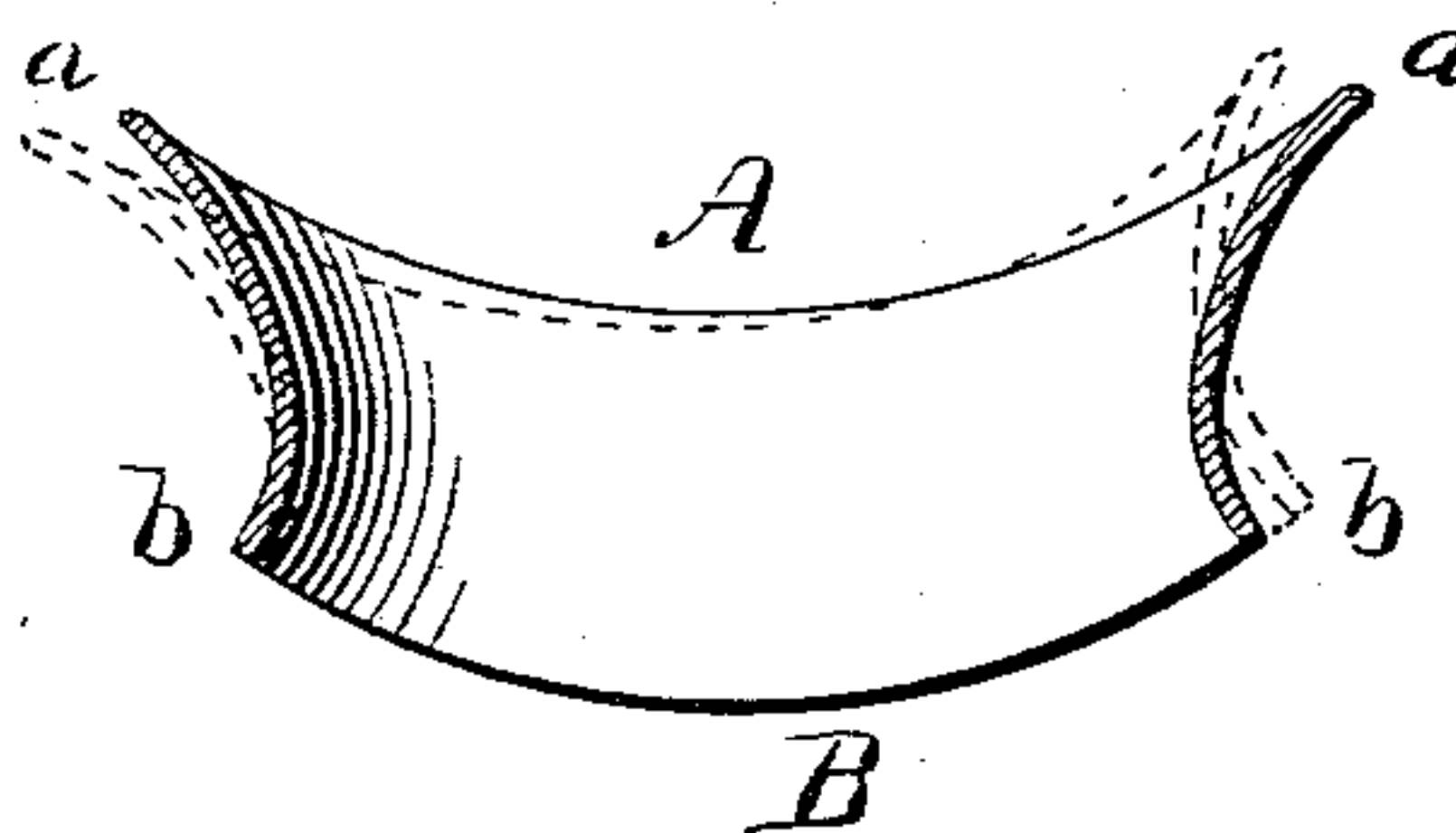
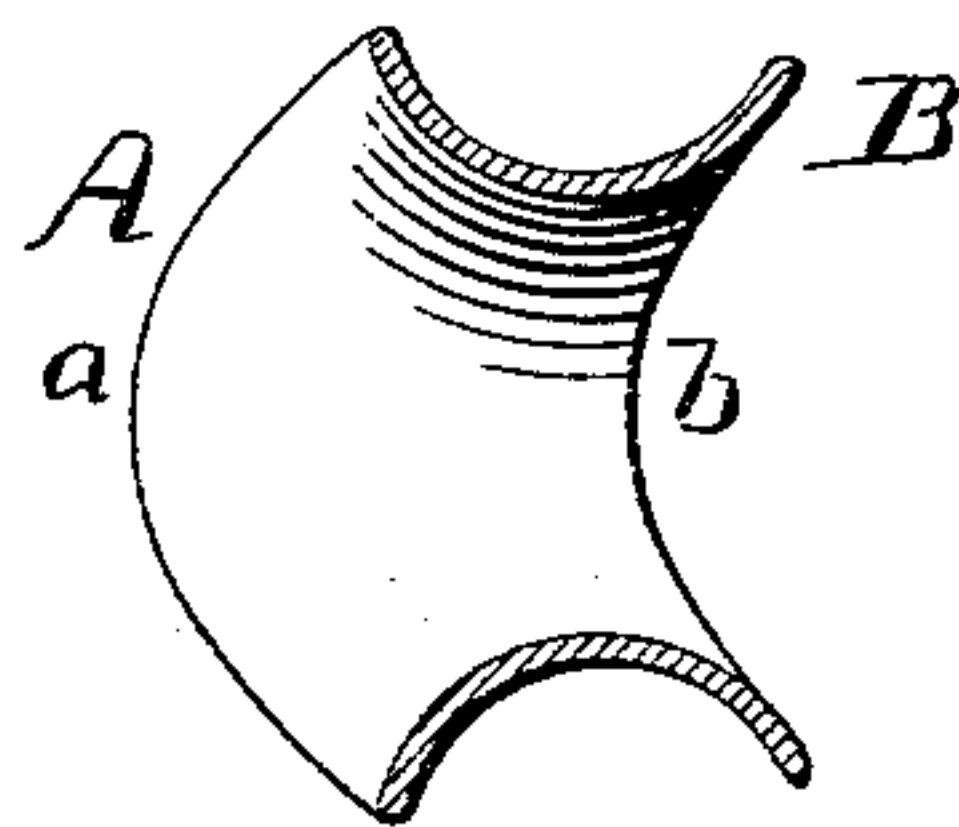


FIG. 4.



WITNESSES:

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By Atty. J. S. Peyton.

UNITED STATES PATENT OFFICE.

VIRGIL WALTER GILBERT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
TO THE S. S. WHITE DENTAL MANUFACTURING COMPANY, OF SAME
PLACE.

SPECULUM.

SPECIFICATION forming part of Letters Patent No. 557,664, dated April 7, 1896.

Application filed January 13, 1896. Serial No. 575,273. (Model.)

To all whom it may concern:

Be it known that I, VIRGIL WALTER GILBERT, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Dental Speculum; and I do hereby 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.

My invention relates to a simple, cheap, and efficient device adapted to distend and be retained in position by the lips and reflect light upon the teeth (natural or artificial) in the mouths of patients, and give great freedom of access to both the upper and lower teeth for examination and operative purposes.

My improved speculum is also useful in the inspection of edentulous jaws and in the adjustment of artificial dentures.

In the accompanying drawings, Figure 1 is a front elevation, and Fig. 2 an elevation as seen from the inner or lip-engaging portion of the speculum. Fig. 3 is a section on the lines 3 of Figs. 1 and 2, and Fig. 4 a section on the lines 4 of Figs. 1 and 2.

The speculum is made in the form of what may be termed an "elliptical," "oval," or "oblong" ring or short tube, longitudinally and transversely curved, with a bright and smooth inner surface adapted to reflect light.

By constructing the speculum of suitable metal, with its interior surface highly polished, strength, durability, and cheapness are secured.

The speculum is of greater dimensions at its inner edge or extremity A than at its outer extremity or edge B. It is curved longitudinally between the ends *a a* at its inner edge or lip-entering portion, so as to flare toward the ends from a point midway between them and so substantially correspond with the curvature of the gums. The longitudinal curvature of the speculum between the ends *b b* of its outer edge is such as to give a central bulge to this edge, which is made to flare from the ends inward toward a point midway between the ends. The speculum-wall is transversely curved all around between its inner

and outer edges, the curvature being such as to impart a flare to both the inner and outer edges and give greater dimension to the inner than to the outer extremity of the device, and so that the outer surface of the peculiarly-formed oblong ring or tube is concaved and made to nicely conform to the opening between the parted lips of the human mouth.

From the above description it will be understood that the construction of the lip-engaging portion of the speculum is such as to adapt it to enter between the lips and then be held by them against accidental displacement and keep them properly distended without requiring that the device be held or supported by hand, and that by the light thrown upon the jaws, gums, and teeth views may be had of them for mere inspection, or for performing operations thereon by instruments, which may be readily inserted and manipulated by way of the speculum-opening without contact with or obstruction from the lips.

I do not wish to be understood as confining my invention to the precise details of construction above described, as it may be modified to some extent without departure therefrom. For instance, one end of the lip-separating portion may be given an increased flare and the flare of the other end decreased, and one end of the outer portion B increased in flare, (see dotted lines, Fig. 3,) in order to facilitate or extend the view to be had of buccal teeth. A like effect may be attained by moving the speculum to the right or to the left, as the case may be.

I claim as my invention—

A dental speculum in the form of a short elliptical, oval or oblong tube, longitudinally and transversely curved and having a reflecting inner surface, the longitudinal curve corresponding with the curvature of the gums and the transversely-curved surface adapted to distend and be engaged by the lips, substantially as set forth.

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

VIRGIL WALTER GILBERT.

Witnesses:

W. STONE HOW,
EDW. F. SIMPSON, Jr.