

No. 624,138.

Patented May 2, 1899.

G. A. WELD.  
LACING HOOK.

(Application filed Nov. 26, 1897.)

(No Model.)

FIG. 1.

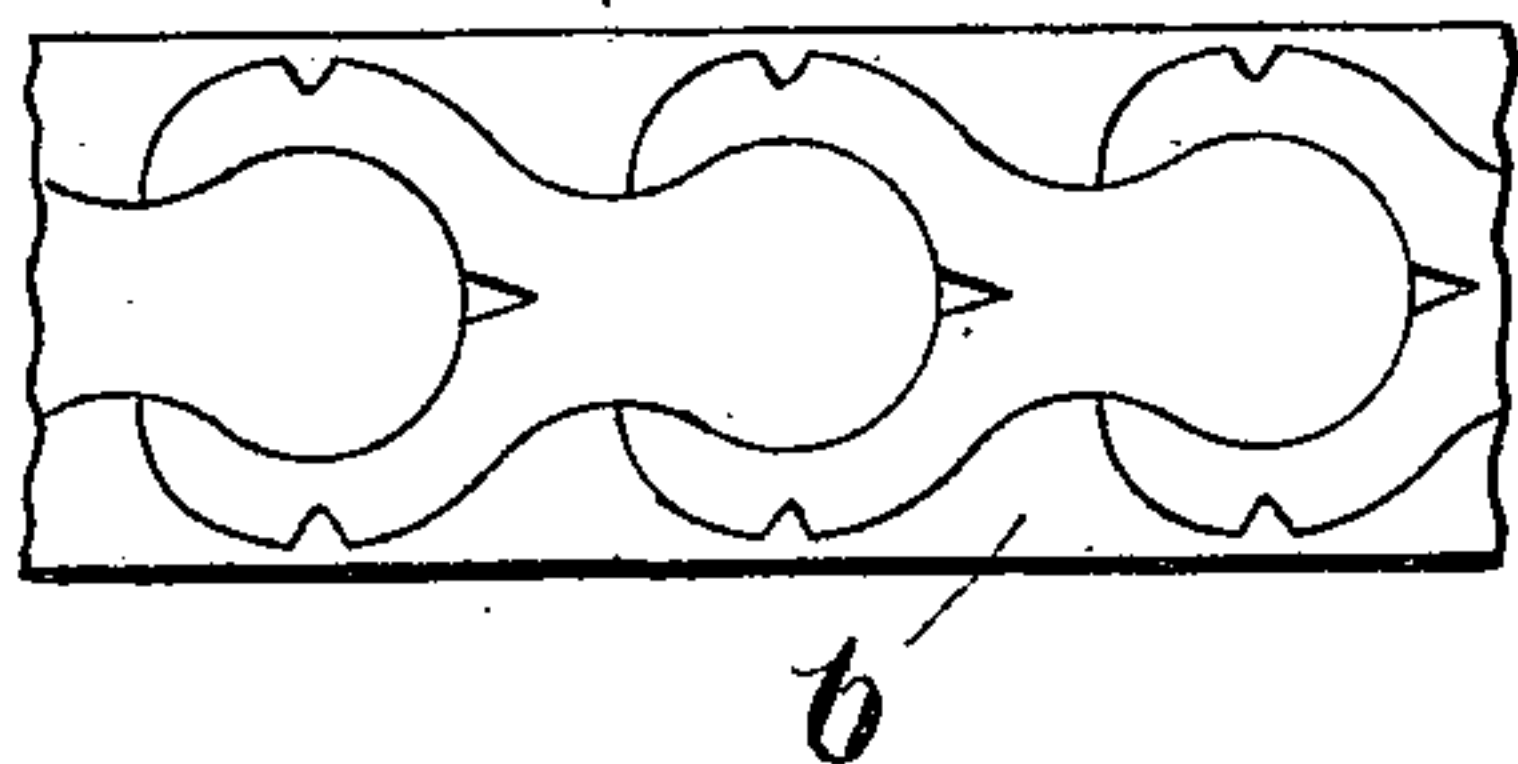


FIG. 2.

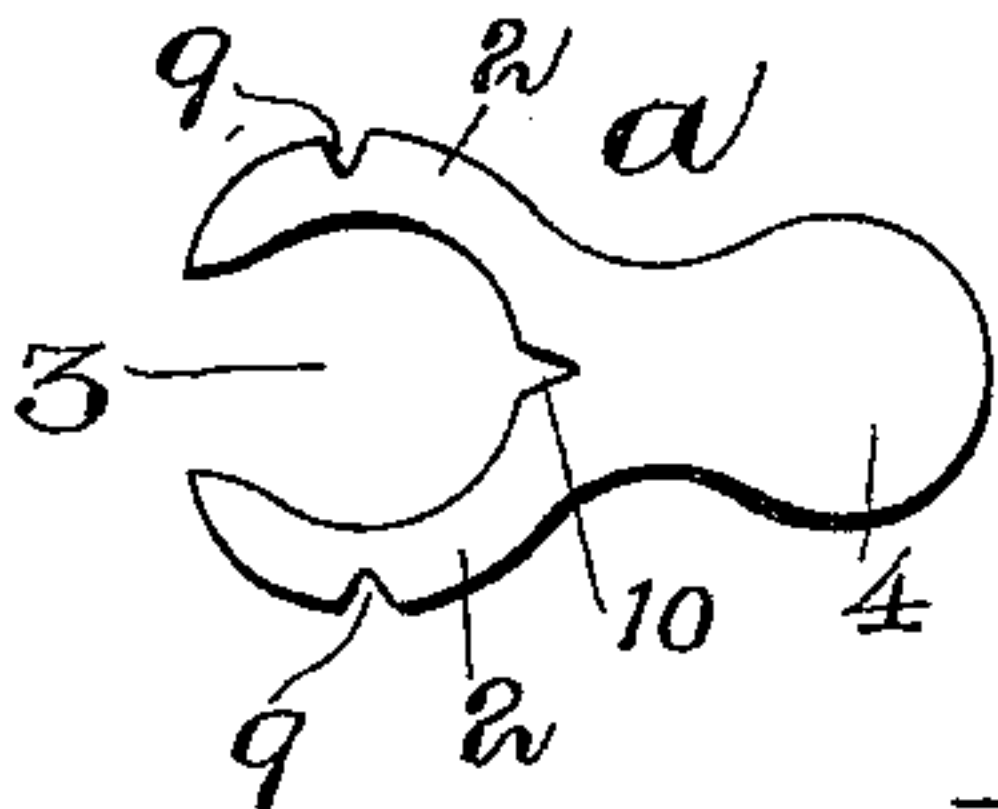


FIG. 3.

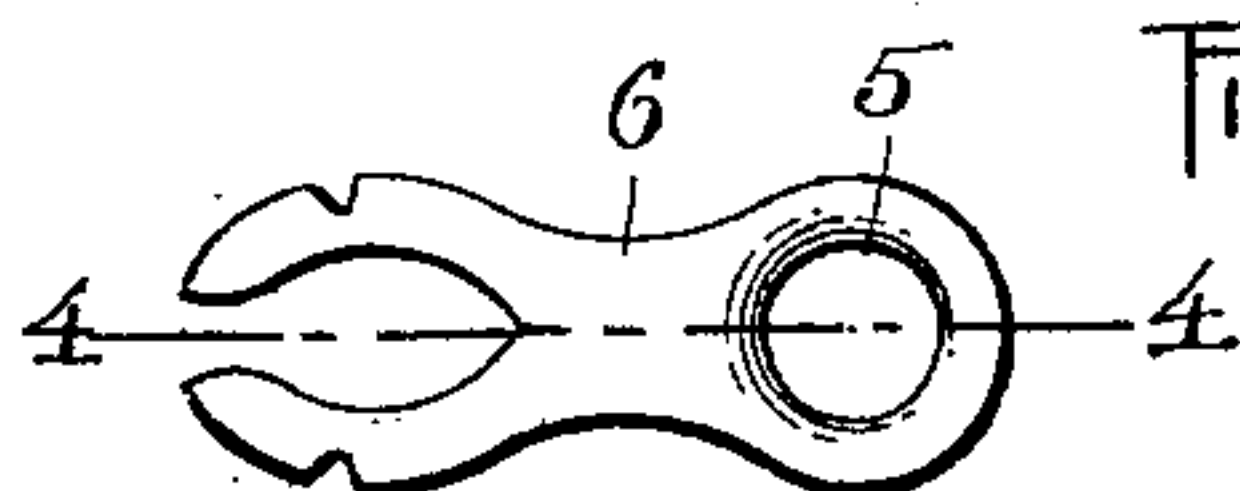


FIG. 4.

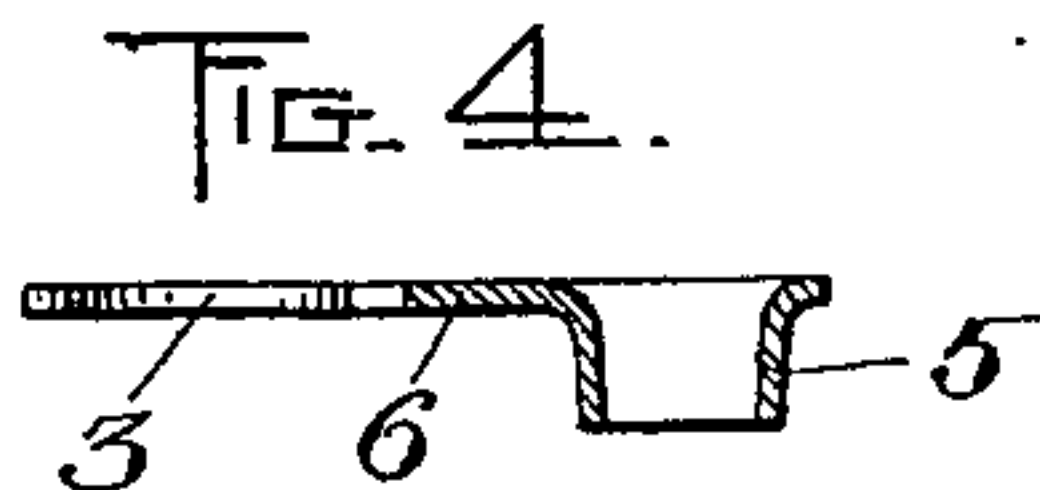


FIG. 5.



FIG. 6.

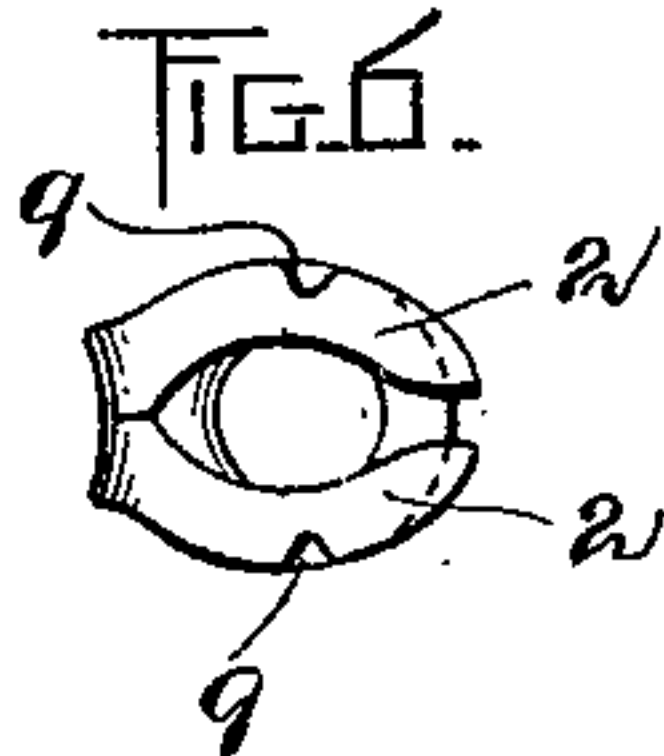


FIG. 7.

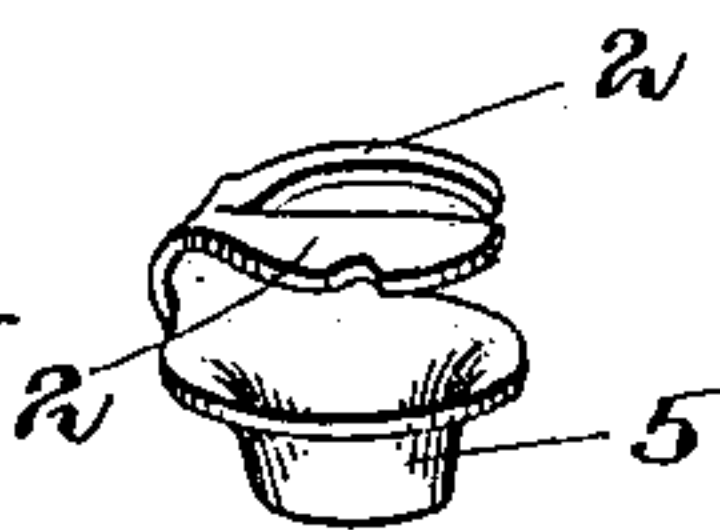


FIG. 8.

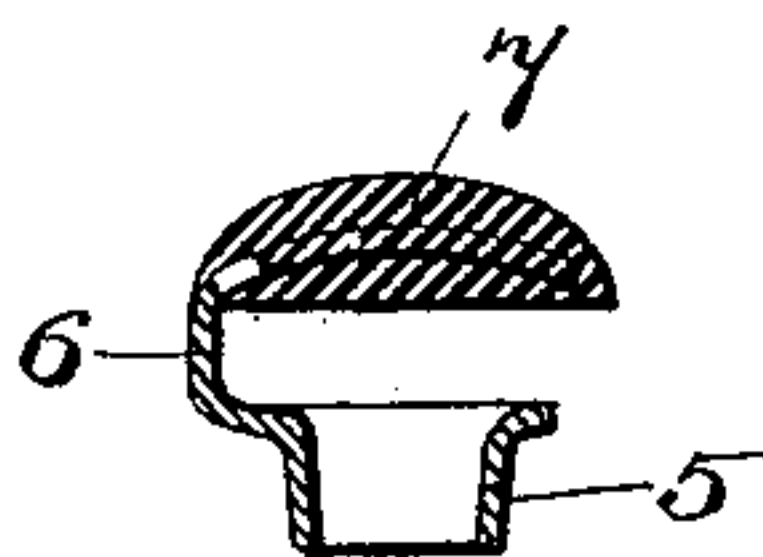


FIG. 9.

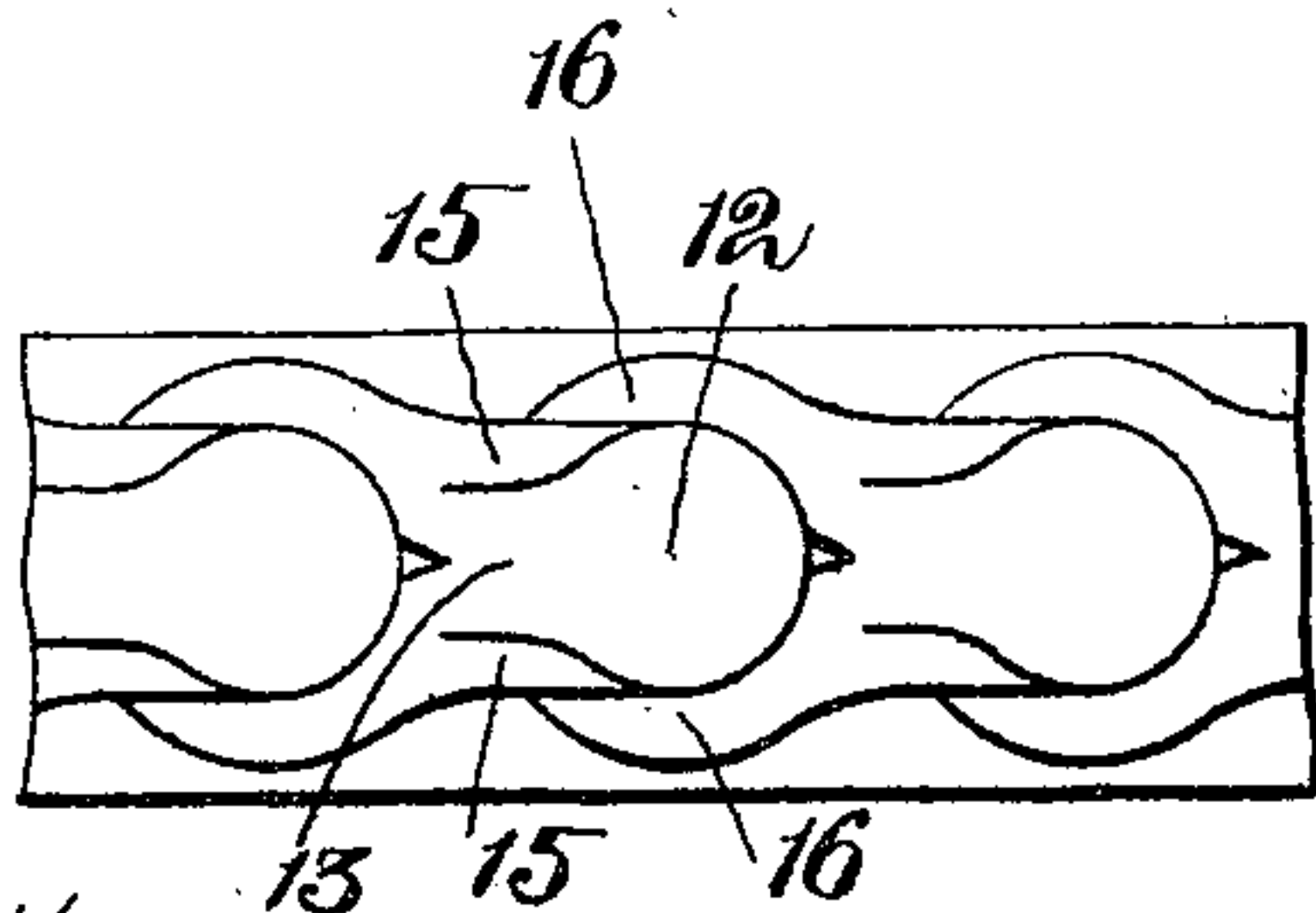


FIG. 10.

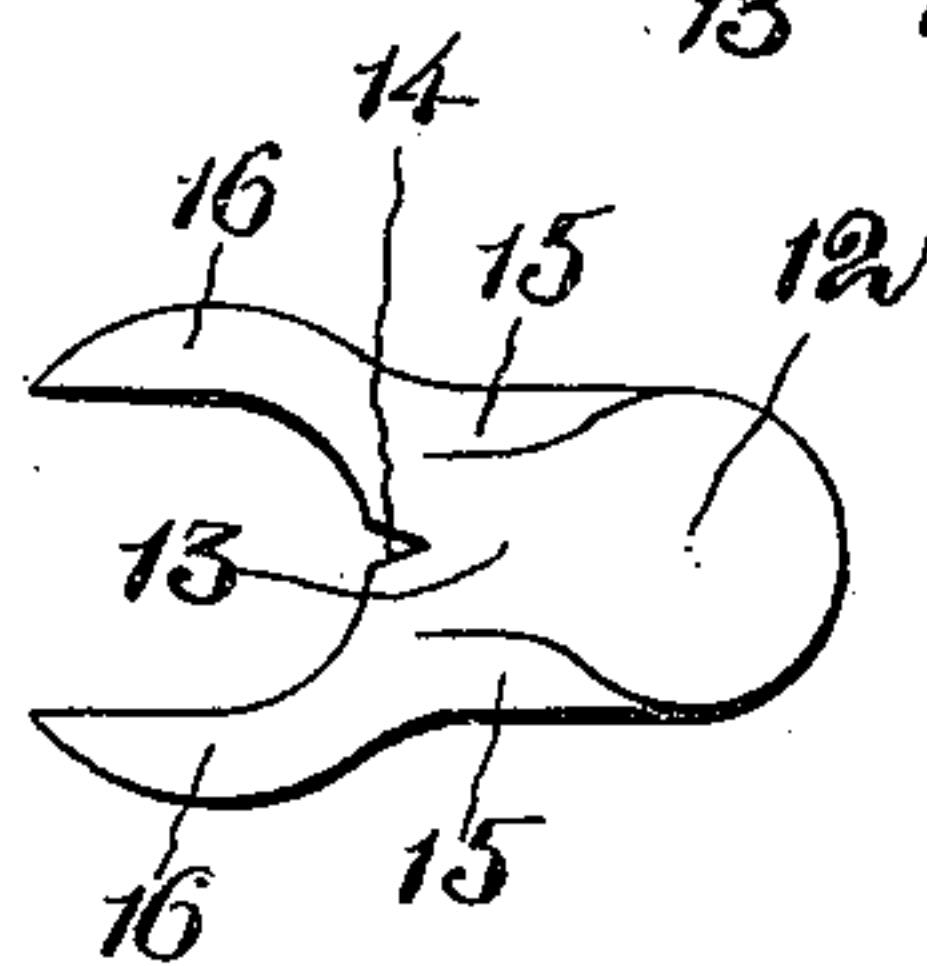


FIG. 11.

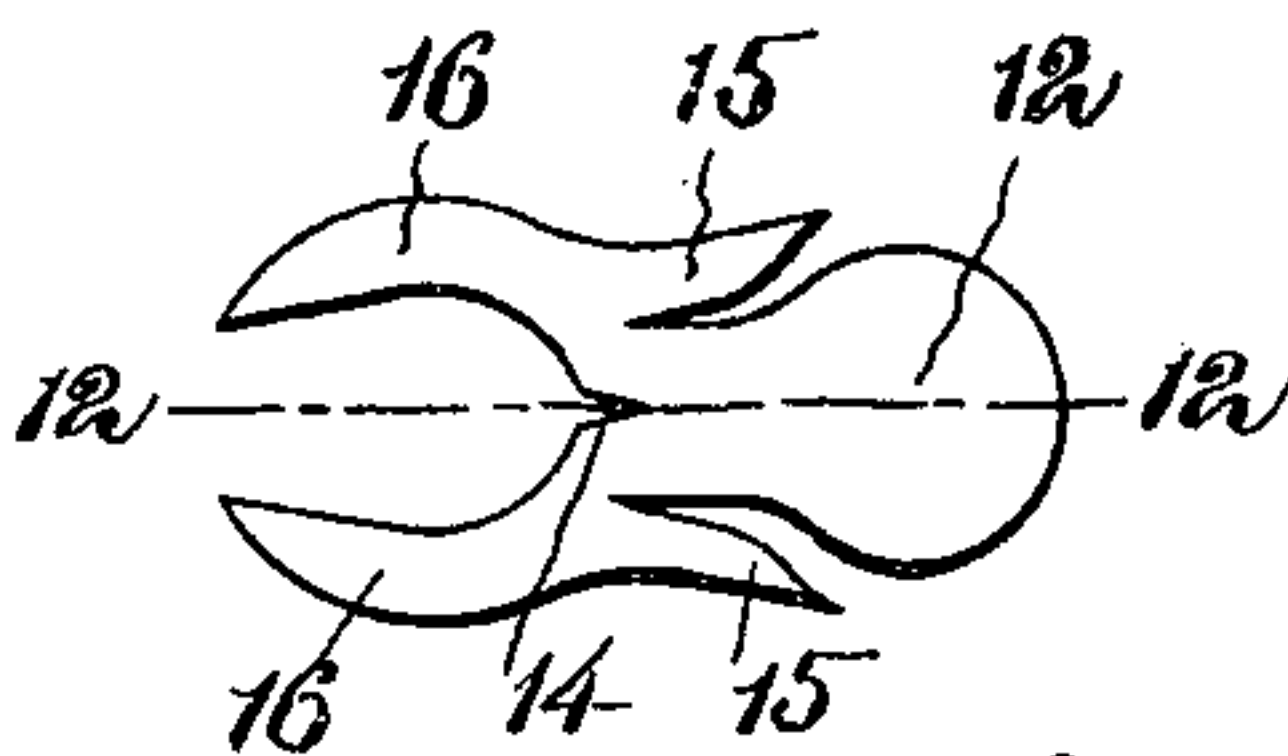


FIG. 12.



FIG. 13.

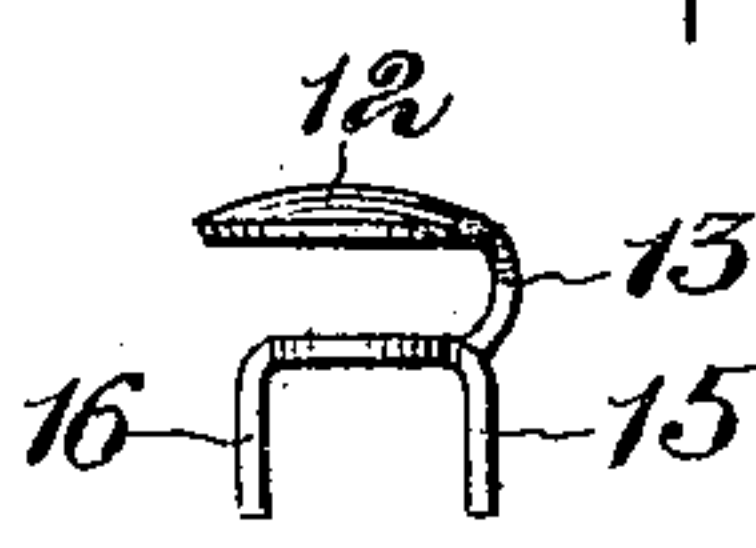
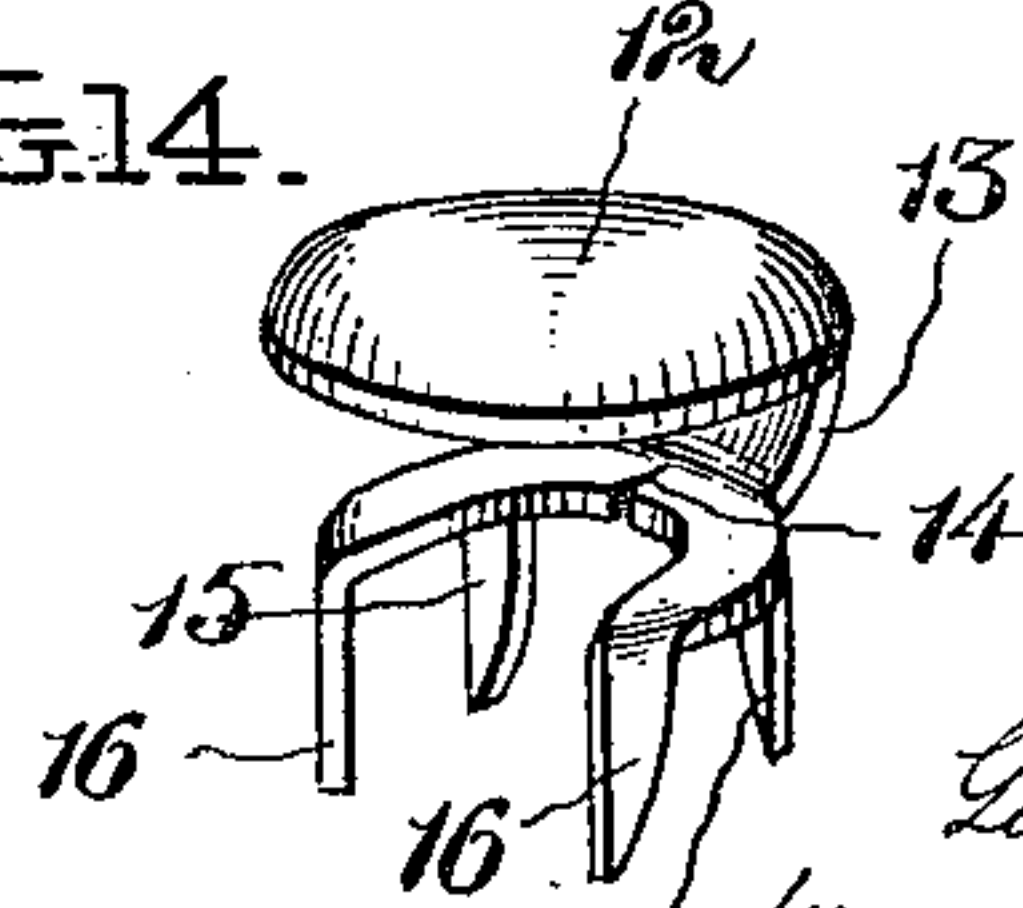


FIG. 14.



WITNESSES  
A. D. Harrison.

P. W. Pezzetti.

INVENTOR:  
Geo. A. Weld

Wright, Brown & Linsky  
Atty.

# UNITED STATES PATENT OFFICE.

GEORGE A. WELD, OF WINCHESTER, MASSACHUSETTS.

## LACING-HOOK.

SPECIFICATION forming part of Letters Patent No. 624,138, dated May 2, 1899.

Application filed November 26, 1897. Serial No. 659,742. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE A. WELD, of Winchester, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lacing-Hooks, of which the following is a specification.

This invention relates to a lacing-hook made of a single piece of sheet metal, which comprises the attaching device for engagement with the article on which the hook is to be used and the head and neck, which form the hook portion.

The invention has for its objects, first, to provide a blank of this character adapted to be made from sheet metal with the minimum waste, and, secondly, to provide an improved construction of the head portion of a hook of this class for use in connection with a wear-resisting covering of plastic material, such as celluloid.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side view of a strip of sheet metal, showing the relative arrangement of blanks cut from said strip in accordance with my invention. Fig. 2 represents a side view of a blank cut from said strip. Fig. 3 represents a view of said blank after it has been partially converted into a lacing-hook. Fig. 4 represents a section on line 4 4 of Fig. 3. Fig. 5 represents a sectional view of a completed lacing-hook made from the blank shown in the preceding figures. Fig. 6 represents a top view of the completed hook. Fig. 7 represents a perspective view of the same. Fig. 8 represents a sectional view of said hook, showing a covering of celluloid applied to the head portion. Figs. 9, 10, and 11 represent views similar to Figs. 1, 2, and 3, showing a different form of blank embodying my invention. Fig. 12 represents a section on line 12 12 of Fig. 11. Fig. 13 represents a side view, and Fig. 14 a perspective view, of a completed hook made from the blank shown in Figs. 9, 10, 11, and 12.

The same letters and numerals of reference indicate the same parts in all the figures.

In the drawings, and referring first to Figs.

1 to 8, inclusive, *a* represents a blank having an end portion 2 2, which is bifurcated to form arms, between which is a recess 3, and another end portion 4, so that a series of blanks can be cut from a strip *b* of sheet metal in the manner shown in Fig. 1 without waste of material between the blanks, the end portion 4 of one blank comprising the material removed for the formation of the recess 3 between the arms of the next blank. The end portion 4 is of sufficient size to permit its conversion into a tubular shank or eyelet 5, adapted for attachment to a boot or shoe or other article. The arms 2 2 are bent inwardly toward each other, as shown in Fig. 3, and the blank is bent to locate the arms 4 4 over the shank 5, thus forming the head portion of the hook from said arms, the arms being connected with the eyelet portion by the neck 6, which is narrower than the said end portions. It will be seen that the head portion thus formed is composed of two arms, which are separated from each other by a slot or recess extending from the outer end of the head to the neck. The head thus formed is particularly adapted to be engaged with a celluloid covering 7, the said covering filling the slot or recess and projecting under, as well as over, the head portion of the hook. Owing to the fact that the slot or recess in the head portion of the hook is open at the outer end of the head, the celluloid covering has a greater thickness or body at the outer end of the head than would be the case if the metal portion of the head were continuous at its outer end, in which case the celluloid veneering would be very thin at that point, which forms the tip or point of the hook, and more liable to be worn away and expose the metal than is the case with my improved hook. The arms 2 2 are preferably provided with notches or recesses 9 9 to increase the firmness of the engagement of the celluloid covering with the head portion. A notch 10 is preferably formed at the inner end of the recess 3 to enable the arms 2 to be freely bent to the position shown in Fig. 3.

In Figs. 13 and 14 I show a sheet-metal lacing-hook comprising a head 12, a neck 13, a base 14, and prongs 15 15 16 16, all made in a single piece from a blank formed as shown in Figs. 9 and 10. The prongs 16 16 are sepa-



rated by a recess the edge of which is equal with the margin of the head 12, so that the blanks can be cut without waste of material between them, as shown in Fig. 9. After the  
5 blanks are removed the prongs 16 16 are bent inwardly toward each other, the prongs 15 15 being at the same time bent downwardly from the neck portion of the hook. This hook is adapted to be used without a celluloid cover-  
10 ing.

The blank shown in Figs. 9, 10, and 11, like that shown in Figs. 1 and 2, comprises two end portions, one formed for conversion into a head and the other for conversion into an  
15 attaching member, the two end portions being connected by a neck which is narrower than said portions, so that it is adapted to present a suitable bearing or support for the lacing-cord.

20 I claim—

1. A lacing-hook blank comprising two end portions, one formed for conversion into a head and the other into an attaching member, and a narrower neck substantially midway

between said end portions and connecting the 25 same, one of the end portions being bifurcated and the other conforming in outline with the space in the said bifurcated portion.

2. A lacing-hook comprising two members formed from a sheet-metal blank, one of said 30 members forming a head member and the other an attaching member, and a narrower neck substantially midway between said members and connecting the same, the head member being bifurcated and having a wear- 35 resisting cover applied thereto, and the external configuration of the attaching member conforming in outline with the space in the other member prior to its being formed into a head member. 40

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 18th day of November, A. D. 1897.

GEORGE A. WELD.

Witnesses:

A. D. HARRISON,  
P. W. PEZZETTI.