

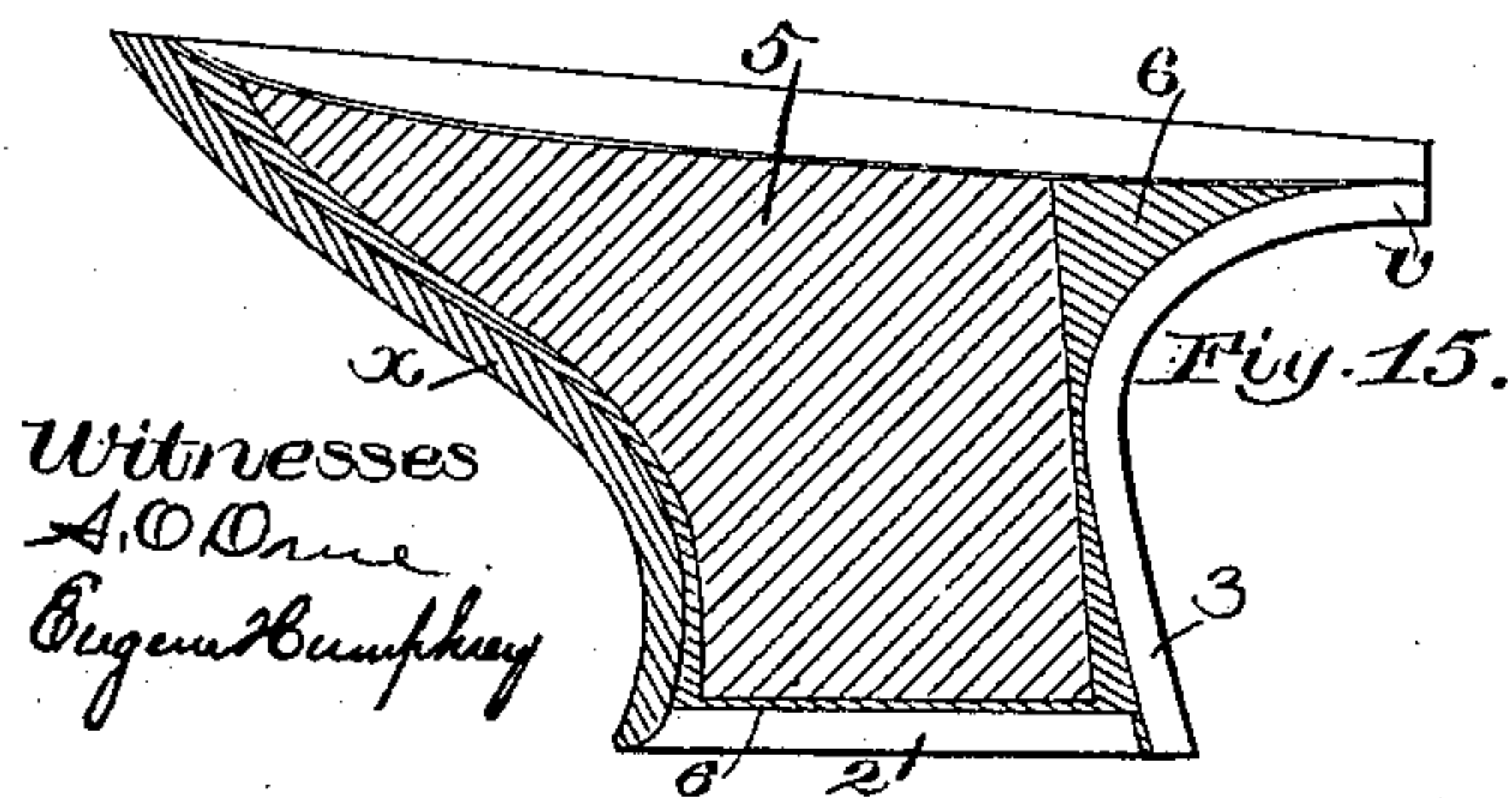
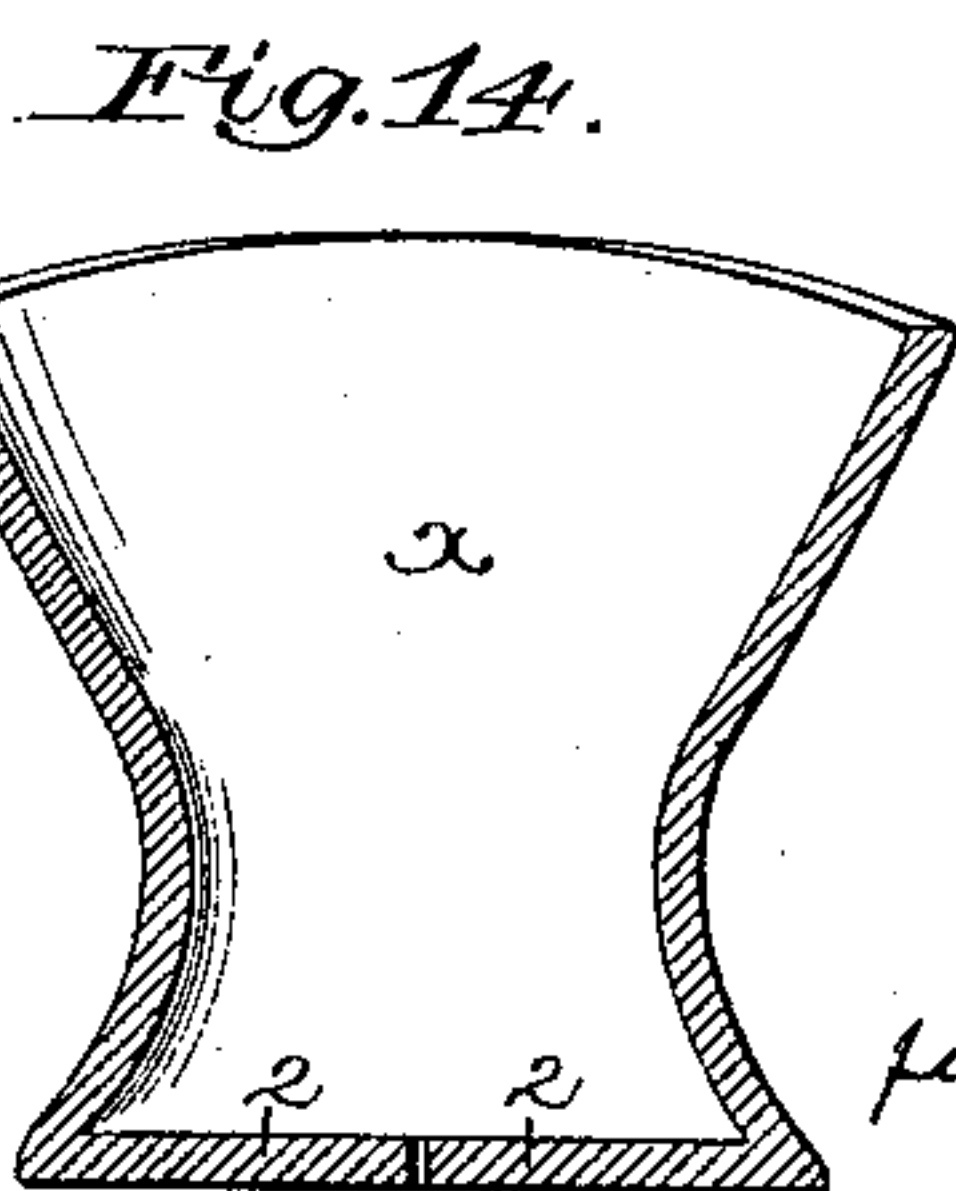
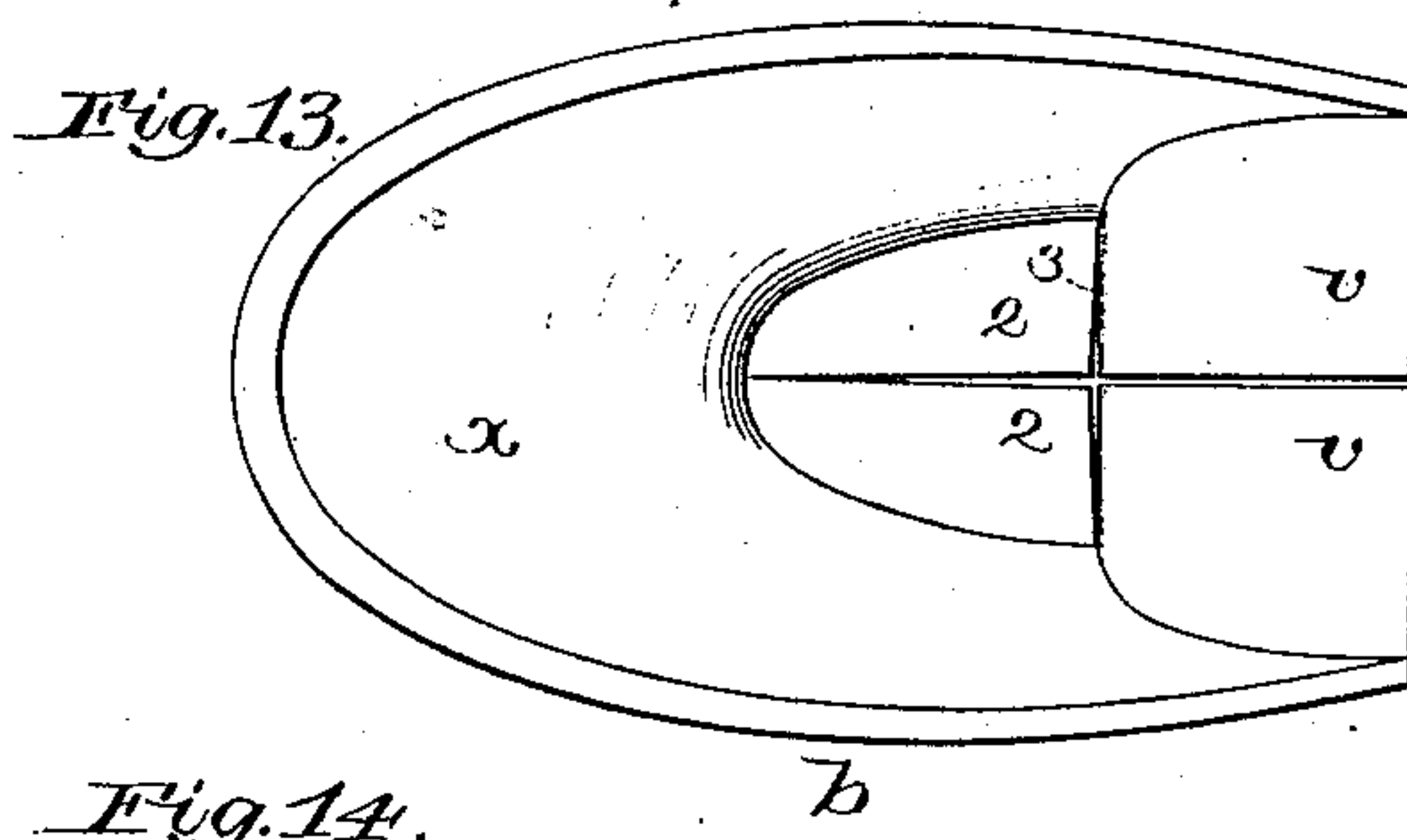
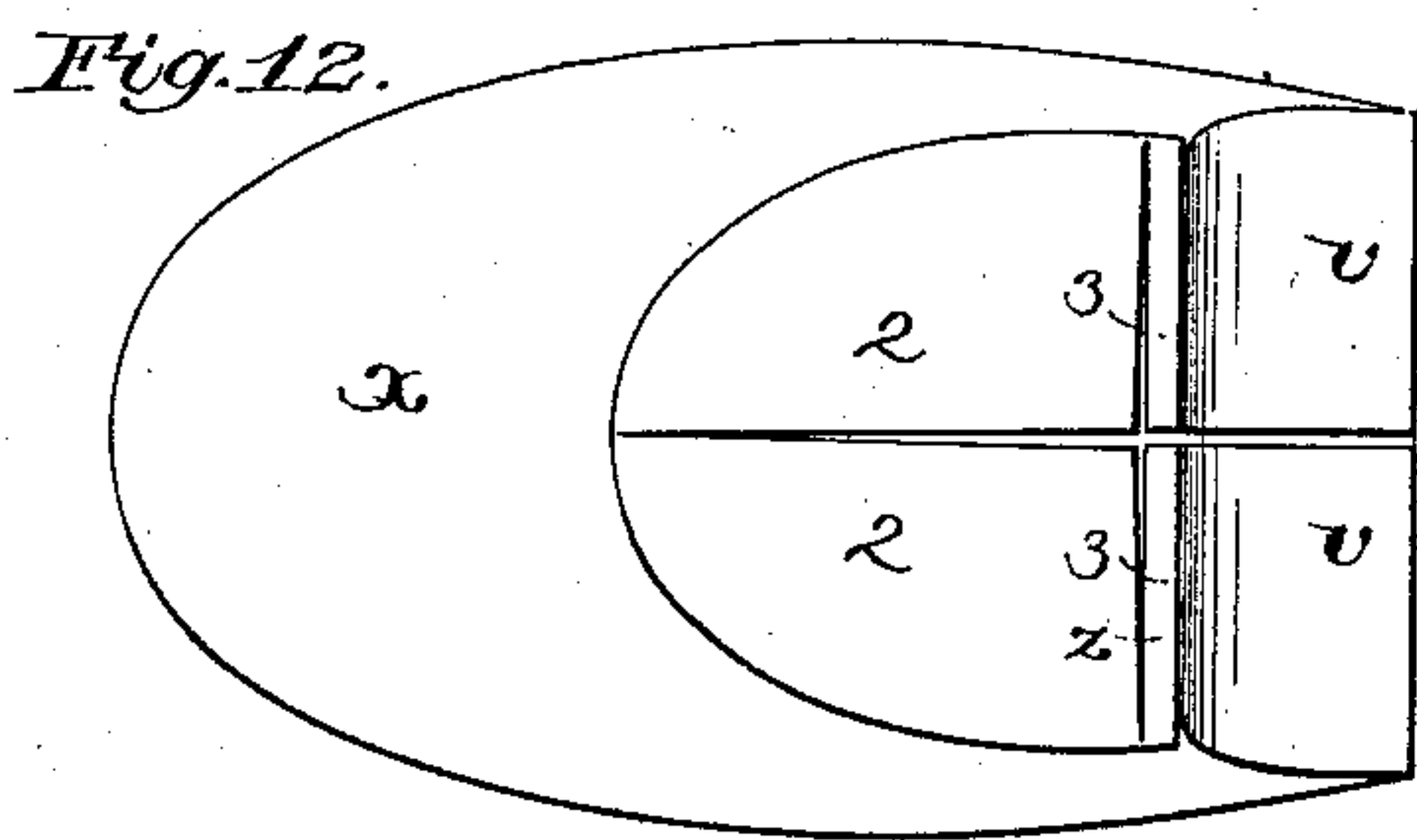
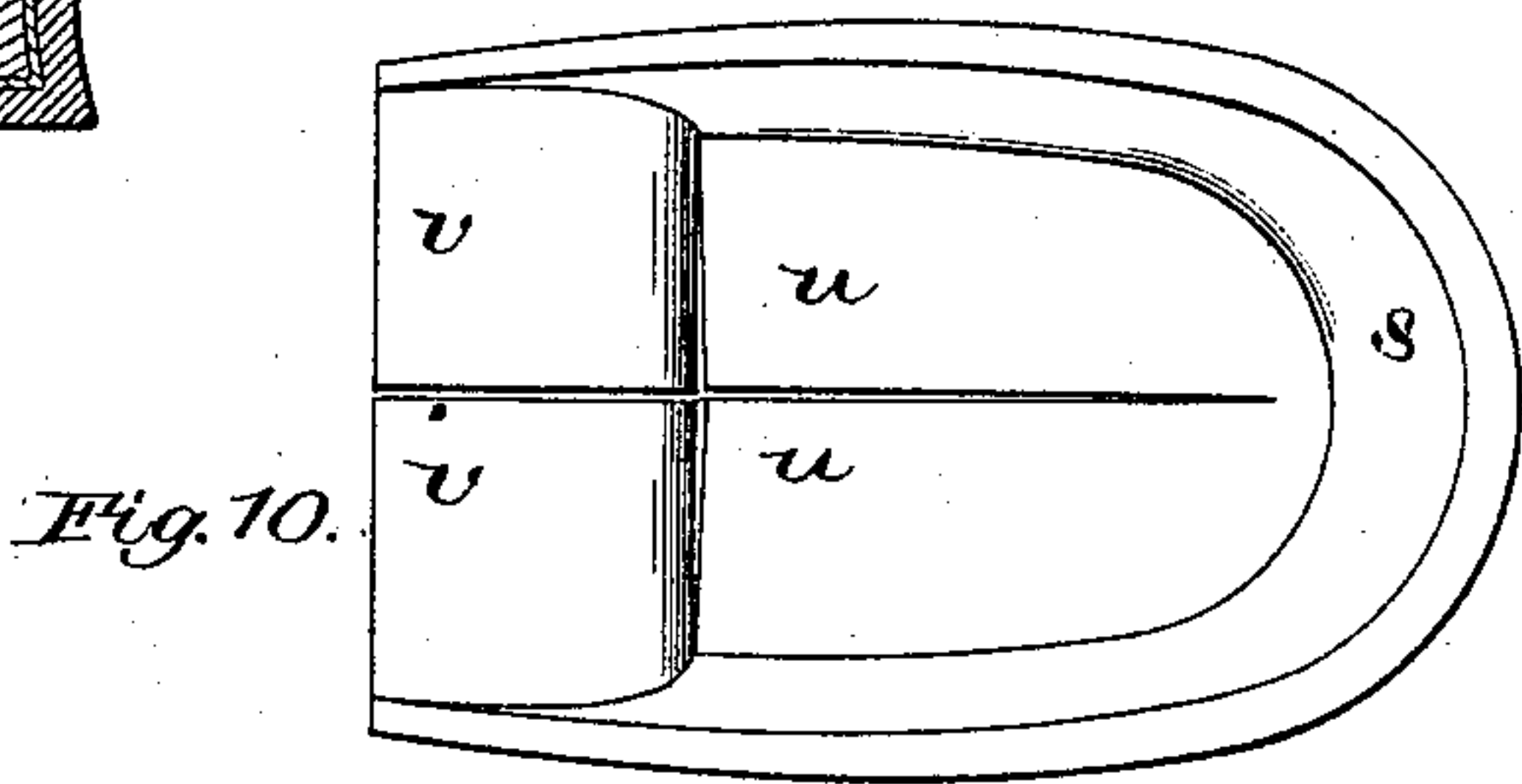
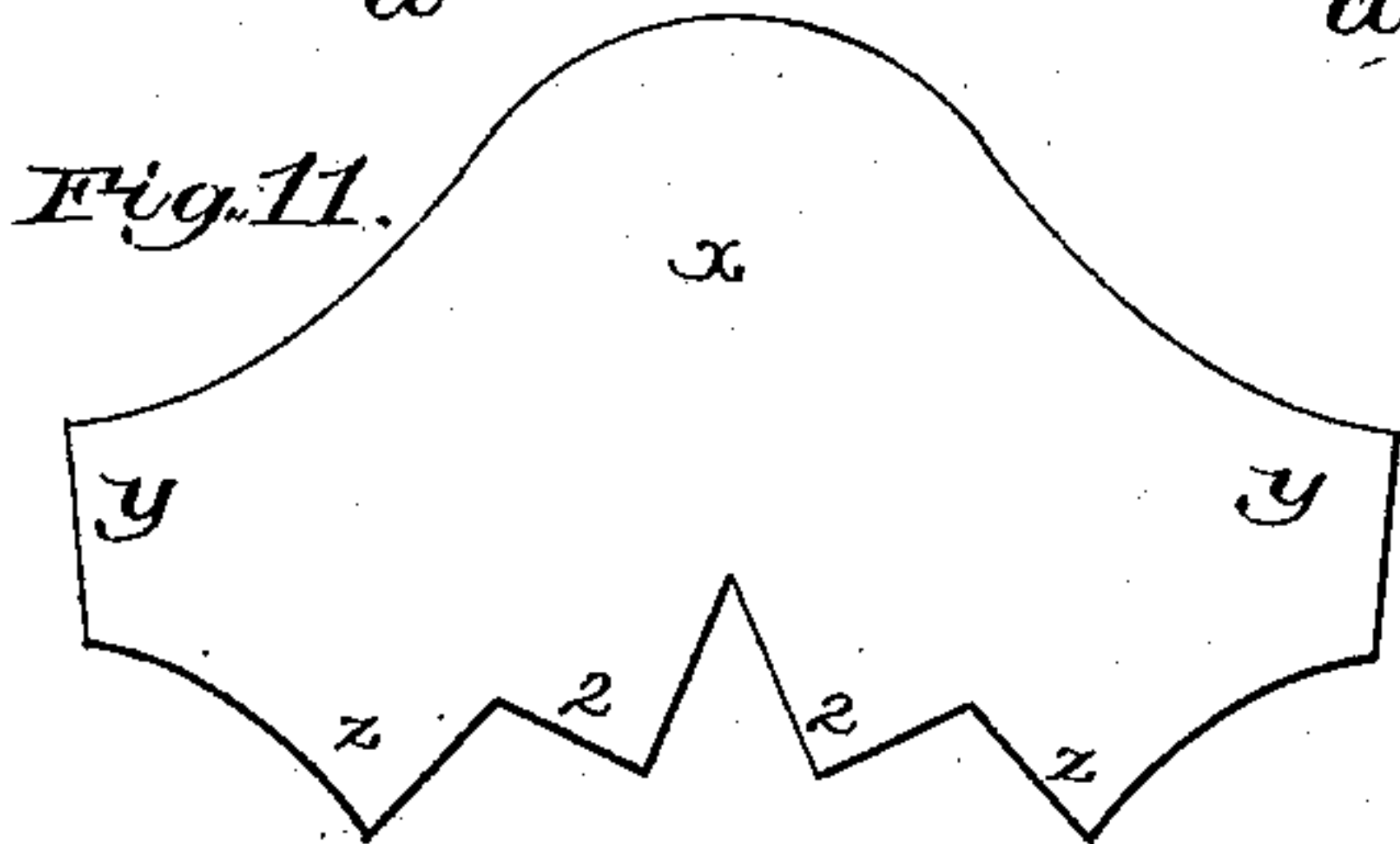
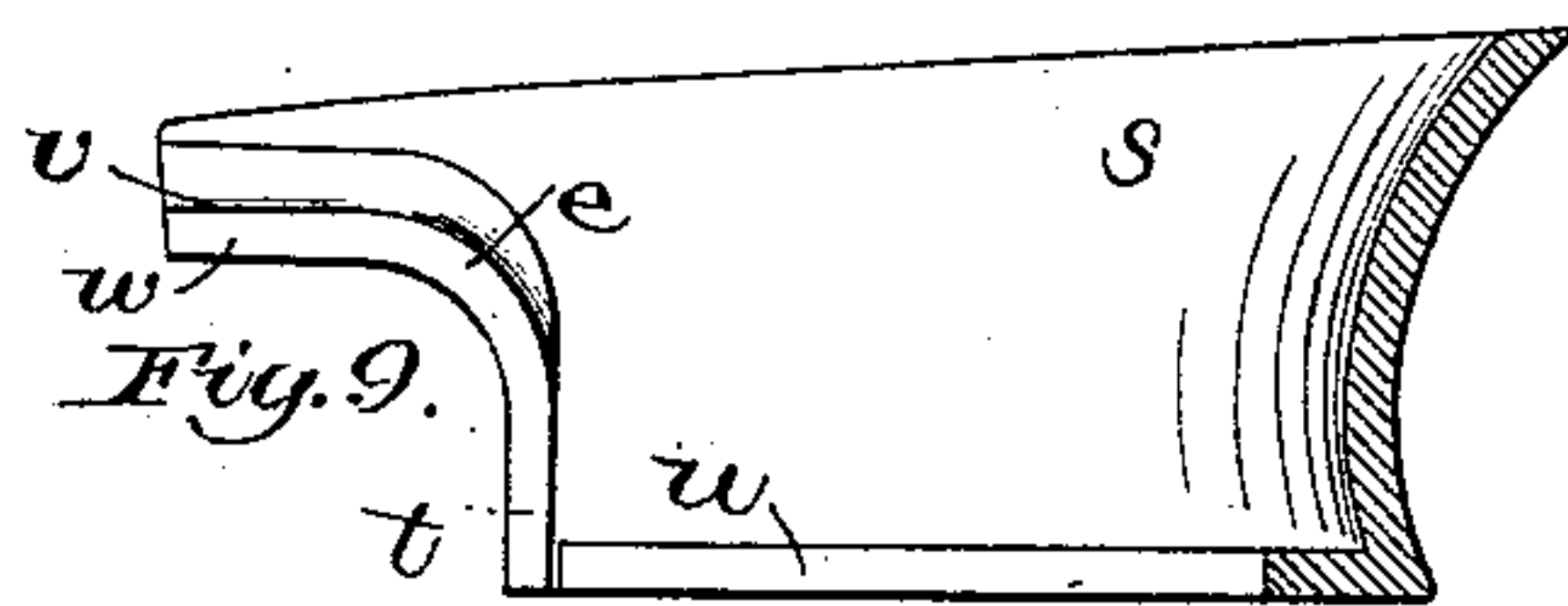
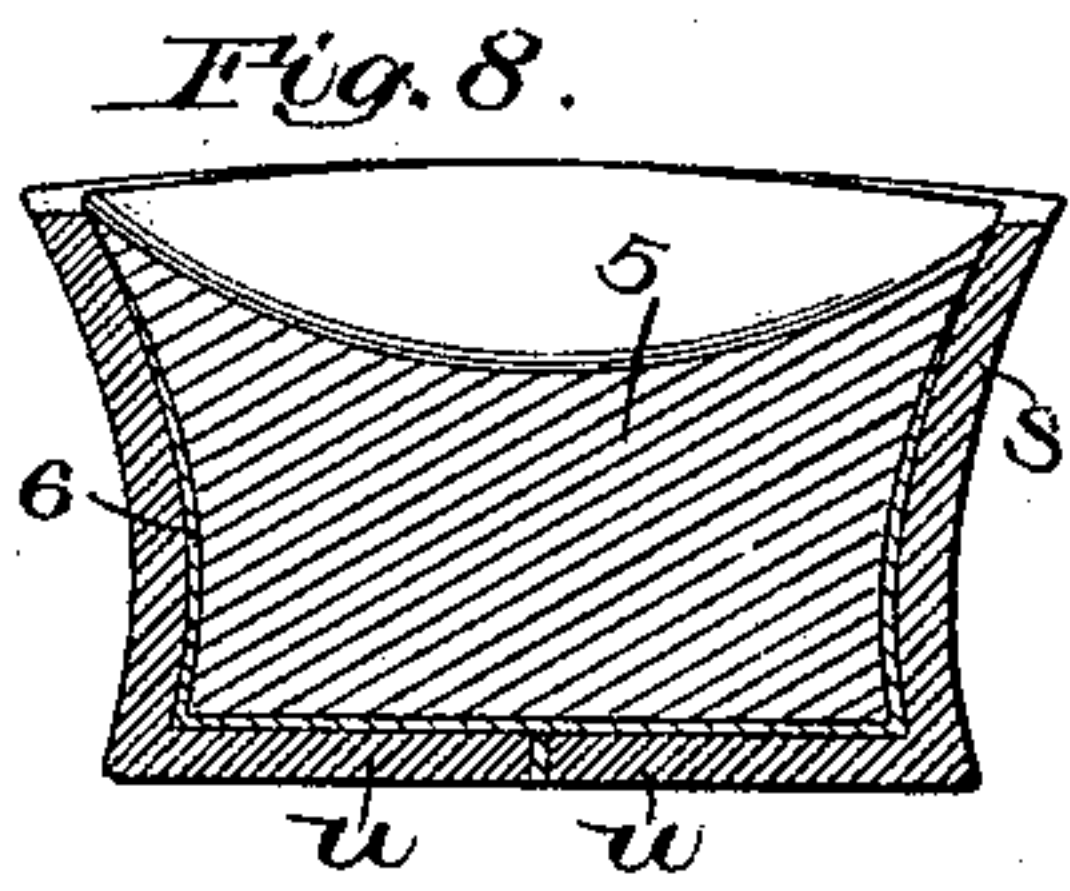
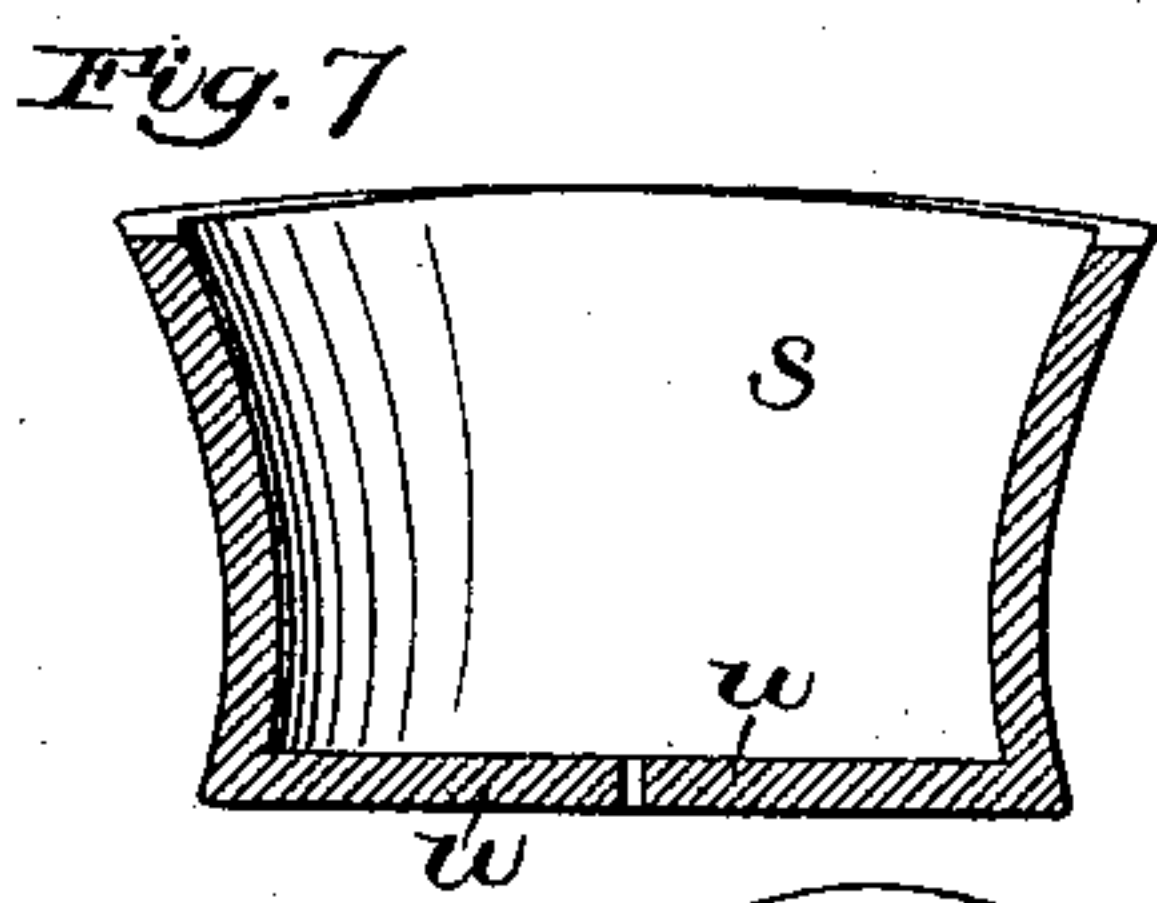
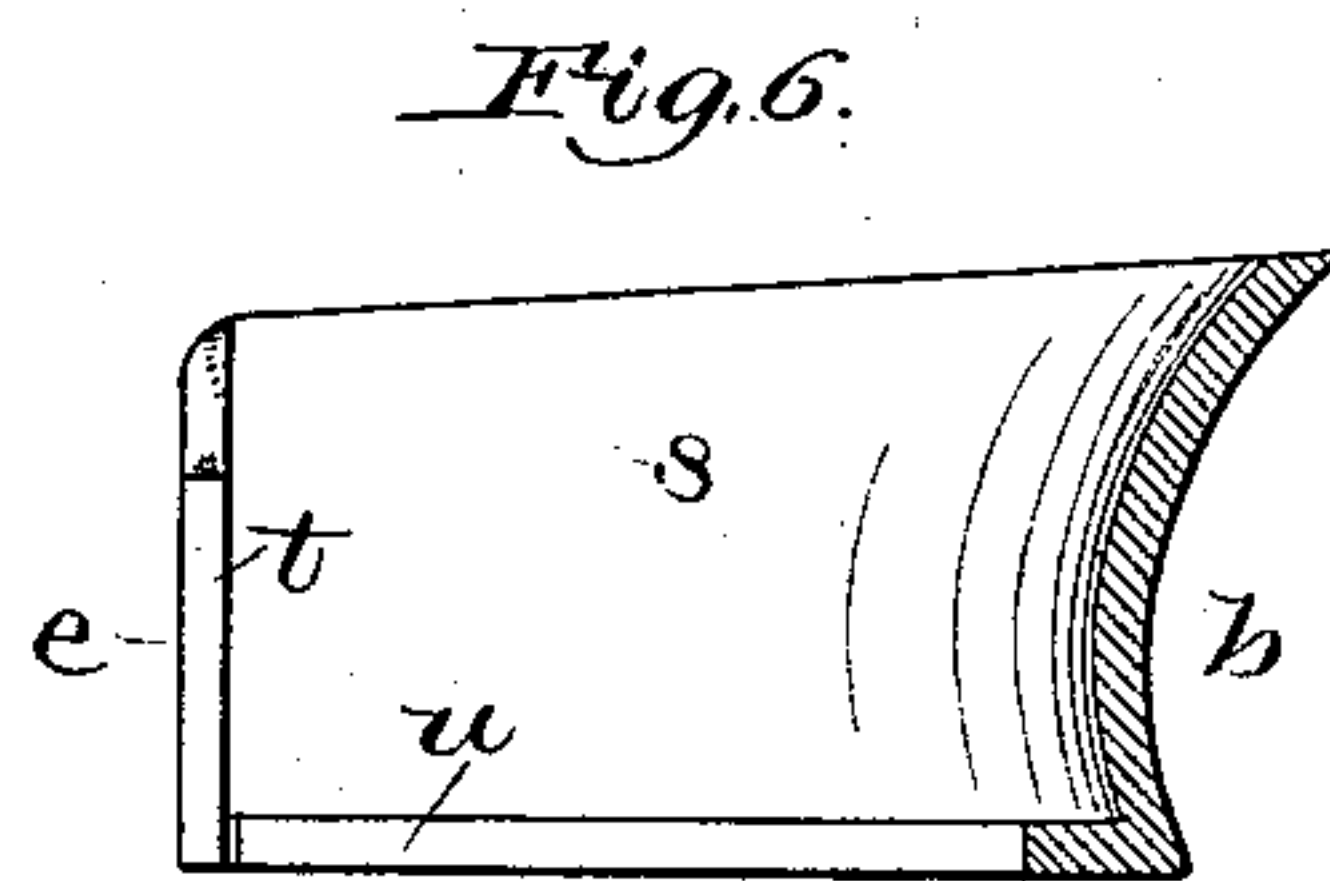
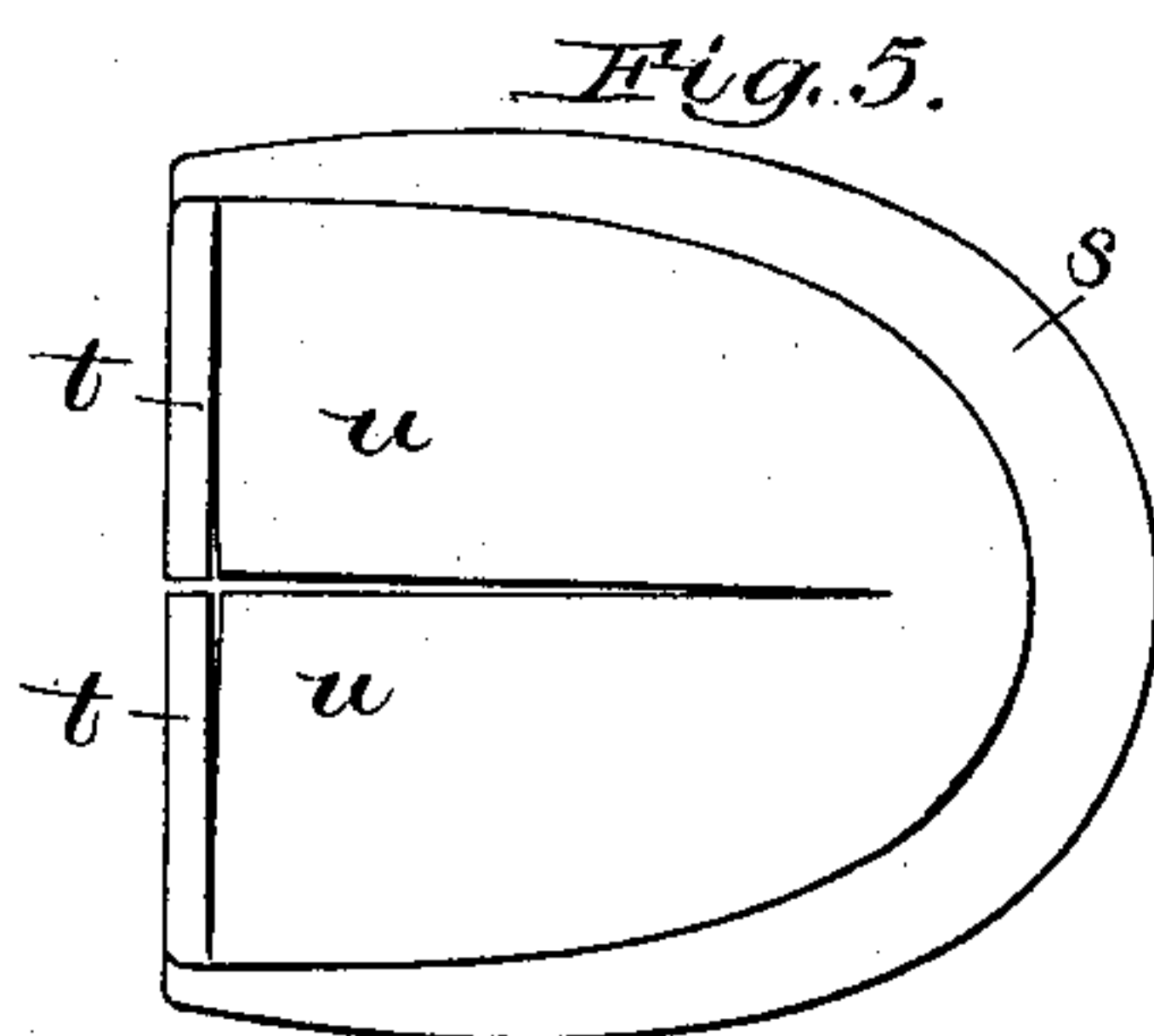
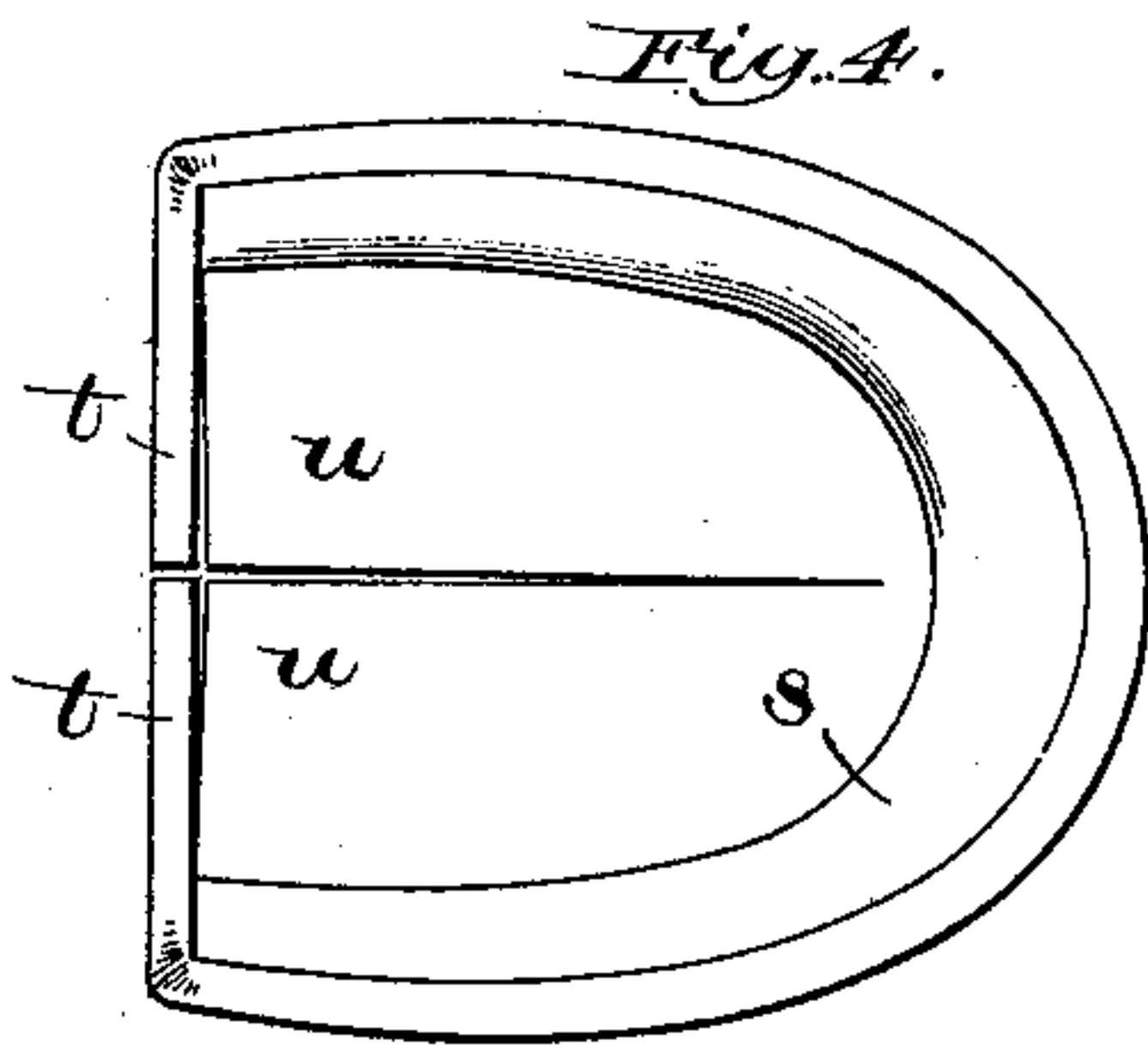
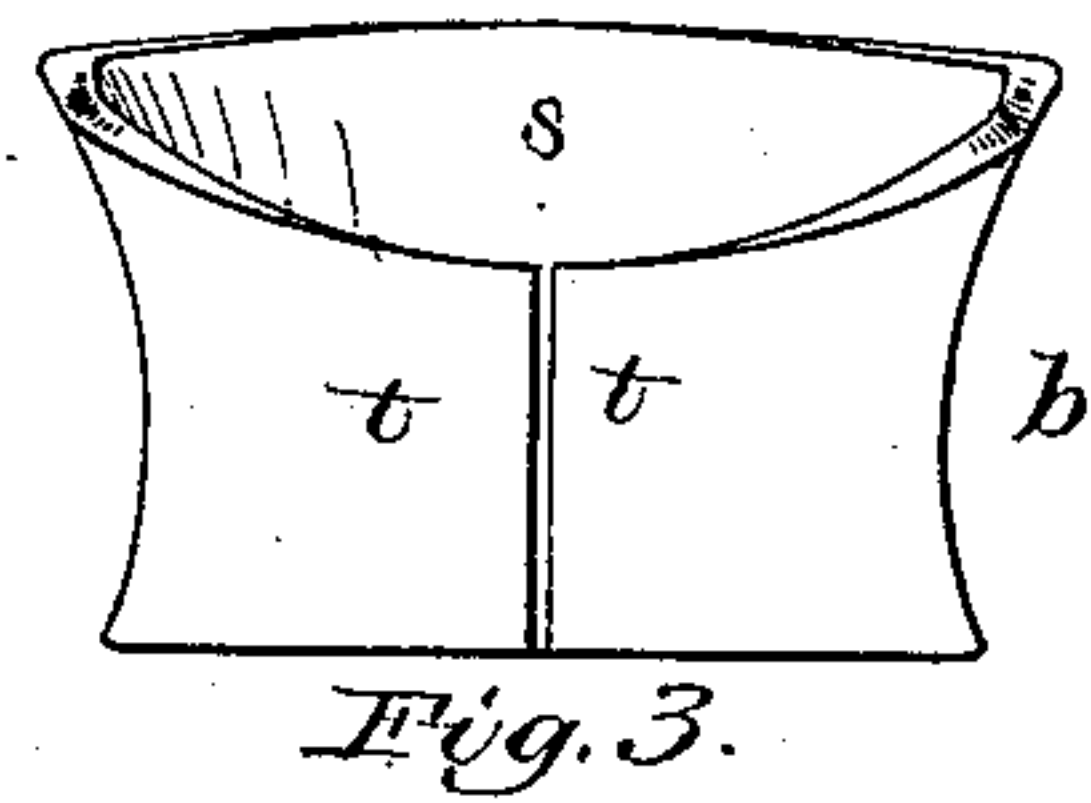
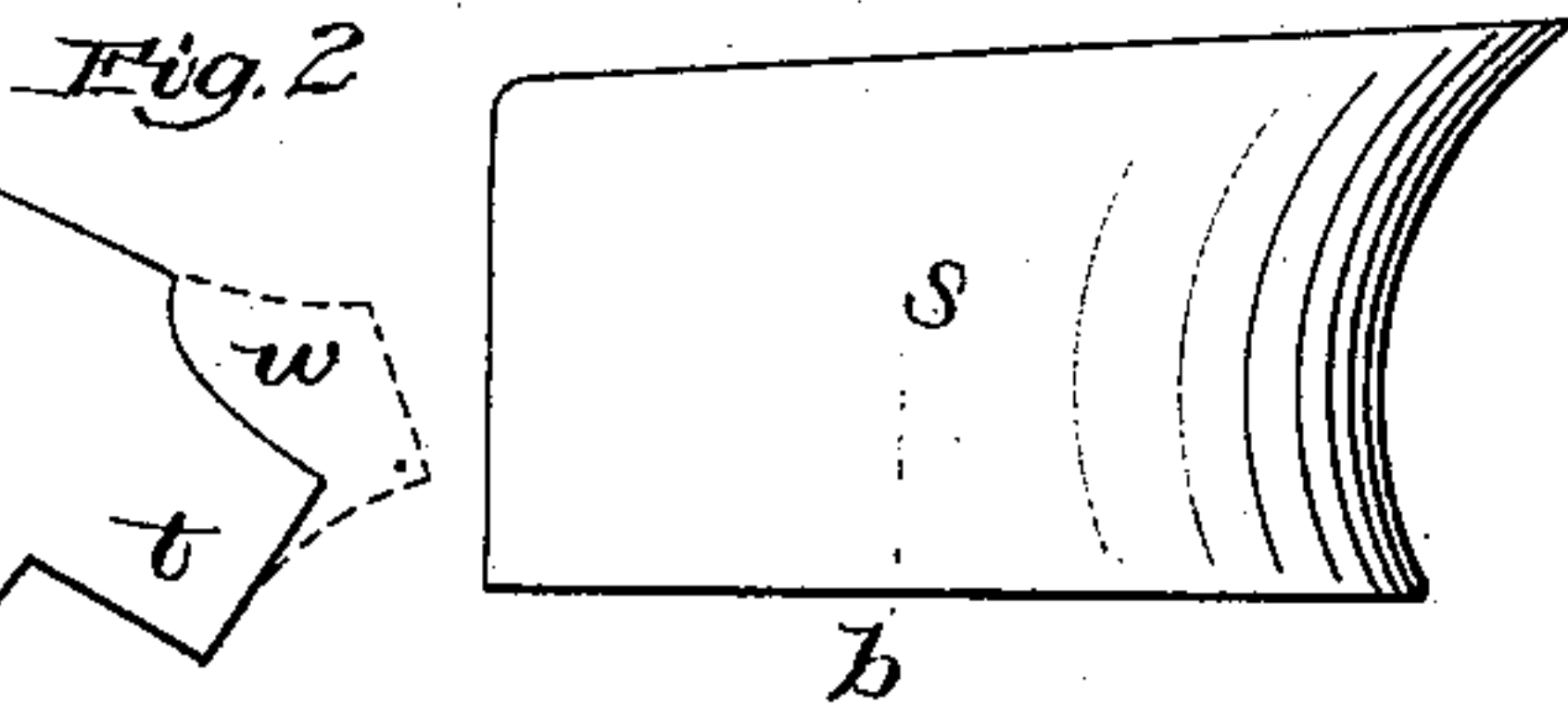
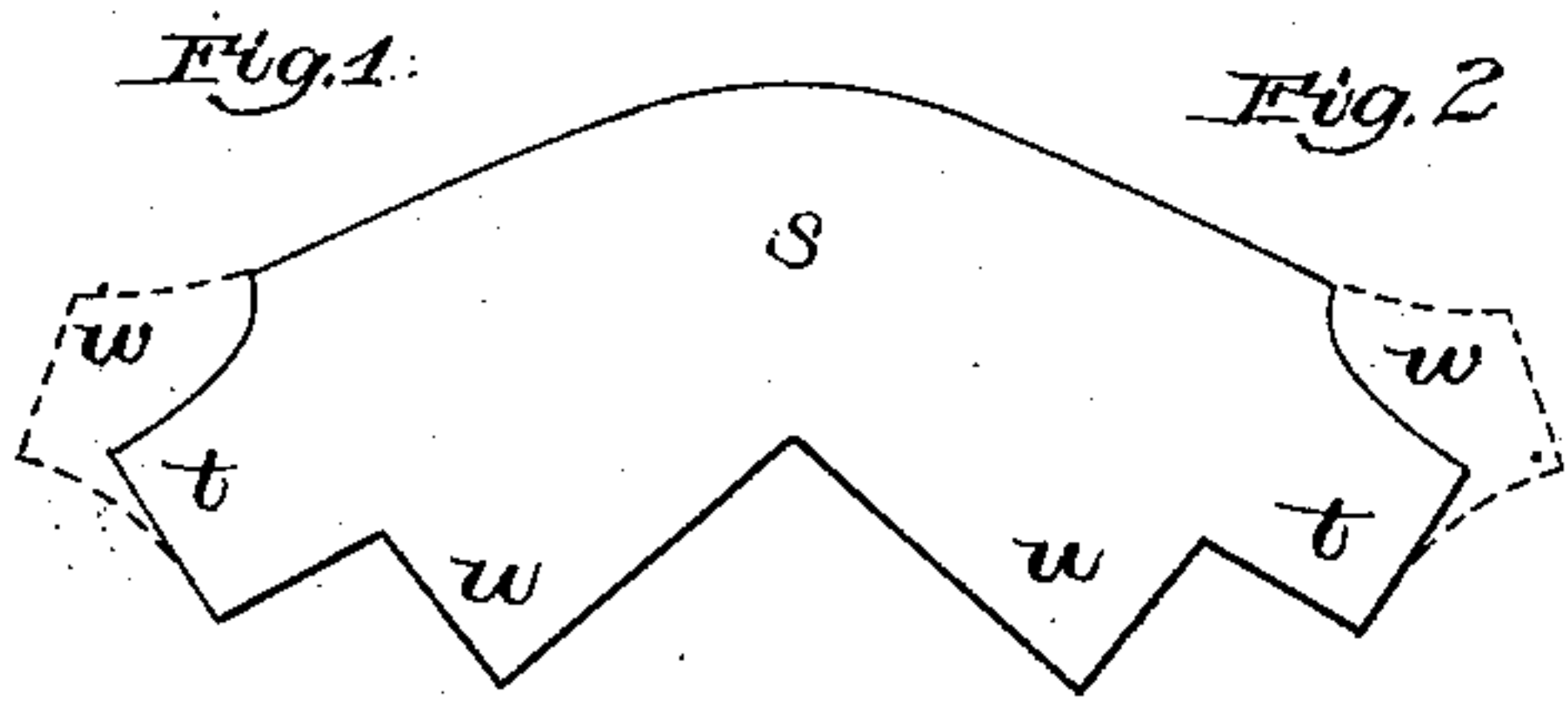
(No Model.)

2 Sheets—Sheet 1.

E. J. LE GAY.  
BOOT OR SHOE HEEL.

No. 324,127.

Patented Aug. 11, 1885.



Witnesses  
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(No Model.)

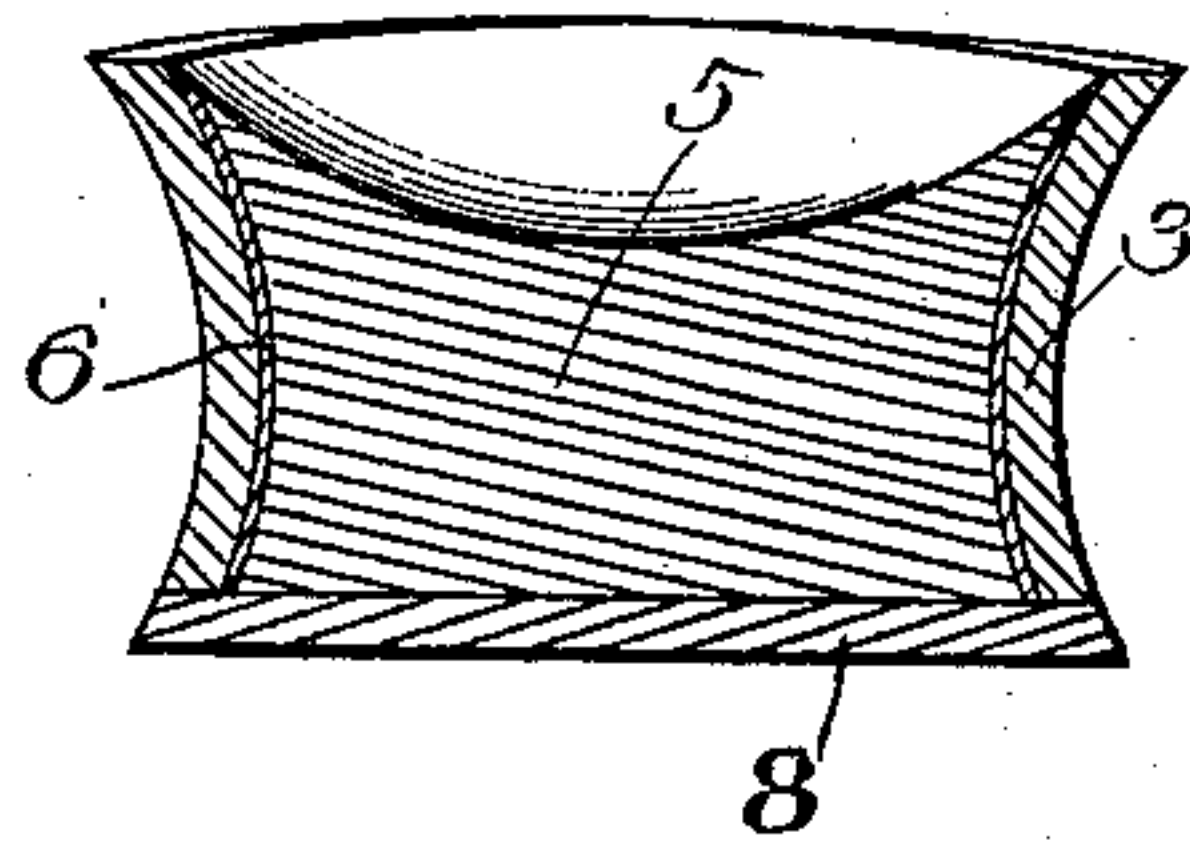
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E. J. LE GAY.  
BOOT OR SHOE HEEL.

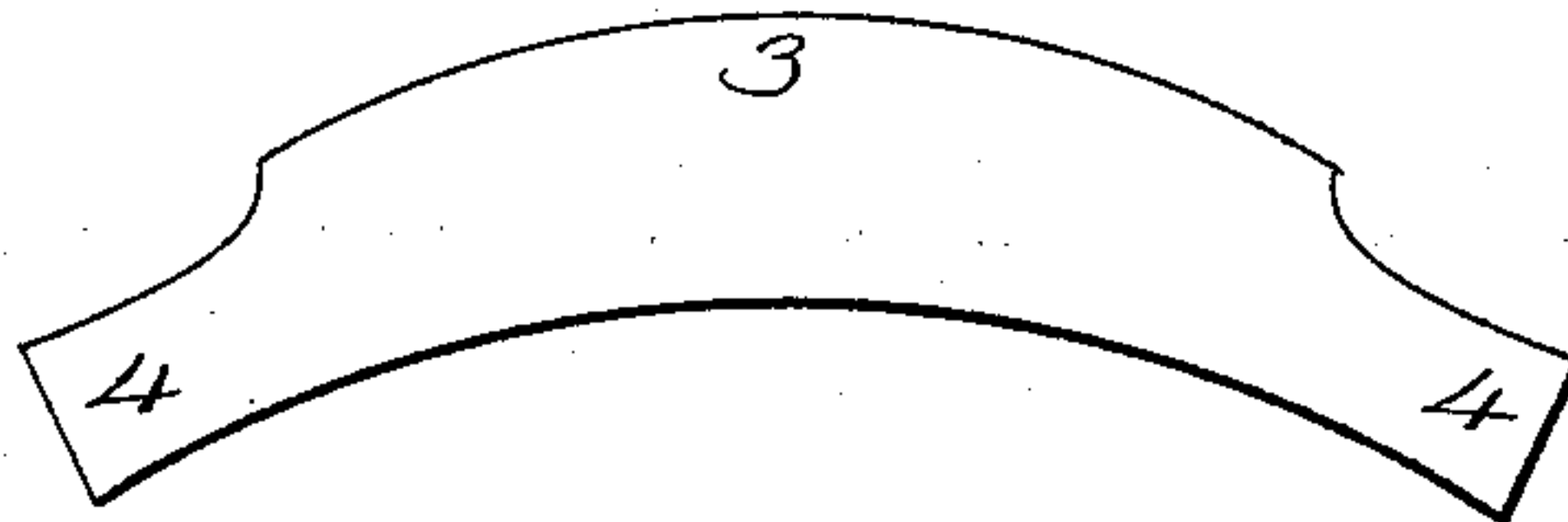
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*Fig. 16.*



*Fig. 17.*



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# UNITED STATES PATENT OFFICE.

EDWARD J. LE GAY, OF BOSTON, MASSACHUSETTS.

## BOOT OR SHOE HEEL.

SPECIFICATION forming part of Letters Patent No. 324,127, dated August 11, 1885.

Application filed January 15, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD J. LE GAY, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved  
5 Boot and Shoe Heel, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

This invention has for its object the production of an improved heel for boots and shoes, and it will, in connection with the accompanying drawings, be hereinafter fully described and particularly claimed.

In said drawings, Figure 1 is a plan view of the blank which I mold into form as the external wall of my heel, of plain style or pattern, the dotted lines indicating the addition or extension thereto requisite when the heel is formed with the front overarched extension shown in Figs. 9, 10, 12, 13. Fig. 2 is a side elevation of the molded outer wall of the heel as molded from the blank, shown by solid lines in Fig. 1. Fig. 3 is a front elevation of Fig. 2, that is taken as at the left thereof.  
20 Fig. 4 is a top plan view of the heel shown in Figs. 2 and 3. Fig. 5 is an inverted or under side plan view of the heel shown in Figs. 2, 3, 4. Fig. 6 is a longitudinal vertical section of the same. Fig. 7 is a transverse vertical section thereof. Fig. 8 is a view like Fig. 7, but showing the wood filling of the heel in place therein. Fig. 9 is a section similar to Fig. 6, but showing an overarched extension at the top of the breast of the heel. Fig. 10  
35 is a top plan view of the shell shown in Fig. 9. Fig. 11 is an outline or plan of the blank employed to mold the shell or outer wall of the fancy heels shown in Figs. 9, 10. Fig. 12 is an under side plan view of the shell or wall as molded from the blank shown in Fig. 11. Fig. 13 is a top plan view of the shell shown in Fig. 12. Fig. 14 is a transverse vertical section of the same. Fig. 15 is a longitudinal vertical section of the same, but showing the  
45 wood filling in place therein. Fig. 16 is a view similar to Fig. 14, but showing the wall or shell as molded from the blank shown in Fig. 17. Fig. 17 is a plan of the blank adapted to mold a bottomless heel shell or wall, as  
50 shown in Fig. 16.

When it is desired to form a "plain" heel, so called, like that shown in Figs. 2, 3, 4, 5, 6,

and it is desired to mold the bottom as an integral part of the blank which constitutes the vertical walls, the blank will be formed  
55 like that shown in Fig. 1, the main portions of which will, when molded, form the side and rear wall of the shell or heel-case, while parts *t t* will constitute the breast of the shell, and parts *u u* will constitute the bottom of the  
60 shell. This blank may be formed of leather, leather-board, or other moldable material which is susceptible to the requisite finish and polish. It is duly moistened to facilitate the  
65 forming action of the molds, within which it is placed and subjected to such pressure as to be permanently set to form, as shown in the divers figures, wherein it is represented as thus molded.

When it is desired to form the common heel  
70 with an arched extension, *v*, as shown in Figs. 9, 10, the blank is formed with the additional areas indicated by dotted lines at *w w*, Fig. 1, which, as the heel is molded, assume the position and constitute such arched portion.  
75

In the fancy or "pompadour" heels, so called, (shown in Figs. 12, 15,) that portion of the blank marked *x*, Fig. 11, forms the side and rear wall of the heel, while the ends *y* form the said front extension, *v*. The projections  
80 *z* form the lower part of the breast, and the projections 2 the bottom of the heel.

When it is desired to mold the wall of the heel without a bottom, (which latter in such case is formed as a lift and separate from the  
85 wall, as shown at 8 in Fig. 16,) the blank for plain heels is formed as shown in Fig. 17, the main portion 3 of which forms the side and rear wall of the heel, while the ends 4 4 form the breast thereof.  
90

When the wall of the heel has been molded and set to form, as stated, and has become properly dried, I then fill them, as shown at 5, with wood, the same being formed rapidly and inexpensively in an automatic machine, so as to  
95 loosely fill the cavity in the molded shell, as shown; and before inserting said filling-block 5 in the shell I insert a sufficient amount of plastic cement of a suitable kind that will harden, (heated gutta-percha being an example,) to  
100 fill the spaces between said block 5 and the walls of the shells, as is shown at 6, Figs. 8, 15, and 16. When the shell, the block, and the cement are thus brought together, the

whole are compressed together in molds till the cement has set and hardened.

In this application as originally filed, molds or dies especially adapted to shape or  
5 mold the walls of these heels and to mold the wall and filling together were fully shown and described, and by division of the application said molds have been embodied in an additional application, to which reference is hereby  
10 made for information as to such molds and the method of their use for the production of my heel.

I claim as my invention—

1. A boot or shoe heel shell or wall formed  
15 of thick leather or analogous moldable material, molded, shaped, and set to form to comprise the sides, rear, and breast of the heel, with the ends of the blank united at the breast thereof, substantially as specified.

2. A boot or shoe heel shell or wall formed  
20 of thick leather or analogous moldable material, molded, shaped, and set to form to comprise the sides, rear, breast, and bottom of the heel, with the meeting edges of the bottom and breast of the blank arranged at the  
25 longitudinal vertical center of the heel, substantially as specified.

3. A boot or shoe heel formed with an outer shell or wall, substantially as described, and having a duly-formed block of wood loosely  
30 fitted therein and secured in place by an adhesive hard-drying material interposed between the wall and block and filling the spaces between the same, substantially as specified.

EDWARD J. LE GAY.

Witnesses:

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