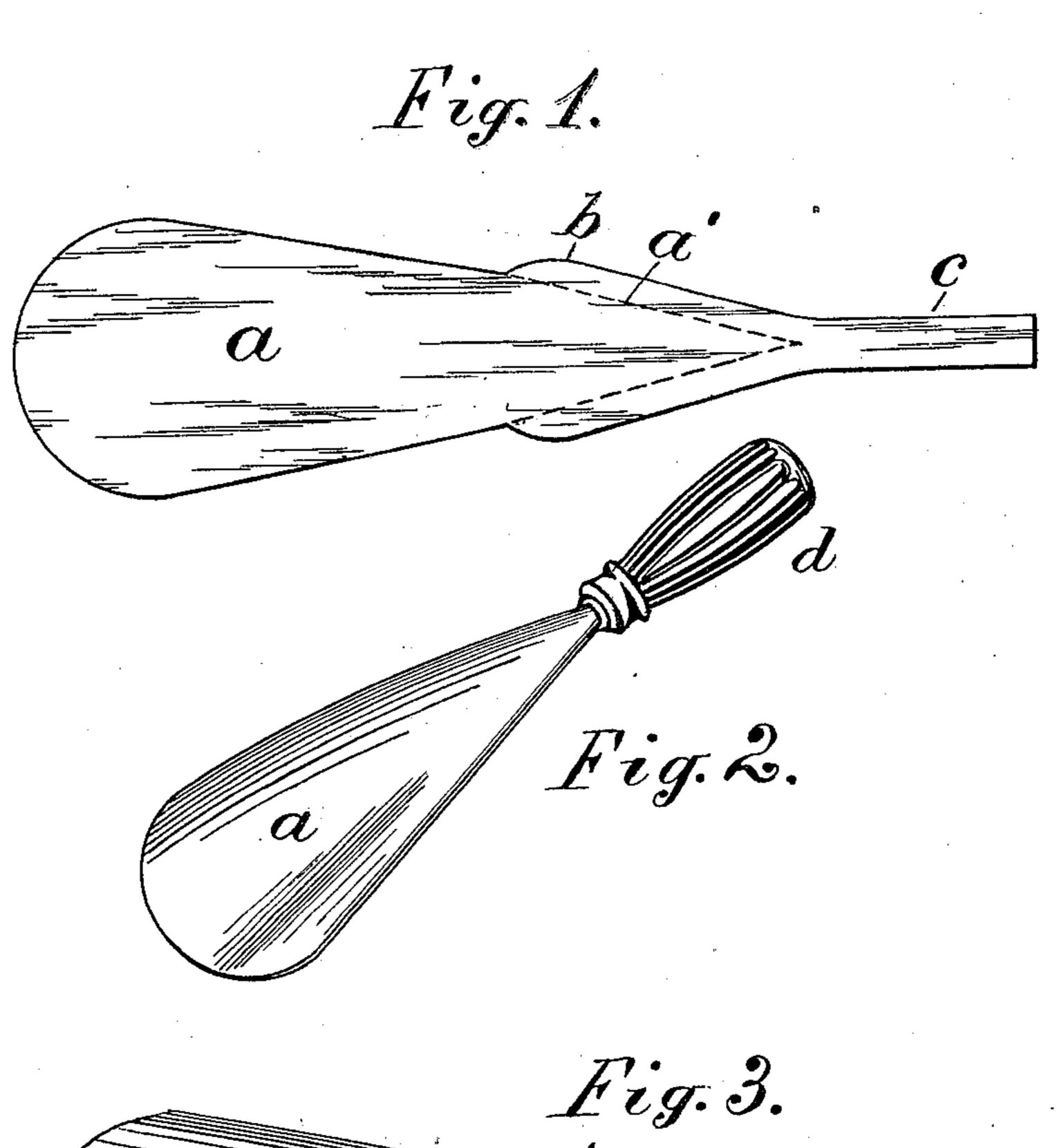
No. 685,548.

Patented Oct. 29, 1901.

## A. G. WILLIAMS. SHOE HORN.

(Application filed June 26, 1901.)

(No Model.)



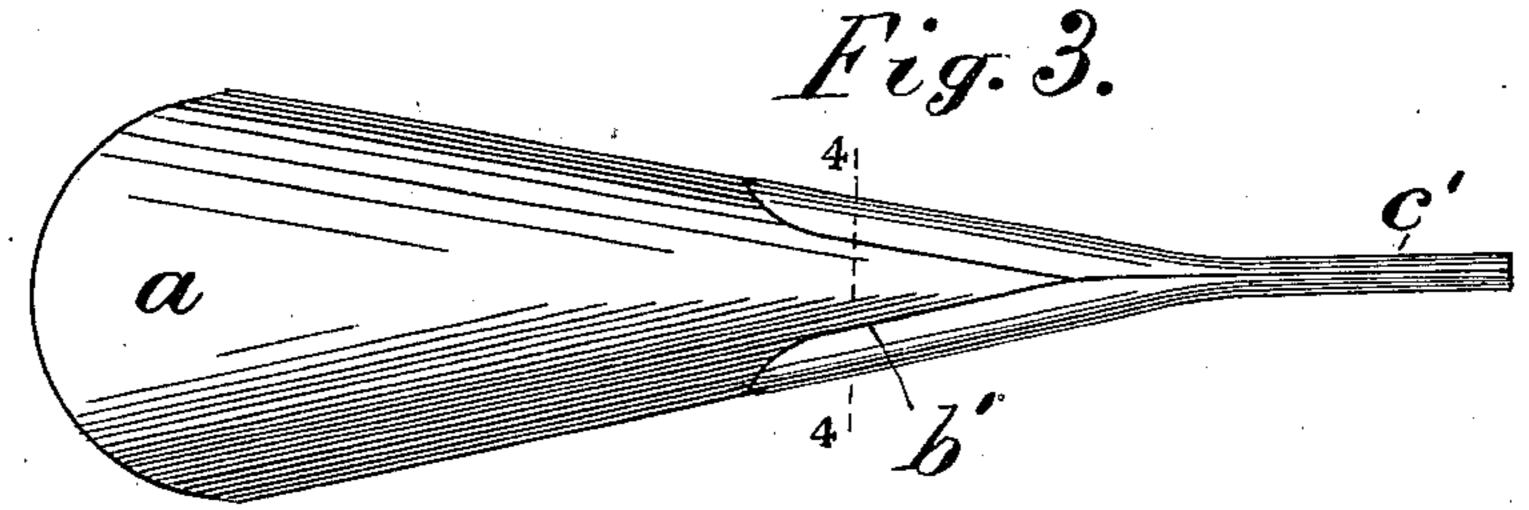
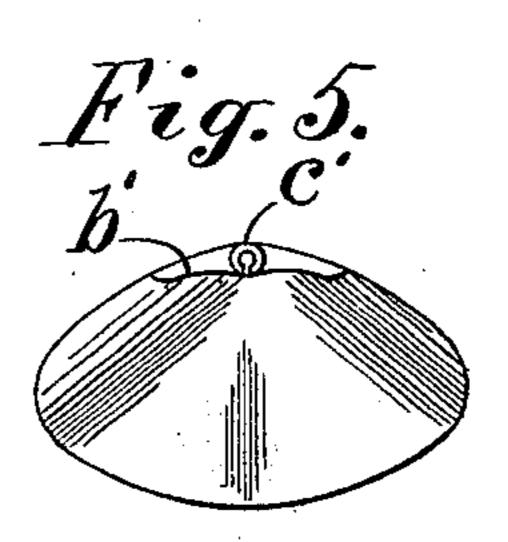


Fig. 4.



Attest: L. Lee. Walter 26. Falmage. Inventor. Alfred G. Williams her Thos. J. Crane, alty.

## United States Patent Office.

ALFRED G. WILLIAMS, OF NEWARK, NEW JERSEY, ASSIGNOR TO HAVELL MANUFACTURING COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## SHOE-HORN.

SPECIFICATION forming part of Letters Patent No. 685,548, dated October 29, 1901.

Application filed June 26, 1901. Serial No. 66,055. (No model.)

To all whom it may concern:

Be it known that I, ALFRED G. WILLIAMS, a citizen of the United States, residing at 319 Belleville avenue, in Newark, Essex county, New Jersey, have invented certain new and useful Improvements in Shoe-Horns with Tubular Tangs, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The object of the present invention is to furnish a shoe-horn with a tubular tang to which a handle can be applied, thus fitting the shoe-horn for use with ornamented handles and others of fancy design, so as to form

15 parts of mounted toilet sets.

As the shoe-horn is made of sheet metal, it. would be undesirable and expensive to form a tang separately and attach it to the horn, and the sheet metal itself is not rigid enough 20 to form a tang without increasing its thickness in some manner. Furthermore, a tang attached to the sheet metal would grasp the metal merely by its own thickness and the horn would be liable to bend if of such thick-27 ness adjacent to the handle, as the horn is narrow and weak at its upper end. To form a tang of sufficient strength and to connect the same with sufficient rigidity to the shoehorn, I construct the tang by extending the 30 sheet metal from the upper or smaller end of the horn in a tongue of suitable width to roll into a tubular tang and form integral with such tongue lateral wings or flanges upon the upper end of the horn, which can be folded or 35 curved upon the edges of the horn to stiffen the same at its junction with the tang.

The shoe-horn has very little curvature in cross-section, and where it is contracted to join the tang it would have very little sectional area of metal at the junction without the wings which I provide. With my construction the tang forms a close-rolled cylinder, the metal of which extends directly into the curved wings where they are folded upon the edges of the horn, and thus greatly strengthens the junction of the horn and the

tang.

The invention will be understood by reference to the annexed drawings, in which—

Figure 1 is a plan of the blank for the shoe- 50 horn and tang. Fig. 2 is a perspective view of the shoe-horn having a handle applied to the tang. Fig. 3 shows the under side of the shoe-horn formed with the integral tang. Fig. 4 is a section on line 4 4 in Fig. 3, showing 55 the stiffening of the horn's edges by the curved wings; and Fig. 5 is an end view of the entire horn looking toward the tang.

The blank for the combined shoe-horn and tang is shown in Fig. 1, where a designates 60 the body of the horn, which when finished is slightly concave transversely, as shown in Fig. 2. From the smaller end of the body a tongue c is projected of suitable width to roll into a close cylindrical tang c', as shown in c

Figs. 3 and 5.

The upper end of the horn is formed with the integral wings b, extending from the root of the tang along the edges of the body a for a suitable distance to reinforce the body when 70 folded over upon the same, as shown at b' in Figs. 3 and 4, which represent the horn inverted.

The end view in Fig. 5 shows clearly the thickening of the edges of the horn where it 75 is joined to the tang, and Figs. 3 and 5 both show the reinforcement of the horn by the

bent wings adjacent to the tang.

A handle d is shown in Fig. 2 secured upon the tang, and it will be understood that in 80 the case of a shoe-horn the handle is applied more for ornament than for support, as the shoe-horn is supported within the shoe when in use and the handle is not subjected to any strain. The tang provided by my invention 85 furnishes ample support for such a handle, in which no prying strain is exerted upon the implement, and the invention is thus adapted for such an article, although it would not be suitable for a trowel or other sheet-metal argo ticle which is subjected to severe strain and in which a large tubular handle is often employed.

Having thus set forth the nature of the invention, what is claimed herein is—

1. The shoe-horn a having integral tang c' of close-rolled cylindrical form, with integral wings b' extended from such tang and folded

over upon the edges of the horn, substantially as herein set forth.

2. The shoe-horn having integral tang c', of close-rolled cylindrical form, with integral wings b' extended from such tang and folded over upon the edges of the horn, and a handle secured upon such tang, substantially as herein set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 10 witnesses.

ALFRED G. WILLIAMS.

Witnesses:

J. D. CLARK, THOMAS S. CRANE.