

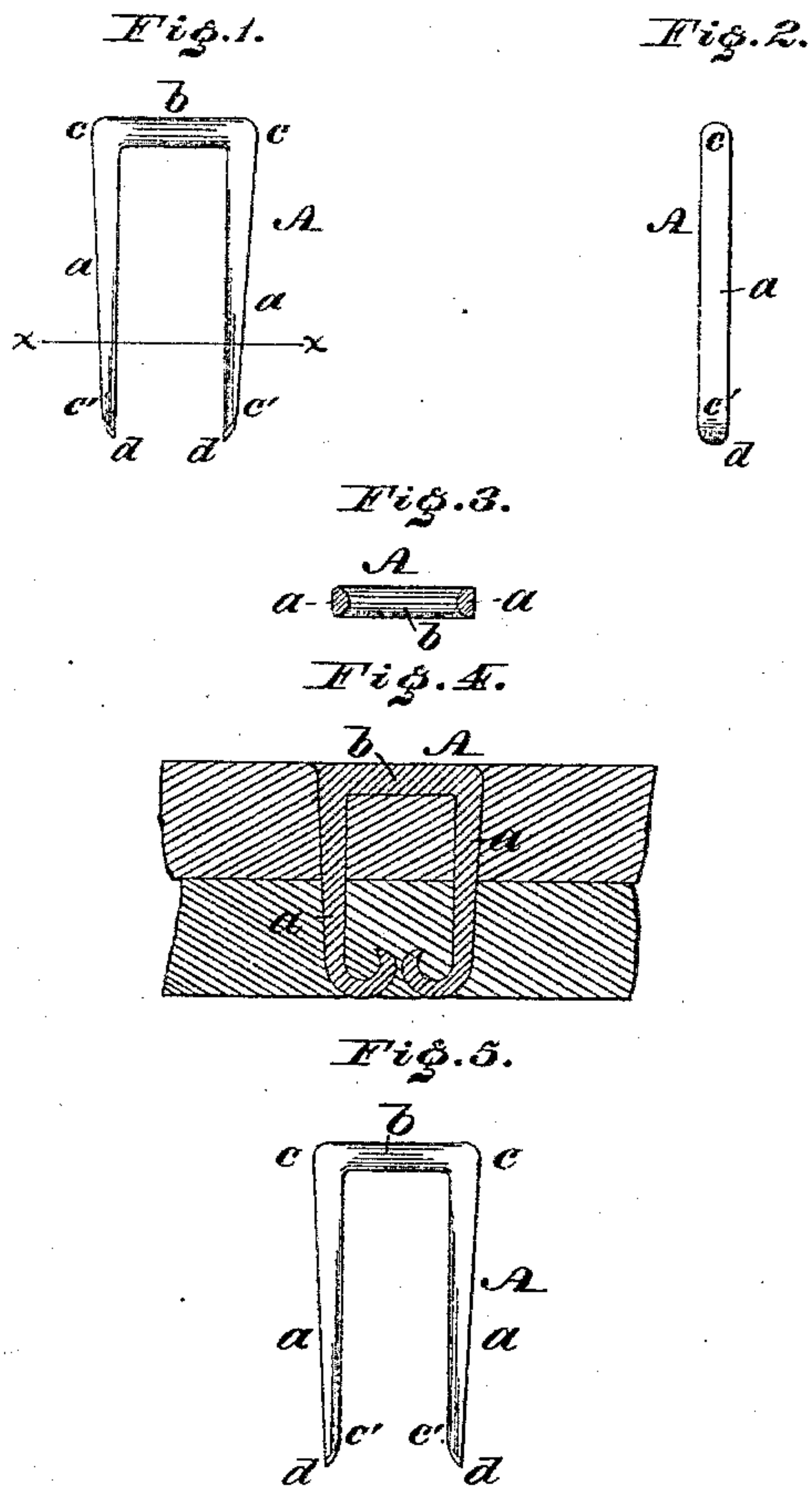
(No Model.)

E. H. BUCKLEY.

STAPLE FOR BOOTS OR SHOES.

No. 387,854.

Patented Aug. 14, 1888.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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THE ACME STAPLE AND MACHINE COMPANY, OF NEW YORK.

## STAPLE FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 387,854, dated August 14, 1888.

Application filed April 17, 1883. Renewed March 3, 1888. Serial No. 266,105. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD H. BUCKLEY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Staples for Boots, Shoes, &c., which improvement is fully set forth in the following specification and accompanying drawings, in which—

10 Figure 1 is a side elevation of a staple embodying my invention. Fig. 2 is an end view thereof. Fig. 3 is a section in line *xx*, Fig. 1. Fig. 4 is a section of the staple clinched. Fig. 5 is a side elevation of a modification.

15 Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to improvements in staples; and it consists in forming the same with a crown of greater thickness than the legs, the latter having round inner and flat outer faces, and the faces being doubly beveled in the direction of their length, whereby, when they are clinched, their ends curve around and take increased hold on the leather, so that the staple provides a strong and reliable fastening, and is prevented from being drawn out in either direction.

Referring to the drawings, A represents a wire staple, which is formed of the legs *aa* and the head or crown *b*. The legs are beveled on their sides from *c* to *c'* and from *c'* to the extreme points *d*, the bevels *d c'* being at a different angle from the bevels *c' c*. When the staple is driven into position, a suitable bed or anvil being provided for causing the deflection of the ends of the legs, said legs turn laterally and upwardly and curve around, forming well-developed eyes, which enter and re-enter the leather or other material to be stapled, the effect of which is to doubly clinch the legs in position, whereby, unless the legs and head break, the staple cannot be withdrawn by strain or power on the same in either direction.

45 In practice the staple-legs are produced by drawing and upsetting the metal of which the

staple is formed, thus vastly increasing the strength thereof.

By the operation of upsetting a greater amount of metal is left in the crown *b*, where the blows are imparted for driving the staple into the leather, &c., and the outer faces of the staple are made flat, the half-round or approximately half-round form of the inner faces of the legs being preserved. By this form of construction the legs may be driven through the leather with less difficulty than if they were entirely round, while the inner faces, owing to their curvature, have an increased or at least a sufficient quantity of metal, so that as the legs bend during the clinching process the crimping of the curve of the clinched parts increases the strength of said parts, it being evident that the strain on the staple in opposite directions is transmitted to the head or crown and to the clinched ends of the legs, the said crown being of increased thickness and the ends of the legs being rounded on their inner faces, as has been stated. The round faces of the sides also prevent lateral bending of the legs, and thus a strong and reliable staple is presented.

I am aware that it is not new to form a staple of wire in which the original shape of the wire is preserved, and some of the metal at the ends of the legs is cut off in order to point the legs but such a staple clinches irregularly and weak; and does not possess the advantages set forth in my case.

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

A wire staple having a crown of greater thickness than the legs, the latter being formed flat on their outer faces and round on their inner faces, the faces being of a double incline or bevel in the direction of their length, substantially as described.

E. H. BUCKLEY.

Witnesses:

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