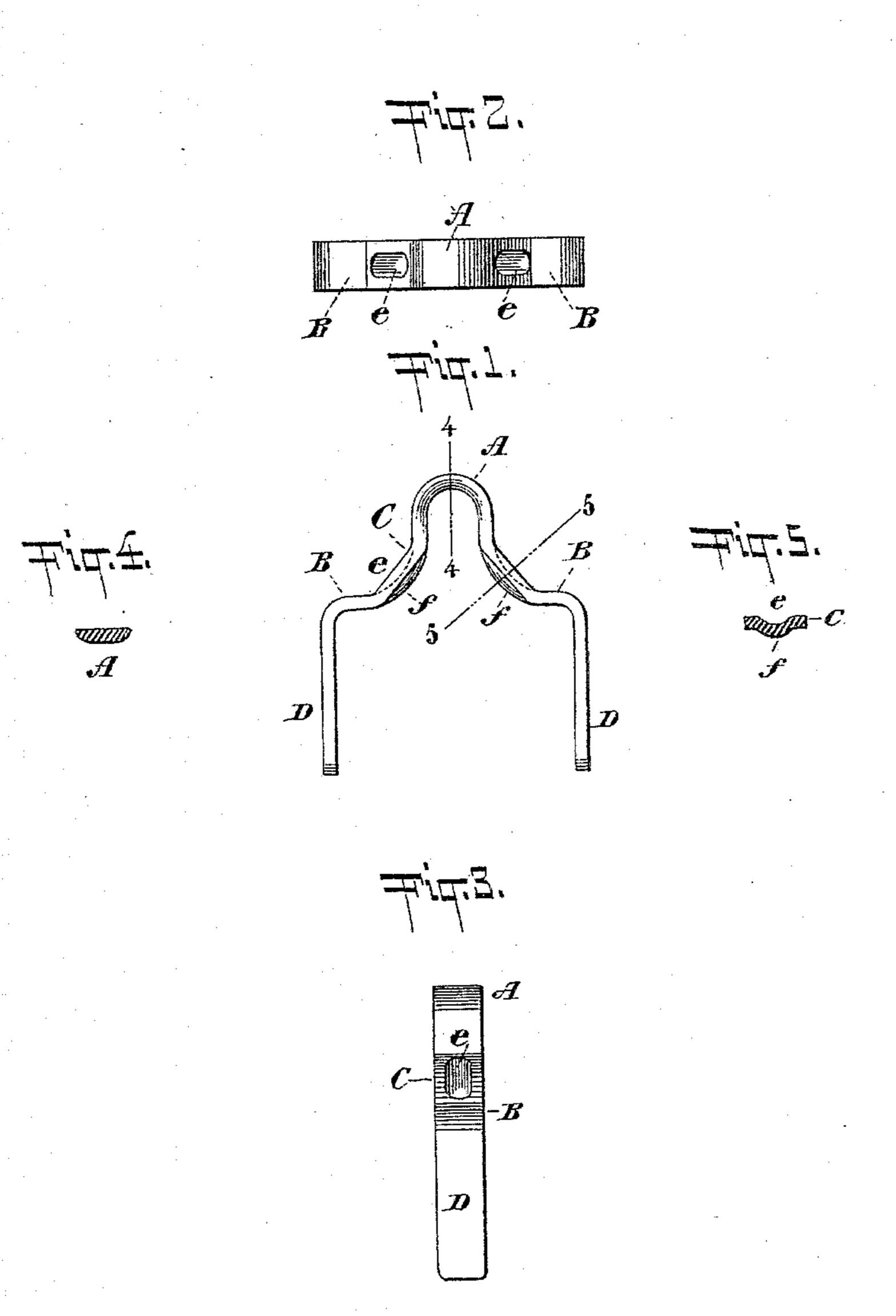
(No Model.)

I. J. SAUNDERS.

METALLIC FASTENER FOR ATTACHING BUTTONS TO SHOES, &c. No. 546,349.

Patented Sept. 17, 1895.



WITNESSES: Les pavel seitenote.

Janathan Marshall

Tra J. Saunders By Sante A. Smith

United States Patent Office.

IRA J. SAUNDERS, OF NEW YORK, N. Y.

METALLIC FASTENER FOR ATTACHING BUTTONS TO SHOES, &c.

SPECIFICATION forming part of Letters Patent No. 546,349, dated September 17, 1895.

Application filed February 17, 1893. Serial No. 462,688. (No model.)

To all whom it may concern:

Be it known that I, IRA J. SAUNDERS, a citizen of the United States, and a resident of New York city, in the county of New York and 5 State of New York, have invented certain new and useful Improvements in Metallic Fasteners for Attaching Buttons to Shoes or other Materials, of which the following is a specification.

My invention relates to improvements in metallic fastenings made from flat metallic strips for attaching buttons to shoes and other materials, and has for its object the strengthening of such fastenings and their better 15 adaptation for use in connection with buttonfastening machines.

Such metallic fastenings are staple-like in shape, the head thereof being a short arch forming the bearing for the button-eye when 20 in use, and at the neck or foot of the arch the bow has shoulders which receive the impact of the driver by which the legs are forced into the shoe, to be clinched on the other side. These fastenings are most commonly made 25 from ordinary wire. Instead, I make my improved fastening from a flat strip of metal of a proper width for the arch or head, as well as for the legs or prongs.

The drawings hereto annexed show a fas-30 tener made of a flat strip of metal embodying

my invention.

Figure 1 is a front elevation. Fig. 2 is a top view; Fig. 3, a side view, as of Fig. 1. Fig. 4 is a cross-section of the arch or head, 35 and Fig. 5 is a cross-section of the neck.

A indicates the arch or head; B, the shoul-

ders; C, the neck, and D the legs.

As hitherto made, such fastenings have developed a weakness in the neck near its juncto tion with the shoulders, causing the neck to "kink" and the head to lop over, thus endangering the integrity of the fastening. To prevent this, I have the neck formed with !

corrugations in cross-section, as indicated in Fig. 5. Such corrugation is preferably made 45 by forming indentations e in the neck C, as indicated by dotted lines in Fig. 1, resulting in a protuberance f on the under side. This indentation not only corrugates the fastener at its weakest point, and thereby imparts 50 needed strength, but the resulting protuberance improves the form of the neck in crosssection, and by preserving the proper curvature of the neck facilitates the threading of the fastener into the button-eye in the opera- 55 tion of attaching buttons to shoes by the machines used for that purpose. It is also of advantage in handling the fasteners in such machines to have the fastener about the same diamensions as to width throughout. I there- 60 fore leave the arch A of the same width as the remainder, as indicated in Fig. 3; but to conform the same approximately to the interior curve of the button-eye the arch is preferably rounded on the under side, as indicated in 65 cross-section in Fig. 4.

Metallic fasteners made as above described have the advantages of increased strength and of adaptability for mechanical manipulation in button-fastening machines above any 7c similar fastening now known.

I claim as my invention and desire to se-

cure by Letters Patent—

The metallic fastener described combining the following elements namely, a flat metal 75 strip having the arch A the inclined portions C provided with the corrugations f, and shoulders B substantially as specified.

Signed at New York city, in the county of New York and State of New York, this 16th 80

day of February, A. D. 1893.

IRA J. SAUNDERS.

Witnesses:

JAMES M. TULLY, JONATHAN MARSHALL.