

(No Model.)

A. H. SWETT.
STAPLE FASTENER.

No. 589,584.

Patented Sept. 7, 1897.

Fig. 1.

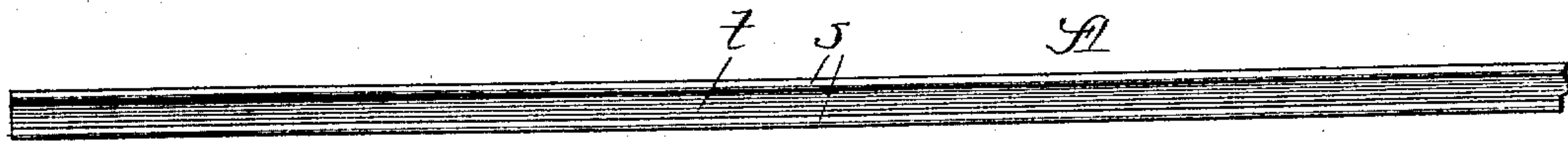


Fig. 2.

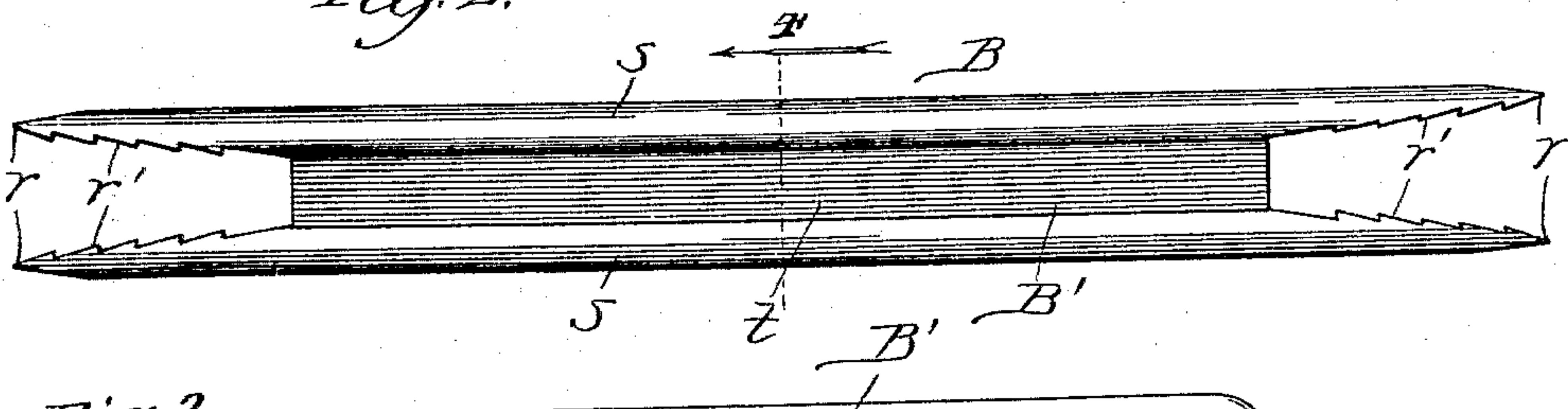


Fig. 3.

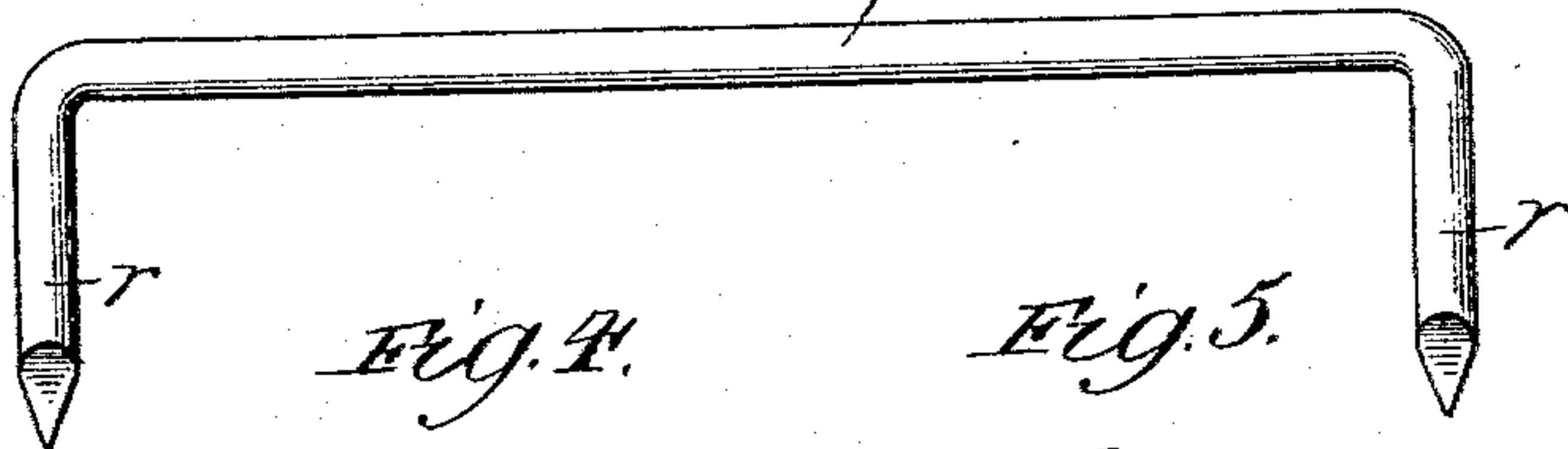


Fig. 4.

Fig. 5.

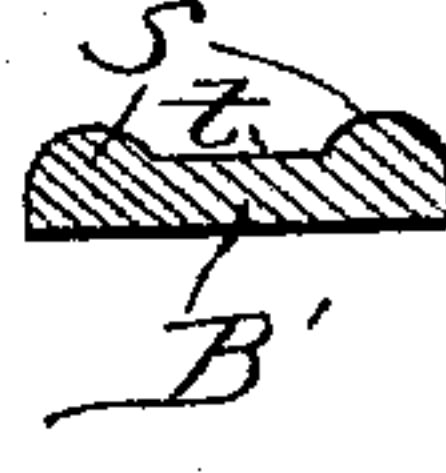
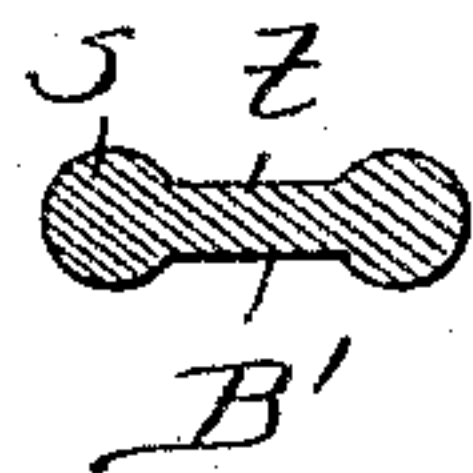


Fig. 6.

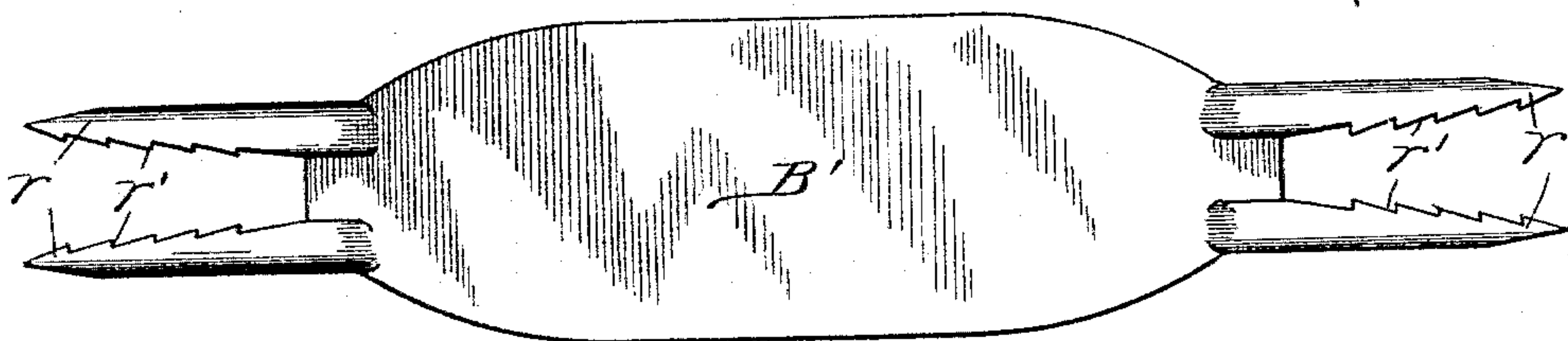
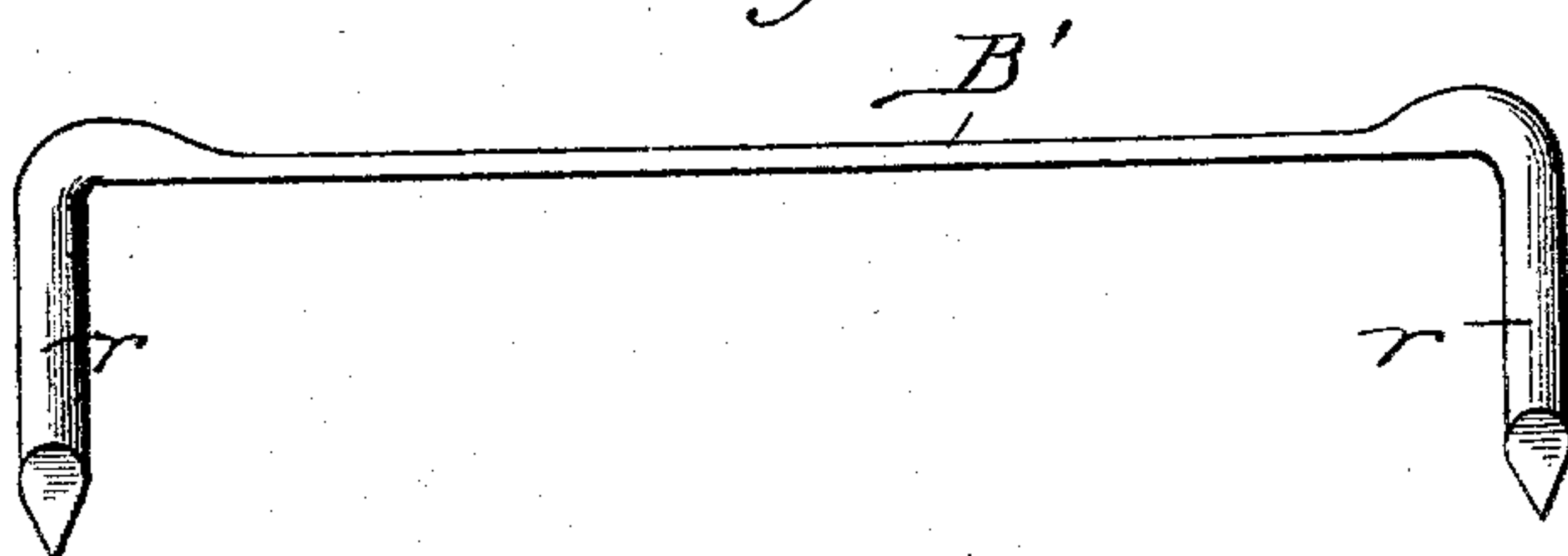


Fig. 7.



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UNITED STATES PATENT OFFICE.

ARTHUR H. SWETT, OF CHICAGO, ILLINOIS.

STAPLE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 589,584, dated September 7, 1897.

Application filed October 15, 1896. Serial No. 608,960. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR H. SWETT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Staple-Fasteners, of which the following is a specification.

My invention relates to an improvement in fasteners designed for use more especially in securing together the parts of boxes, wooden shipping-cases, and the like.

My object is to provide a construction of fastener which may be cheaply produced, easily applied, and the retentive function of which shall be so great as to enable the auxiliary use of nails to be dispensed with.

In the accompanying drawings, Figure 1 is a plan view of a section of the preferred form of blank from which my improved fastener is made; Fig. 2, a plan view of a fastener before it is bent to the staple form; Fig. 3, a view in side elevation of the perfected staple; Fig. 4, a section taken at the line 4 on Fig. 2 and viewed in the direction of the arrow, and Figs. 5, 6, and 7 views showing modifications of structure.

To produce my improved fastener, I form it from a blank A, composed of a strip of metal comprising a web portion *t*, provided with edge beads, affording strengthening-ribs *s s*, which may be wires, though the blank is preferably a strip of metal rolled into the desired shape.

B is a fastener which may be stamped or otherwise formed from the blank A by removing at its end portions sections of the web *t* to afford the bifurcated prongs *r r*, each comprising at least two members. These prongs are preferably so formed that the adjacent edges of each pair of the members taper outwardly and are provided with serrations *r'*. At or near the ends of the web the prongs *r* are bent at suitable angles (preferably right angles) to the body B' of the staple.

The wires or strengthening-ribs *s* are preferably of the cross-section shown in Fig. 4; but they may be of any other suitable cross-section, as that shown in Fig. 5, it being only essential to my invention that prong-forming material of adequate rigidity be supplied in sufficient length on the blank. The strengthening-ribs may or may not, therefore, extend

throughout the entire length of the body of the staple.

Figs. 6 and 7 represent a modification of the device, in which the body portion B' is flat or flattened, as by rolling or stamping, and for some purposes this construction is preferable to that shown in Figs. 2 and 3.

In applying the fastener to the corner of a box one set of prongs is driven into the wood at the proper place. The body of the fastener is then bent over the corner of the box and the second set of prongs driven in. When the construction involves the tapering prongs and the serrations thereon, the effect is to force the members of the prongs somewhat farther apart as they are driven into the wood, and the springiness of the metal acts to force the teeth *s'* against the wood to prevent withdrawal. The result is that it is not possible to remove the fastener without disfiguring the box, so that any tampering therewith could be readily detected, and herein is seen the accomplishment of that in the attaining of which it has heretofore been necessary to employ a nail in connection with the fastener, the former being driven through the latter to produce a bur, which would hinder withdrawal of the prong.

Moreover, my improved fastener can be readily applied to a box in those positions in which the ordinary forms of fasteners could not be conveniently applied because their prongs would extend crosswise of the grain.

What I claim as new, and desire to secure by Letters Patent, is—

1. A fastener comprising a body portion B' formed of a web *t* and strengthening-ribs *s*, said strengthening-ribs being extended beyond the ends of the web and forming prongs *r*, substantially as and for the purpose set forth.

2. A fastener, comprising a body portion B' formed of a web *t* and strengthening-ribs at opposite sides and projecting beyond opposite ends of the web to form prongs *r*, said prongs being tapered and serrated, substantially as and for the purpose set forth.

ARTHUR H. SWETT.

In presence of—

J. H. LEE,

M. J. FROST.