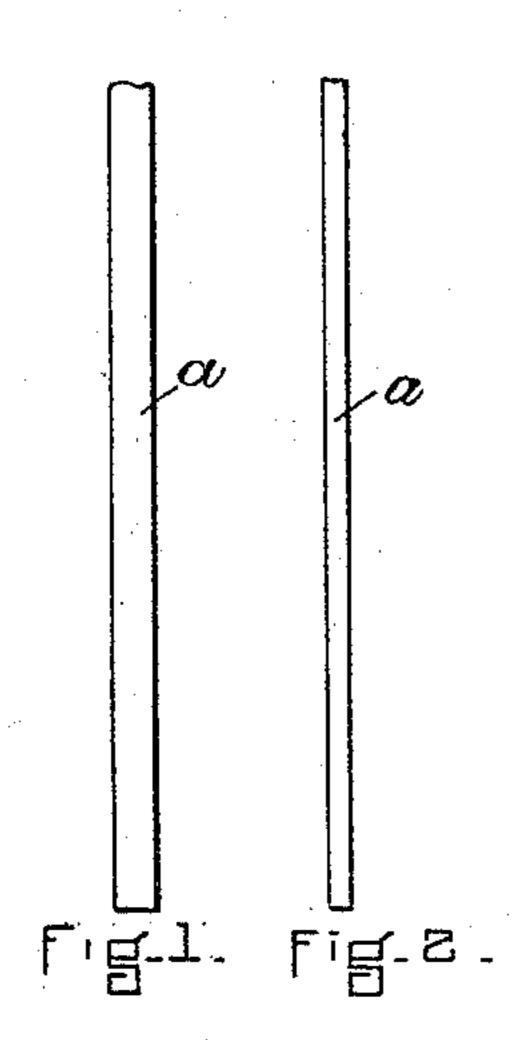
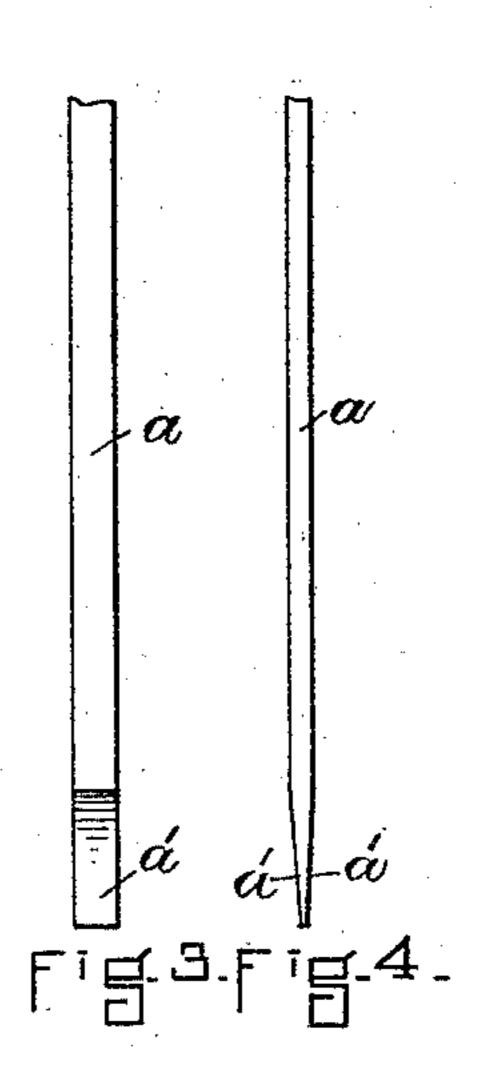
(No Model.)

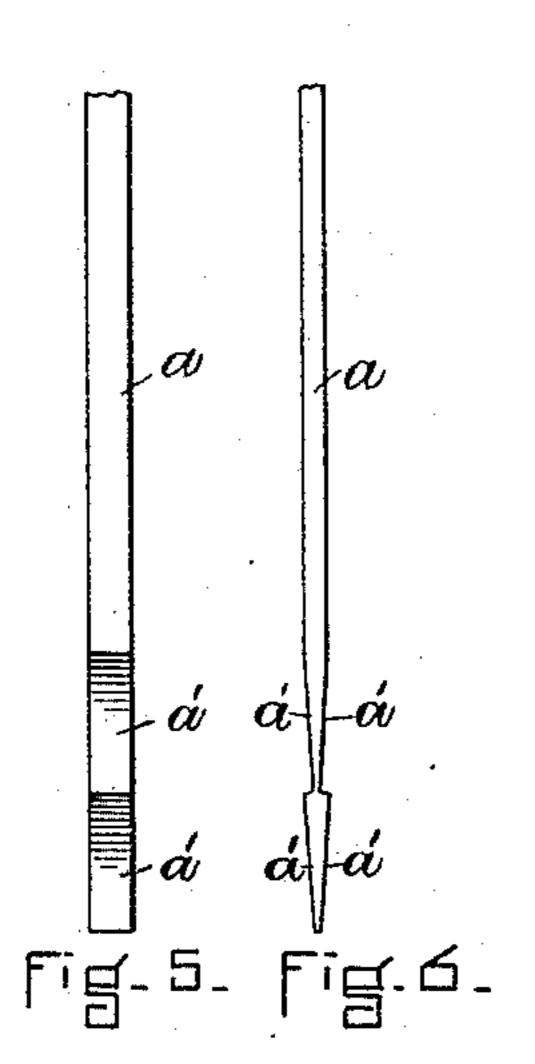
F. F. RAYMOND, 2d. METHOD OF MAKING SHOE SLUGS.

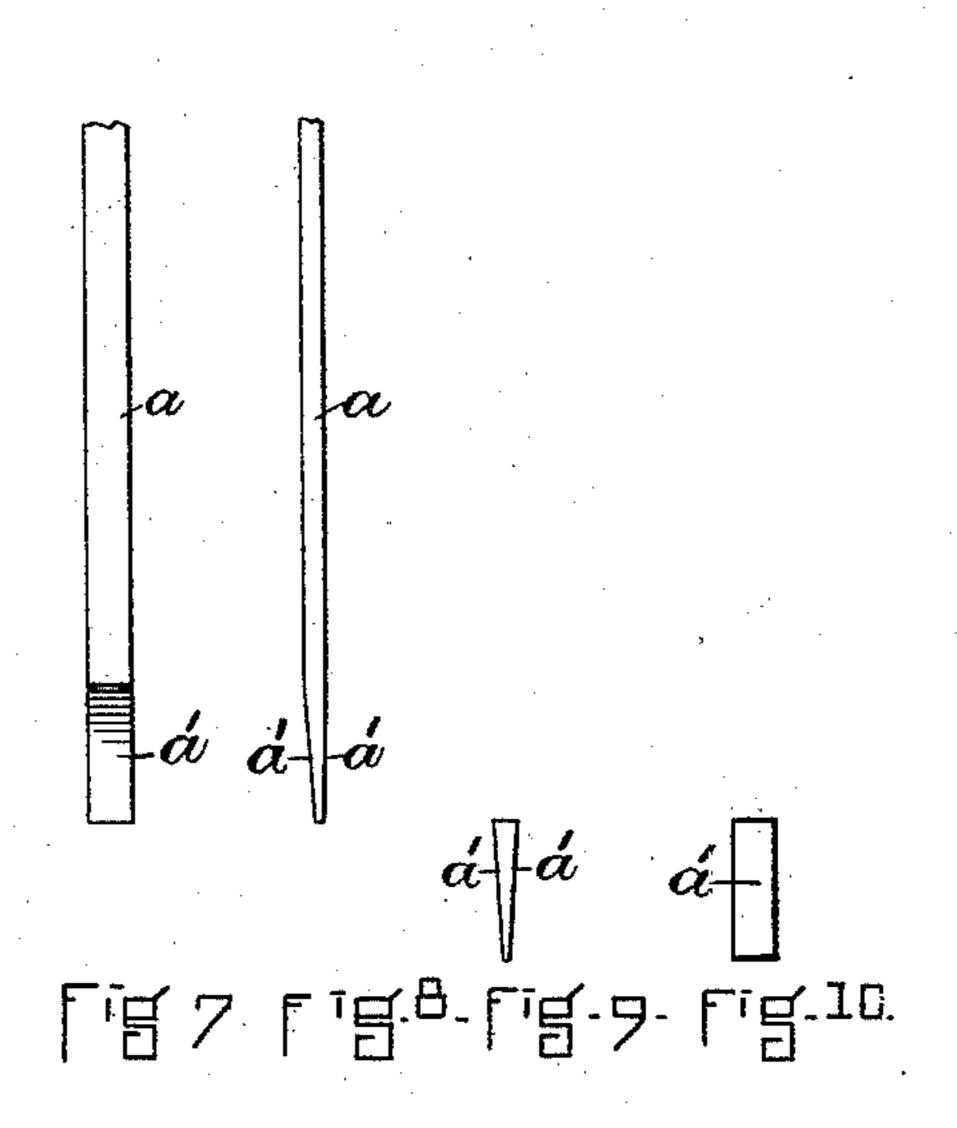
No. 467,522.

Patented Jan. 26, 1892.









WITNESSES. J. M. Dolan E. P. S. Lee. INVENTOR-

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

United States Patent Office.

FREEBORN F. RAYMOND, 2D, OF NEWTON, MASSACHUSETTS.

METHOD OF MAKING SHOE-SLUGS.

SPECIFICATION forming part of Letters Patent No. 467,522, dated January 26, 1892.

Application filed January 19, 1888. Serial No. 261,233. (No model.)

To all whom it may concern:

Be it known that I, FREEBORN F. RAYMOND, 2d, a citizen of the United States, residing at Newton, in the county of Middlesex and State 5 of Massachusetts, have invented a new and useful Method of Making Shoe-Slugs of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this 10 specification, in explaining its nature.

The invention relates to the method of making shoe-slugs like those described in my application for Letters Patent of the United States, executed December 31, 1887; and it 15 consists, essentially, of a long head and long point substantially of the length of the head and one or both sides tapering from the point to or toward the head, thus providing a slug the head of which is not diminished in length | together. It has not a shank in the ordinary 20 and not practically diminished in area as the heel or sole of the boot or shoe is worn.

To make the slug, I take a flat wire of a width sufficient to provide the length of head and point which it is desired that the slug 25 shall have, and this wire is then reduced to shape by tapering one or both of its side surfaces at its end, and the slug is then completed by being severed from the wire at a point the necessary distance from the end of 30 the wire plate. If desired, the taper of the next slug in order may be formed in the wire plate before the first slug is severed therefrom.

In the drawings, Figure 1 is a view of the 35 wire plate to show its width. Fig. 2 is a view showing its thickness. Figs. 3 and 4 represent its end as provided with tapering surfaces. Figs. 5 and 6 show the wire plate as having a second set of tapering surfaces 40 formed therein before the slug is severed therefrom. Figs. 7 and 8 show the wire plate after the severing of a slug. Figs. 9 and 10 show the severed slug.

Referring to the drawings, a represents the drawn wire plate. At its ends I form the ta- 45 pering side surfaces a'. I then sever the tapered section from the wire plate at the upper end of the tapered section or adjacent to the upper end of the tapered surfaces, or before severing the slugs I form a second set of ta- 50 pered surfaces above the first, as represented in Figs. 5 and 6, and for some reasons I prefer this method of making the slug.

I am aware that nails have been made having long shanks and points formed by two 55 tapering surfaces, and that the point of the next succeeding nail in order has been formed before the nail has been severed from the end of the wire from which it is made. My slug varies from attaching-nails of all kinds in that 60 it is not used for securing or fastening things sense of the term. The taper of its point begins at or very near its head and is formed upon the flat sides of the wire plate, prefer- 65 ably, by drawing or without removing any stock from the wire plate.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

The herein-described method of making flat wedge-shaped shoe-slugs, consisting in flattening metal stock to make it wider in one direction than in the other equally throughout its length and with parallel edges and 75 sides forming angular corrugations at intervals on the flat sides of the stock to provide points and heads which are separated to form individual nails, as set forth.

FREEBORN F. RAYMOND, 2D.

Witnesses:

J. M. Dolan, E. P. SMALL.