

(No Model.)

T. BARRETT.

MANUFACTURING TACK STRIPS.

No. 343,689.

Patented June 15, 1886.

Fig. 1.

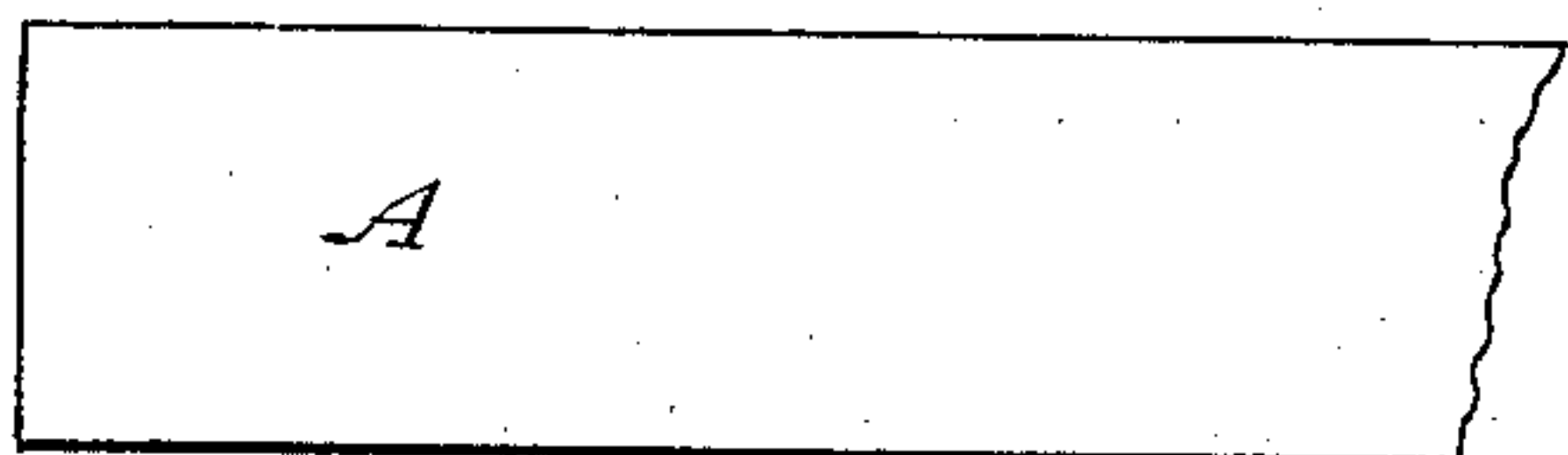


Fig. 2.

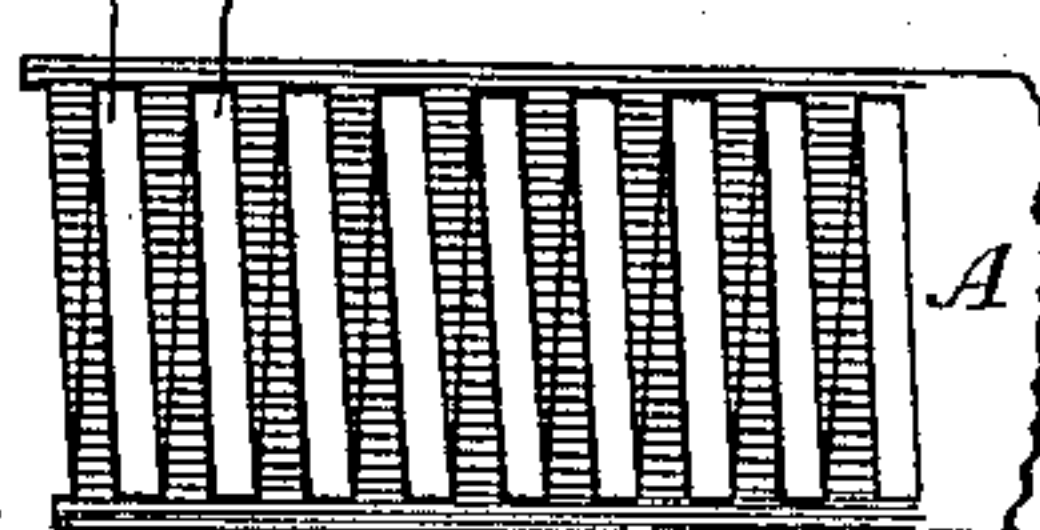


Fig. 2a.

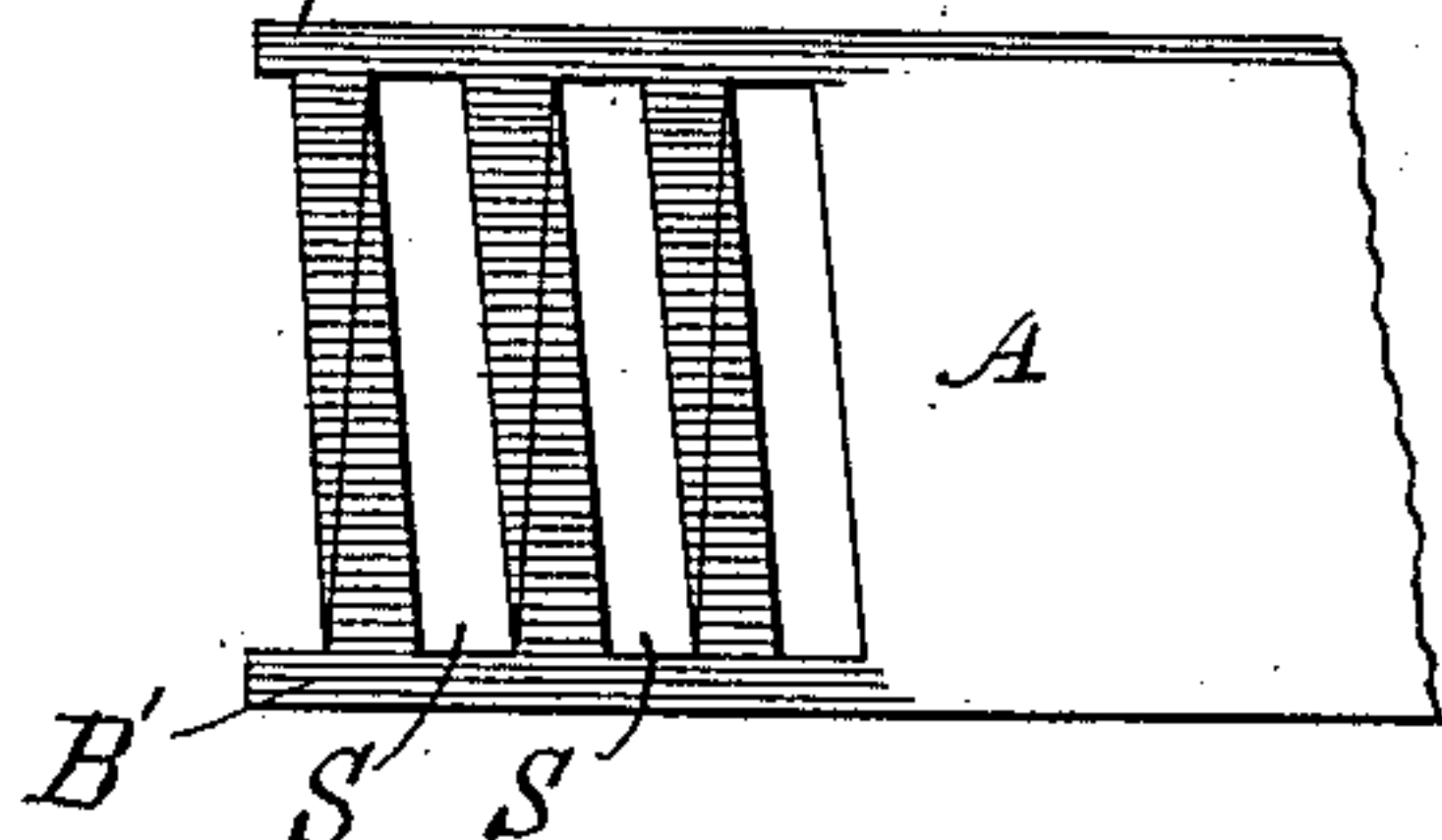


Fig. 3.

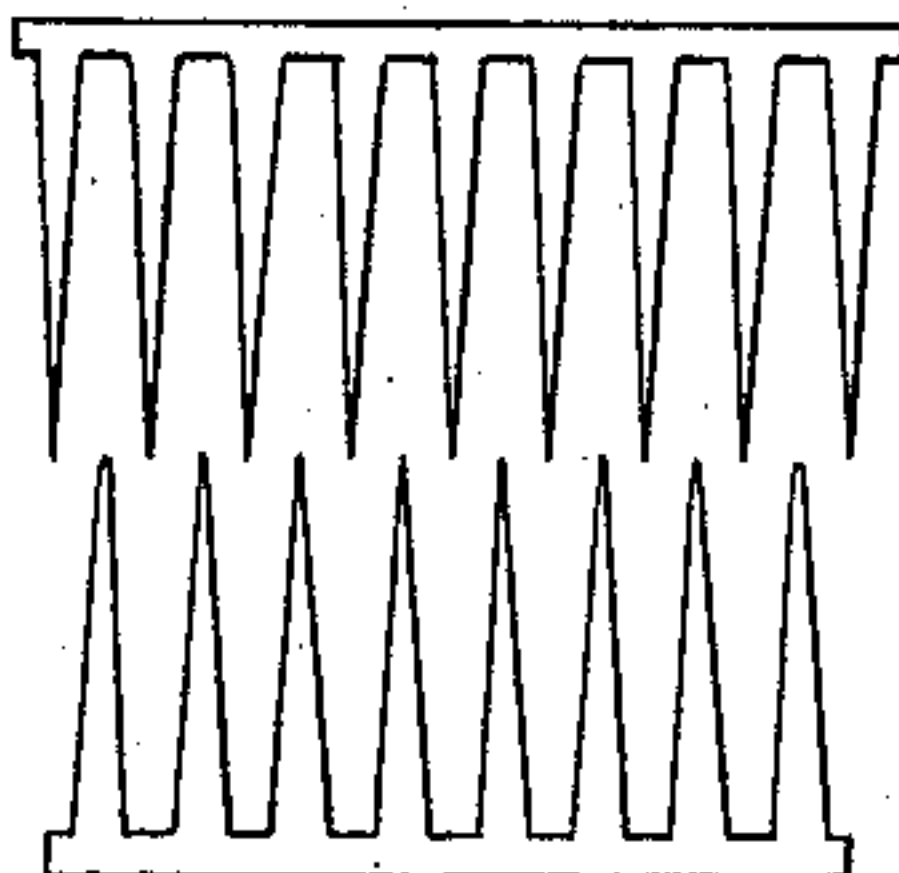


Fig. 4.

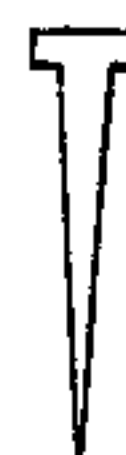


Fig. 5.

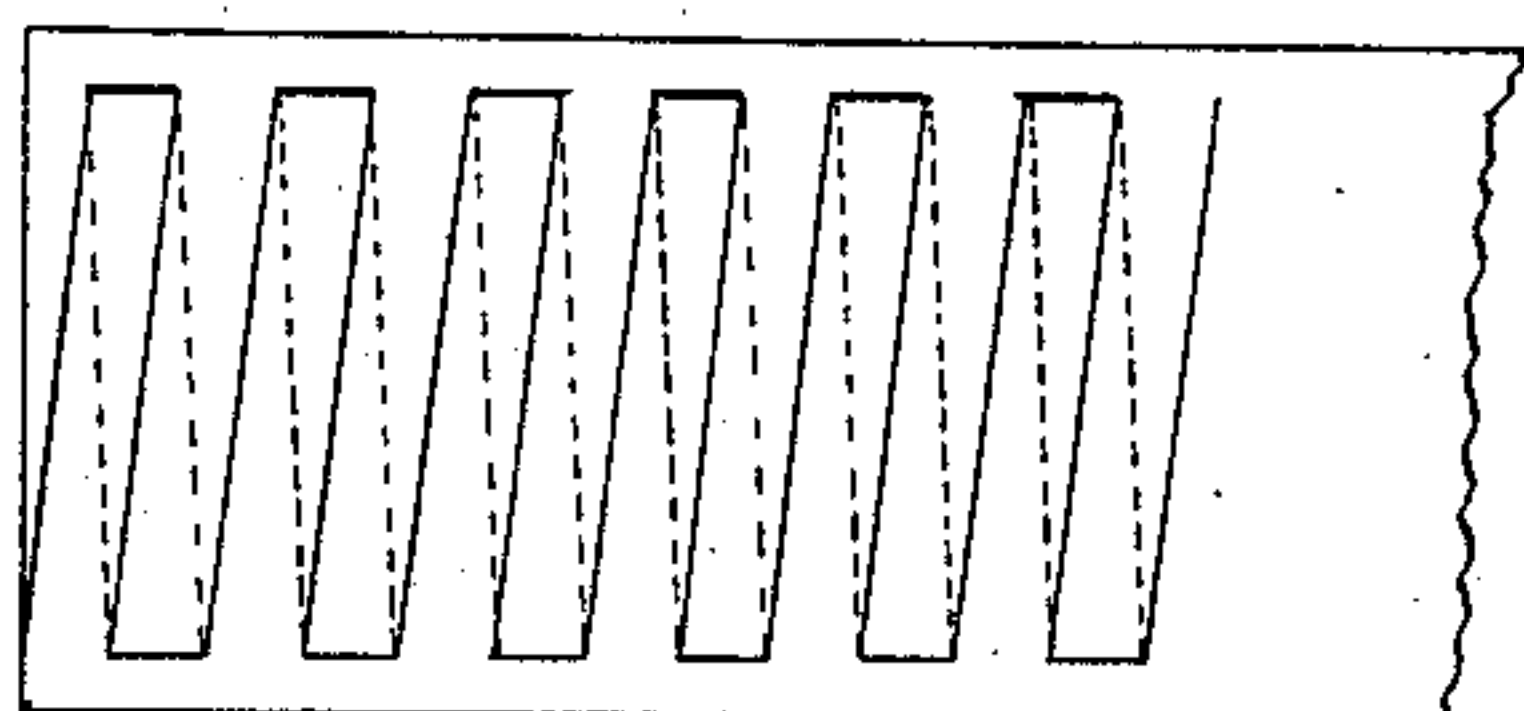


Fig. 6.

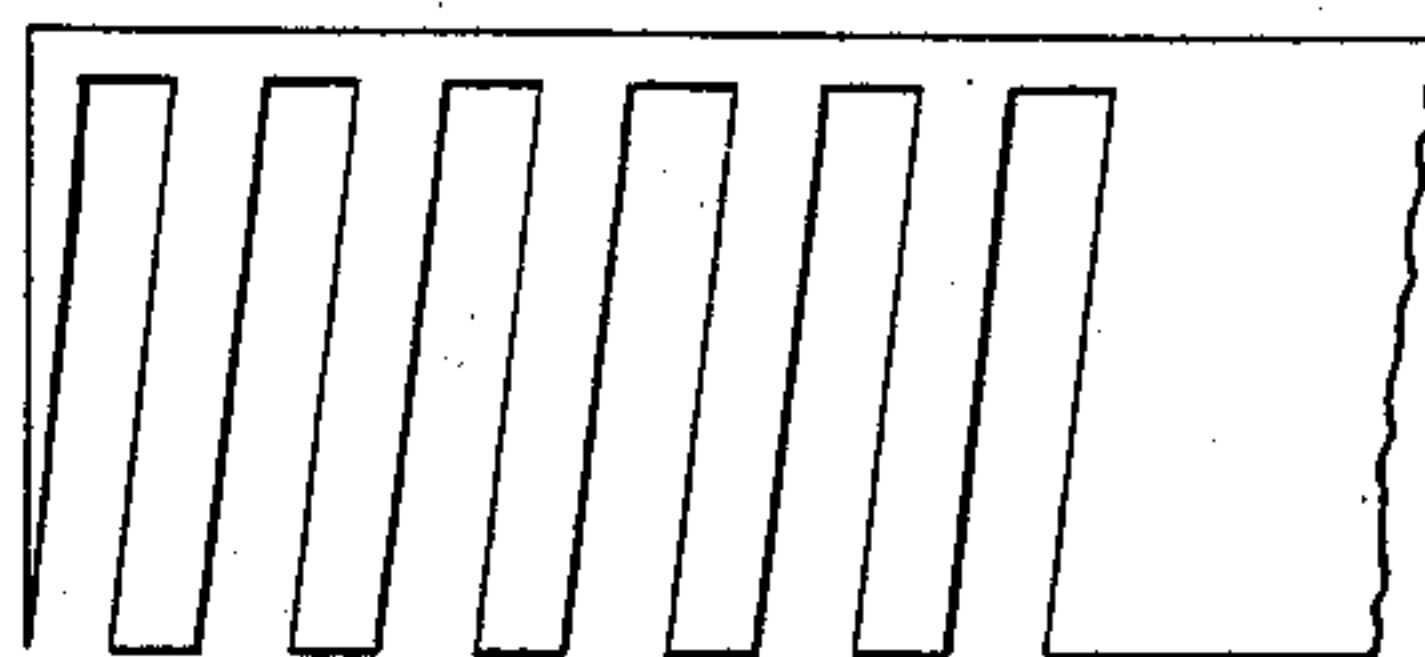


Fig. 7.

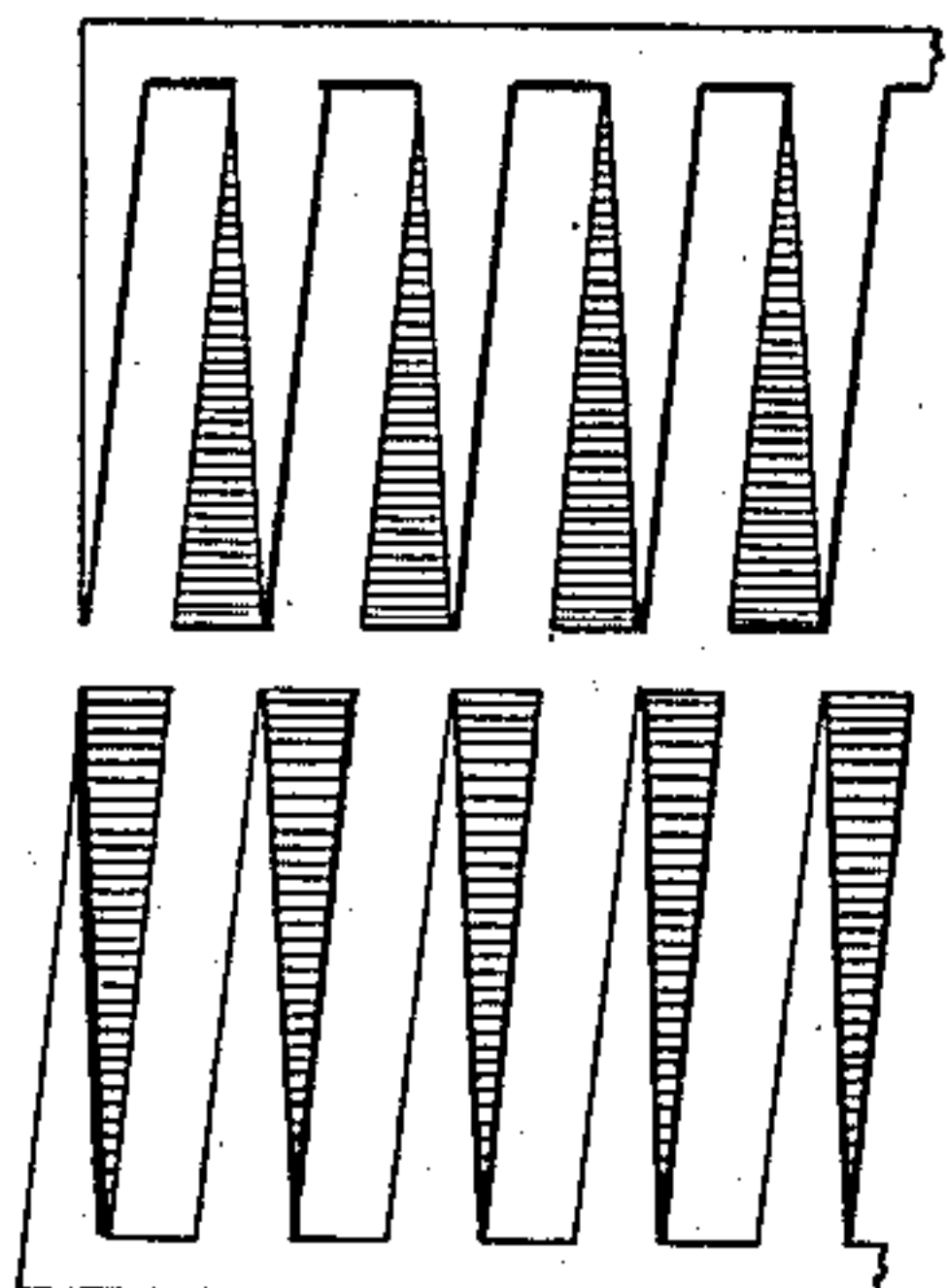
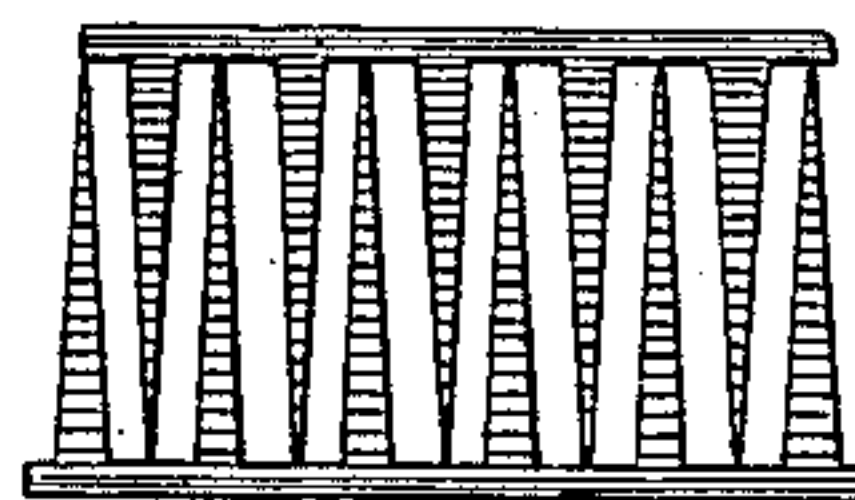


Fig. 8.



Fig. 9.



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Atty.

# UNITED STATES PATENT OFFICE.

THOMAS BARRETT, OF BOSTON, MASSACHUSETTS.

## MANUFACTURING TACK-STRIPS.

SPECIFICATION forming part of Letters Patent No. 343,689, dated June 15, 1886.

Application filed September 24, 1885. Serial No. 177,986. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS BARRETT, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Tack-Strips, of which the following is a specification.

My invention relates to nail or tack strips used in the manufacture of boots and shoes, and which are formed in a series connected at their heads, and are separated from each other by the machine with which they are driven as they are fed along and needed for use.

My invention consists in the improvement in the art of making tack-strips, all as hereinafter described, and subsequently pointed out in the claim.

Tack-strips of the character mentioned have heretofore been formed from a blank or plate of sheet metal of a width slightly greater than the length of tack or nail it is desired to produce, by punching or cutting therein slots running slightly diagonal across the sheet in such manner as to form two series of tack-bodies connected at their head ends by portions of the original strip, the head ends of the tacks of one series alternating with the points, so that two complete tack-strips are formed from one piece of metal. In the method heretofore practiced said slots have been formed at each side of each nail—that is, a portion of the metal of the blank is punched out on both sides of each portion that is to form a nail or tack body, as shown in Fig. 9. The effect of this is to divide the blank or plate longitudinally into two parts, each part consisting of a strip of tacks connected at their heads, their shanks having the desired taper, and with space between each two tack-bodies at their head ends greater than the width of each tack-body at said end. The tack-strips thus formed are placed in the machine, and the tacks are separated one after another by it as they are fed along and are needed for use. In separating the tacks thus formed it becomes necessary to cut away a portion of the metal joining the tacks in a series or strip, since if each tack were separated from the one next adjacent by merely cutting across the joining part midway between each two tacks, the heads of the tacks would be larger than would be necessary or convenient for use. Thus there is by

this mode not only a waste of material produced, by reason of the punching out of metal on each side of each tack, but considerable labor and wear and complication of machinery is required to properly form the tack in the machine by which it is driven, in that it is necessary to cut twice across that portion of the strip joining the series of tacks and forming the heads thereof for each tack.

By my invention I obviate the difficulties mentioned, as will be better understood by reference to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a blank from which two tack-strips may be formed. Fig. 2 represents the strip after having been subjected to a stamp or cutting-die. Fig. 2<sup>a</sup> represents an enlarged view of said strip as shown in Fig. 2. Fig. 3 represents the parts shown in Fig. 2 as separated. Fig. 4 represents a tack separated from the strip or series shown in Fig. 3. Figs. 5, 6, and 7 represent a modification. Fig. 8 represents a tack-strip having tack-bodies of different lengths. Fig. 9 represents a method in use prior to my invention.

In carrying out my invention I take a plate or sheet of metal, A, and punch or strike therefrom strips, so as to form slots S, running nearly across the blank and parallel with each other, leaving portions of the metal at each edge of the blank, as at B B', undisturbed. At the same time, or by a separate operation, the strips of metal between the slots formed as described are severed by cutting diagonally across them, as represented in Figs. 2 and 2<sup>a</sup>, thus dividing the blank into two strips of tacks, each having the form shown in Fig. 3. The width of said slots is not greater than the width of each tack-body at its head end, and as the metal is removed between each pair of tack-bodies, instead of between each tack-body and the next, it follows that by dividing the connecting-strips midway between the tack-bodies, heads will be formed projecting from each edge of the tack by half or less than half of the head ends of the tack-bodies. In this way a considerable saving in material is accomplished, and at the same time a tack-strip much more convenient for use is produced, and one which can be employed at a material saving of labor and wear of machinery.



In Figs. 5, 6, and 7 I have shown a modification in which the strip A is divided, so as to form two complete series of connected tack-bodies, each being of practically uniform width from end to end, both edges of each tack-body being diagonal to the length of the strip, as shown in Fig. 6. I then turn off a portion of one edge of each tack-body, as shown in Fig. 7, where the shaded parts indicate the metal removed. The strips thus completed are of the same form as those previously described, and the same amount of metal is wasted in forming them, as shown by dotted lines in Fig. 5.

The tacks formed as last described may be made of different lengths in the same strip, as shown in Fig. 8, so that longer and shorter nails, required for different parts of the work, may be supplied from the same strip.

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

The art of manufacturing tack-strips, which consists in forming in a plate or blank of sheet metal a series of slots running crosswise of the blank, and diagonally severing the portions of the strip intermediate of said slots by cutting diagonally thereacross, and then separating the blank thus treated into strips, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 11th day of September, 1885.

THOMAS BARRETT.

Witnesses:

C. F. BROWN,  
H. BROWN.