

(No Model.)

E. WOODWARD.

METHOD OF PREPARING HEADED TACKS FOR USE.

No. 253,250.

Patented Feb. 7, 1882.

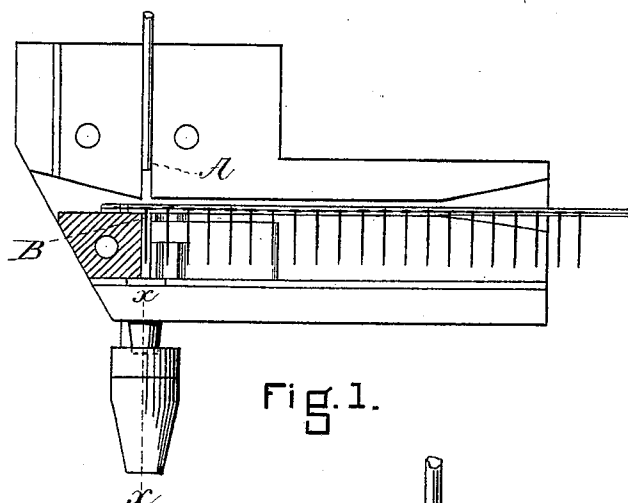


Fig. 1.

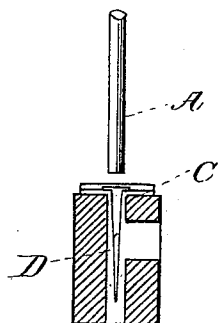


Fig. 2.



Fig. 3.

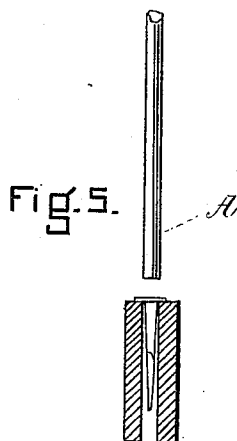


Fig. 5.

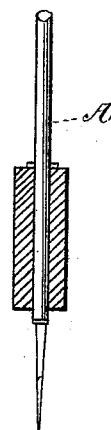


Fig. 6.

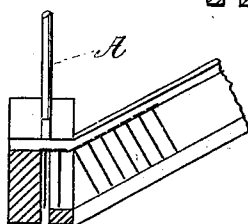


Fig. 4.

WITNESSES

Willard L. Fogg
Frederick Harris

INVENTOR

E. Woodward
by his attys
Clark & Raymond

UNITED STATES PATENT OFFICE.

ERASTUS WOODWARD, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR TO
THE COPELAND TACKING AND LASTING COMPANY, OF PATERSON, N. J.

METHOD OF PREPARING HEADED TACKS FOR USE.

SPECIFICATION forming part of Letters Patent No. 253,250, dated February 7, 1882.

Application filed December 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS WOODWARD, of Somerville, in the county of Middlesex and State of Massachusetts, a citizen of the United States, have invented a certain new and useful Improvement in the Method of Preparing Large Headed Tacks for Use, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 represents, part in elevation and part in vertical section, a portion of the tack-driving machine adapted to be used with the machine described in my application for Letters Patent allowed November 1, 1881, in practicing this process. Fig. 2 is a vertical section on the line *xx* of Fig. 1, representing the throat or die of the machine and the driver or punch, enlarged. Fig. 3 is a detail view, hereinafter referred to. Fig. 4 illustrates a portion of my tack-setting machine adapted for use in practicing this process. Figs. 5 and 6 are enlarged views of the throat or die of said machine, and the driver or punch employed therewith.

In the various patents granted George W. Copeland and myself there has been described machinery for sorting tacks in bulk, and for driving or setting them into a flexible supporting or carrying strip. Other patents granted to me relate to mechanism for driving tacks from said tack-strip; but in all these patents the tacks are not changed from their original shape, and this has not been necessary, because the machines as organized have been adapted only for using what is commonly known as "lasting-tacks"—that is, a tack having a comparatively small head and a quite short but slender and sharp shank. It is desirable for many purposes, however, to use a tack having the features of the said lasting-tack, but larger in all respects, except the head, which may vary in size according to the use to which the tack is to be put. But the ordinary loose tack of the proper size has a head much larger than is necessary or even desirable for a great many purposes, and especially is this the case in tacks used for fastening the outsole to the upper or insole, either in "sole-laying," as it is

called, or in permanently fastening the outsole to the insole. It is at the same time very desirable to use these ordinary lasting-tacks of the market, because they are a well-known and staple article, cheaply made, and because they are easily driven and the points clinch readily and well upon the iron bottom of the last.

My invention consists in the method of preparing these large-headed tacks having long sharp shanks for use; and it comprises the shearing, punching, or removal of a portion of the head of each tack to reduce the size of such tack preparatory to or in the act of driving; and for the purpose of practicing this process I will describe how the machine above referred to for making the lasting-tack strip, or for driving tacks therefrom, may be used. Substantially the only difference between the said machine and those which I employ for practicing this process consists in making the driver of the tack setting or driving machine act as a punch, and so constructing the machine about the throat that a sufficient support for the head of the tack shall be provided, and that it shall act as a die in connection with the punch, whereby a part of the head of the tack may be sheared off.

In Figs. 1, 2, and 3 the punch and die of my tack-driving machine constructed so as to practice this process are represented; and in Figs. 4, 5, and 6 the driver and throat of my tack-setting machine are represented as adapted for use in practicing this process. In each instance A represents the driver or punch, and B the die or throat. There is about the throat or die a horizontal table, rest, bed, or support, C, upon which the head of the tack or its supporting-strip rests, the upper portion of the shank of the tack being in the throat. And here let me observe that in the tack driving and setting machine as heretofore constructed by me the throat of the machine has always been large enough to receive the head of the tack, and the flat support in the tack-driving machine and about the throat was used for holding the tack-strip, and not for holding the head of the tack, and therefore that the construction materially differs from that shown in said machines.

In operation the tack having been fed into the die, its head rests upon the bed about it, and the punch or driver descends and drives the shank of the tack and a portion of the head through the die.

5 In Fig. 2 I show the position of the tack-strip and tack in relation to the die or throat and driver or punch immediately before the descent of the driver; and in Fig. 3 I represent the tack
10 as having been forced through the die and its head reduced in size thereby.

15 In Fig. 5 I show a single tack in position in the throat preparatory to the descent of the driver, and in Fig. 6 I represent the tack after it has been driven through the throat and with the head reduced.

20 Of course it is immaterial for the purposes of my process when this reduction in the size of the tack's head is made; but when tacks of a large size are to be used it is preferable that the heads be left large until they are driven

from the tack-supporting strip, in order that they may be securely held in the strip.

Of course this method of preparing large-headed tacks for use may be practiced either 25 during the making of the tack-strip or the driving of the tack, or preparatory thereto, as desired.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of 30 the United States—

The method of preparing large-headed tacks having long sharp shanks for use, comprising the shearing, punching, or removal of the head of each tack to reduce the size thereof prepar- 35 atory to or in the act of driving, all substantially as specified.

ERASTUS WOODWARD.

Witnesses:

BOWDOIN S. PARKER,
J. E. CRISP.