

(Model.)

E. WOODWARD & G. W. COPELAND.

TACK STRIP.

No. 336,539.

Patented Feb. 16, 1886.

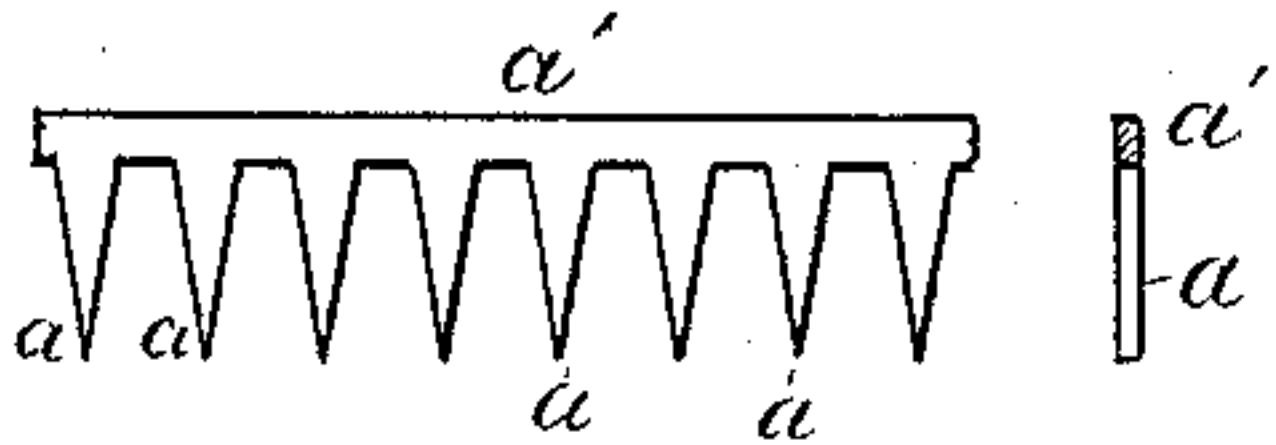


Fig. 1.

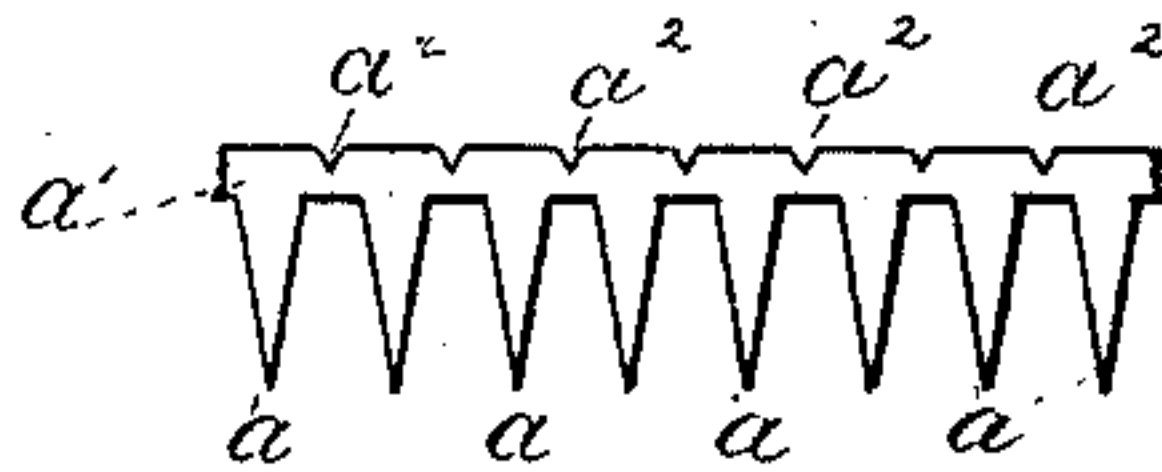


Fig. 2.

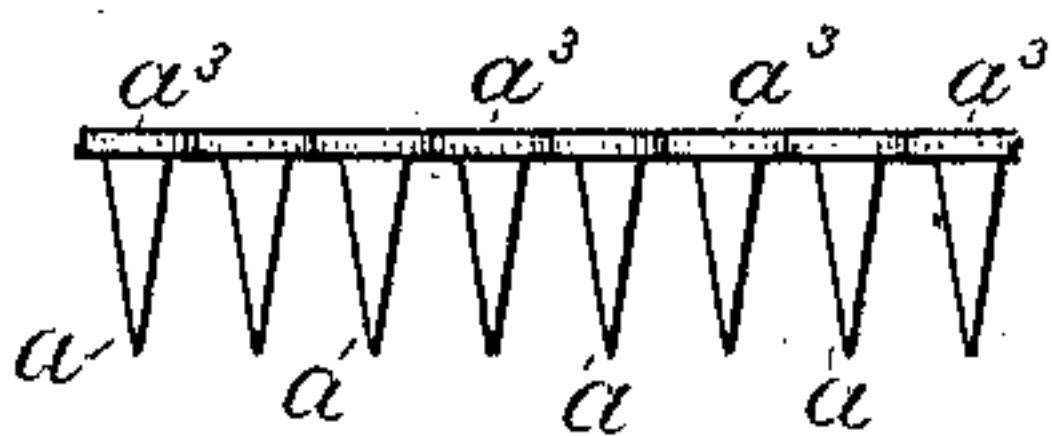


Fig. 3.



Fig. 4.

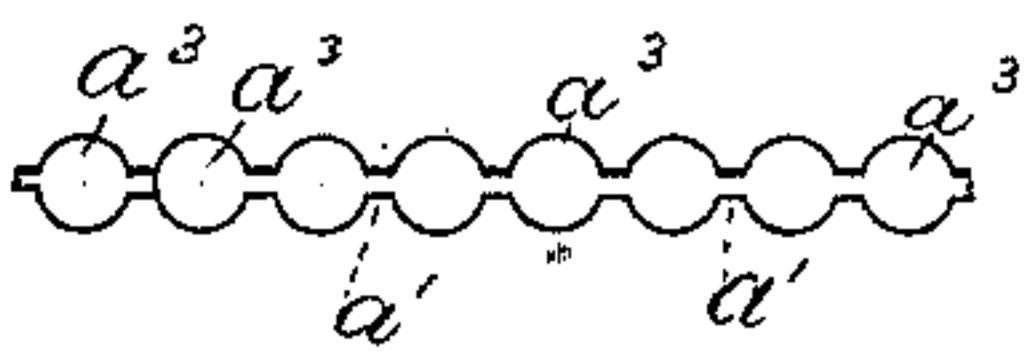


Fig. 5.



Fig. 6.

WITNESSES

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# UNITED STATES PATENT OFFICE.

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## TACK-STRIP.

SPECIFICATION forming part of Letters Patent No. 336,539, dated February 16, 1886.

Application filed December 31, 1883. Renewed January 25, 1886. Serial No. 189,674. (Model.)

*To all whom it may concern:*

Be it known that we, ERASTUS WOODWARD, of Somerville, in the county of Middlesex and State of Massachusetts, and GEORGE W. COPELAND, of Malden, in the county of Middlesex and State of Massachusetts, citizens of the United States, have invented a certain new and useful Improvement in Tack-Strips, 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 is a view in elevation of a tack-strip, which preferably is made from a flat metal plate, substantially as shown and described in Letters Patent No. 183,614, granted Erastus Woodward, dated October 24, 1876. Fig. 2 represents in elevation the tack-strip shown in Fig. 1, with portions removed to form notches between the shanks. Fig. 3 is a view in elevation of the tack-strip after its head-connecting portion has been upset. Fig. 4 represents an end elevation of said strip. Fig. 5 is a plan of the head-connecting portion of the strip. Fig. 6 is a plan of a severed tack.

This tack-strip comprises the shanks  $a$  and the head-connecting portion  $a'$ , which is of the same thickness as the principal portion of the shanks. This head-connecting portion may have portions removed to form the notches  $a^2$ , as shown in Fig. 2, and is upset or flattened laterally by pressure upon the upper edge of the blank strip, which flattens the same and throws it in a lateral direction from the shanks, so that it is caused to take the shape shown at  $a^3$  in elevation in Fig. 3, in section in Fig. 4, and in plan in Fig. 5. Any suitable means may be used for thus upsetting the head-connecting portion, and of course it may be so upset or flattened without first forming the notches  $a^2$ , if desired.

The chief advantage of this invention is that we are enabled to produce an all-metal tack-strip cheaply, which provides a tack having a well-defined metal head and a strip which is easily fed to a tack-driving mechanism.

It will be seen that by forming the notches

$a^2$  in the edge of the tack-strip before the heads are formed the metal which forms the heads is disposed, in its best form, to be easily upset or flattened by the pressure which is brought to bear upon the edge thereof for this purpose, and that each shank is provided with a head that projects uniformly, or substantially uniformly, from it on all sides, and that the shape of the head is circular or elliptical, and that the heads  $a^3$  are connected with each other by a portion of the strip, which preferably is not upset at all, but which may be somewhat upset, but if so to a very limited extent. Of course this result could be obtained by upsetting the entire head-connecting portion  $a'$  before forming the notches  $a^2$ ; but in our opinion this would not be as efficient, desirable, or practical a way of forming the heads, because it is desirable to provide for the extension of the metal while being upset in all directions, and this is accomplished by providing the notches  $a^2$ . At the same time we would not be understood as confining our invention to a tack-strip in which the notches  $a^2$  are formed before the upsetting of the head-forming portion of the blank strip to make the heads of the shanks.

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

1. A tack-strip consisting of the shanks  $a$ , each provided with its separate laterally-extending head, but connected by a narrow strip of the blank from which the heads are formed and adapted to be separated into single tacks or nails, substantially as shown and described.

2. A flat tack-strip blank having the shanks  $a$ , the head-connecting portion  $a'$ , and the notches  $a^2$ , formed in the edge of the head-connecting portion to divide the same into separate head-forming portions or sections, all substantially as and for the purposes described.

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Witnesses:

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