

(No Model.)

G. W. COPELAND.

ART OF HEADING NAILS, TACKS, &c.

No. 383,043.

Patented May 15, 1888.

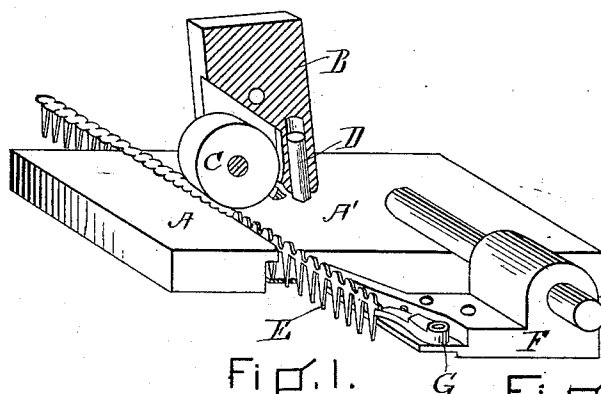


Fig. 1.

Fig. 6.

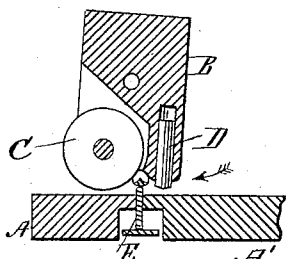


Fig. 2.

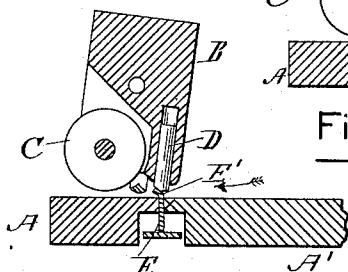


Fig. 3.

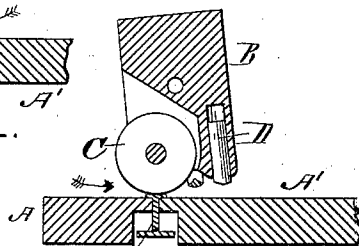


Fig. 4.

WITNESSES.

Frank H. Parker.

Matthew M. Blunt.



Fig. 5.

INVENTOR.

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UNITED STATES PATENT OFFICE.

GEORGE W. COPELAND, OF MALDEN, MASSACHUSETTS.

ART OF HEADING NAILS, TACKS, &c.

SPECIFICATION forming part of Letters Patent No. 383,043, dated May 15, 1888.

Application filed February 8, 1888. Serial No. 263,361. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. COPELAND, of Malden, in the county of Middlesex and Commonwealth of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in the Art of Heading Nails, Tacks, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of the specification in explaining its nature.

The object of my invention is to provide a simple and rapid method of heading or upsetting nails, tacks, &c., either hot or cold.

In the accompanying drawings, I have particularly shown a method of applying my invention to heading strip-tacks, in which—

Figure 1 is a perspective view showing the parts necessary for practicing my method. Figs. 2, 3, and 4 illustrate the different steps in this method. Fig. 5 shows a series of strip-tacks headed. Fig. 6 shows a view of a single nail, to which my method is applied.

Adopting the strip-tack as the article which I use for the purpose of illustrating my method, I proceed as follows: The strip-tacks, united as indicated in Fig. 5, are placed within the gripping-jaws A A', and fed along by the feeding mechanism F G into the field of action of the tools D and C in the tool-holder B. The first step in the method is to incline that part of the metal to be used in forming the head E', Fig. 3, by pressing or forcing it over, as indicated in Fig. 3, the work being done by the tool D, which is caused to move in the direction of the arrow, Fig. 3. This bending

of the head metal having been accomplished, a second tool—the roller C—moves in the direction of the arrow, Fig. 4, and forces downward the head metal, and afterward by its continued movement causes the head metal or a part of the head metal to flow over to the right and thus complete the head, as shown in Figs. 4 and 5.

In Fig. 2 I have shown the position of the tools D and C in relation to the article to be headed and before the work begins.

In the illustrations I have simply shown one set of working parts, and have not shown any mechanism for moving said parts, as I do not wish to confine myself to any particular mechanism, for my invention is in reality an art that may be practiced by the use of a great many well-known mechanical devices—for instance, the tool-carrier B may be omitted and two carriers put in its place, one for each tool, and instead of the tool D a roller on a swinging lever could be used.

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

That improvement in the art of heading nails or tacks which consists in taking a blank or strip of metal, clamping it rigidly, bending the edge or top portion at an angle, and then bending or swaging the end and parts near the end of said bent portion back upon itself, substantially as described.

GEORGE W. COPELAND.

Witnesses:

M. A. BALLINGER,
J. H. GRAY.