

(No Model.)

B. HEMANN.  
CUT NAIL MACHINE.

No. 386,317.

Patented July 17, 1888.

Fig. 1.

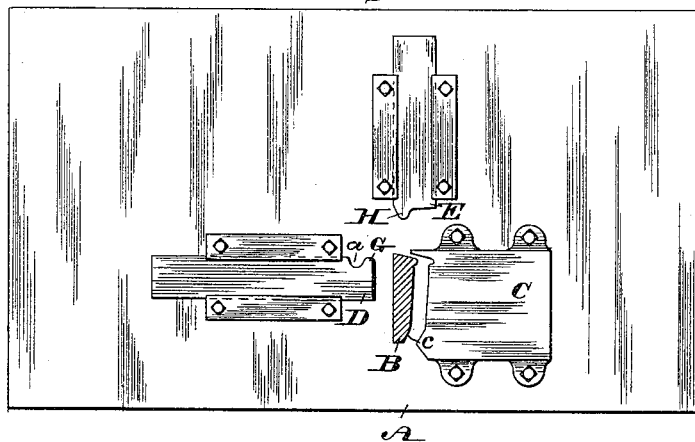


Fig. 2.

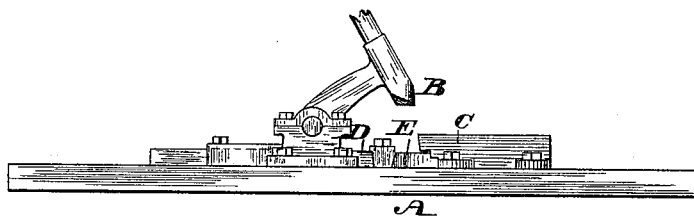


Fig. 3.

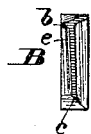


Fig. 4.

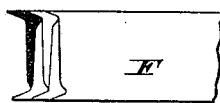


Fig. 5.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

BENNARD HEMANN, OF BELLEVILLE, ILLINOIS.

## CUT-NAIL MACHINE.

SPECIFICATION forming part of Letters Patent No. 386,317, dated July 17, 1888.

Application filed August 8, 1887. Serial No. 246,367. (No model.)

*To all whom it may concern:*

Be it known that I, BENNARD HEMANN, a citizen of the United States, residing at Belleville, in the county of St. Clair and State of Illinois, have invented a new and useful Improvement in Cut-Nail Machines, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in cut-nail machines; and it consists in the construction and combination of parts as herein set forth and claimed.

Figure 1 represents a top or plan view of a cut-nail machine embodying my invention, the cutter being shown in sections. Fig. 2 represents a side elevation thereof. Fig. 3 represents a view of the working edge of the cutter thereof. Fig. 4 represents a view of the blank employed and the outlines of a nail made therefrom. Fig. 5 represents a view of a finished nail as completed by the mechanism embodied in my invention.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A represents a bed-plate or part of the frame of a cut-nail machine, and B represents a cutter or knife which is properly operated and guided so as to move to and from the working-edge of the bed-knife C, the latter being supported on the plate A.

D and E represent shaping-dies, which are located on the plate A at a right angle to each other, adjacent to one end of the working-edge of the bed-knife, said dies being connected with suitable mechanism whereby they are advanced and returned. The working-edges of the knife B and bed-knife C are shaped to cut from the blank F the pieces shown in outline on said blank in Fig. 4 as a primary step in forming the cut nail shown in Fig. 5. The die has on its side, near the front end, a depression, *a*, forming a nose, G, and the die E has on its front end a nose, H, said noses being adapted for bending the head of the nail into hook shape, as will be hereinafter more fully set forth. The working-edge of the knife B has a projection, *b*, at the neck of the head portion of said edge, and a bevel, *c*, at the

front portion thereof, the face of the projection *b*, where it joins the shank portion of said edge, being beveled, as at *e*.

The operation is as follows: The blank or plate is placed on the bed-knife C and motion duly imparted to the cutter B and dies D E. As the cutter B descends or advances it cuts the blank of shape corresponding to the contour of the working-edge of the cutter. The blank is then turned and the cutter advances, whereby the blank is cut the primary shape of a nail. (Shown blackened in Fig. 4.) The blank is again turned and the cutter advanced, whereby the second shaped piece is severed, it being noticed that each time the cutter advances one-half of the point of the nail is formed, so that two motions of the cutter form the point of a nail without requiring said point to be cut by subsequent operations. After the primarily-shaped nail leaves the cutter it is temporarily arrested below the top of the bed-knife by nippers or other means well known in nail-making, and the die D advances and firmly holds said nail. The die E next advances, and its nose H bends the head of the nail around the nose G of the die D, thus producing a hook, as will be seen in Fig. 5.

The contour of the working-faces of the parts of the machine may be varied to produce nails of different shapes, forms of which are shown in the drawings.

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

A cut-nail machine having a bed plate with the bed-knife C secured thereto, the cutter B, with a cutting edge having projection *b* and bevels *c* and *e*, the said bed-knife C having a cutting-edge corresponding to said edge of cutter B, and shaping-dies D and E, operating at right angles to each other, the former having the depression *a* and nose G, and the latter having the nose H, said parts being combined substantially as described.

BENNARD HEMANN.

Witnesses:

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A. G. GLASER.