

A. W. PAULL & JOHN MORGAN, Jr.

Improvement in Cut-Nail Machines.

No. 116,091.

Patented June 20, 1871.

Fig. 1.

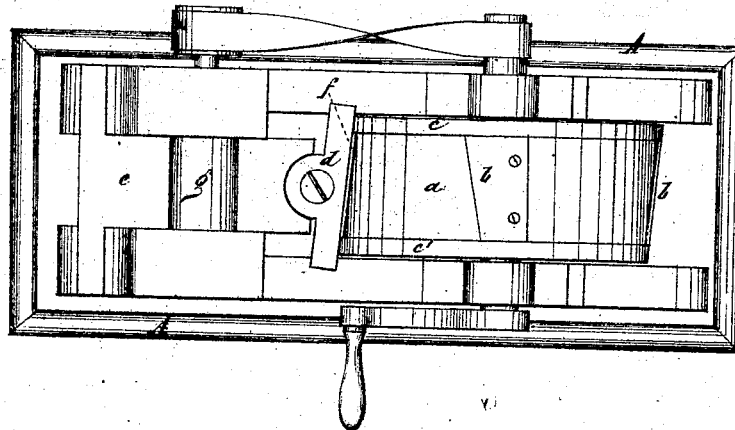
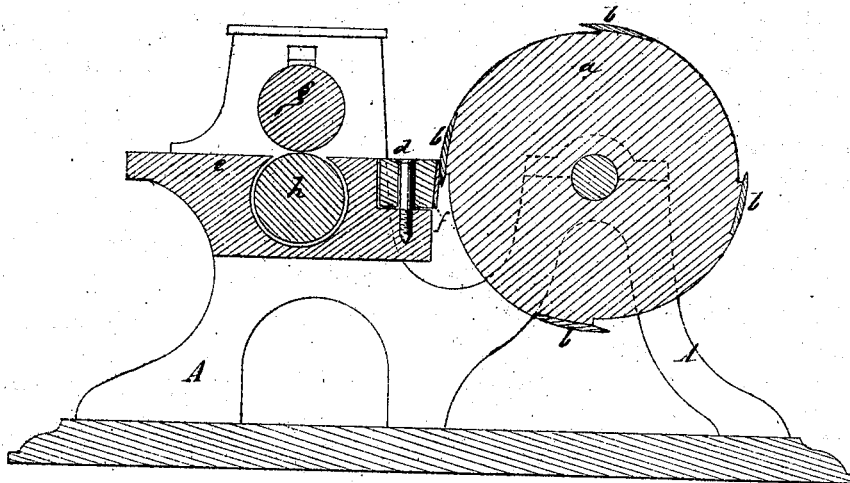


Fig. 2.



Witnesses:

H. J. Metz  
A. Hughes

Inventor:

Archie W. Paull  
J. Morgan, Jr.

PER *[Signature]*  
Attorneys.

# UNITED STATES PATENT OFFICE.

ARCHIE W. PAULL AND JOHN MORGAN, JR., OF WHEELING, WEST VIRGINIA.

## IMPROVEMENT IN CUT-NAIL MACHINES.

Specification forming part of Letters Patent No. 116,091, dated June 20, 1871.

*To all whom it may concern:*

Be it known that we, ARCHIE W. PAULL and JOHN MORGAN, Jr., of Wheeling, in the county of Ohio and State of West Virginia, have invented a new and Improved Nail-Cutting Machine; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view, and Fig. 2 is a longitudinal sectional elevation.

Our invention relates generally to machines for cutting nail-blanks from sheets of metal, and particularly to the machine patented by W. J. Miller, June 27, 1854. The invention consists in an improvement upon this machine, by which the nail-blanks are cut with uniformity, as will be hereinafter fully described, and then clearly pointed out in the claim.

On the drawing, *a* represents the rotating cutter-stock. *b* are knives, whose edges are at an angle to a plane passing through the axis of the stock, and the obliquity of each alternate knife is reversed. *c c'* are cam-flanges, arranged on the edges of the periphery of the stock. *d* is a pivoted cutter-stock, having the knife *f* thereon. *g h* are feed-rolls. Each alternate space of the periphery between the knives is beveled transversely, and the recess formed corresponds in depth and shape to the nail-blank intended to be cut.

The mode of operation is as follows: The nail-plate, being fed forward by the rolls until

it strikes the surface of the cutter-stock, is immovably held along the whole line of its front by the inclined surface of the stock. Any lateral movement is also prevented by the flanges *c c'*. As the cutter-stock revolves the cam-flanges *c c'* also move the horizontally-vibrating cutter-stock *d* into parallelism with the nearest descending knife. The peculiar construction of the surface of the periphery of the cutter-stock, by which the nail-plate is supported along its entire front edge, causes all the blanks to correspond exactly to the intended pattern, and all to contain the same proportion of metal to the pound.

Having thus described all that is necessary to a full understanding of our invention, what we esteem to be new, and desire to protect by Letters Patent, is—

As our improvement of nail-cutting machines of the character generally herein described, the particular construction of the rotary cutter-stock—that is to say, with lateral eccentric flanges for operating the pivoted nail-cutter *D*, preventing lateral displacement of the nail-plate, and alternating reversely-inclined recesses in and extending across its periphery between the cutters, all as described, and for the purpose specified.

A. W. PAULL.  
JOHN MORGAN, JR.

Witnesses:

F. M. INGRAM,  
C. A. O'BRIEN.