

L. A. DODGE.

Cutters for Wrought-Nail Machines.

No. 155,715.

Patented Oct. 6, 1874.

Fig. 1.

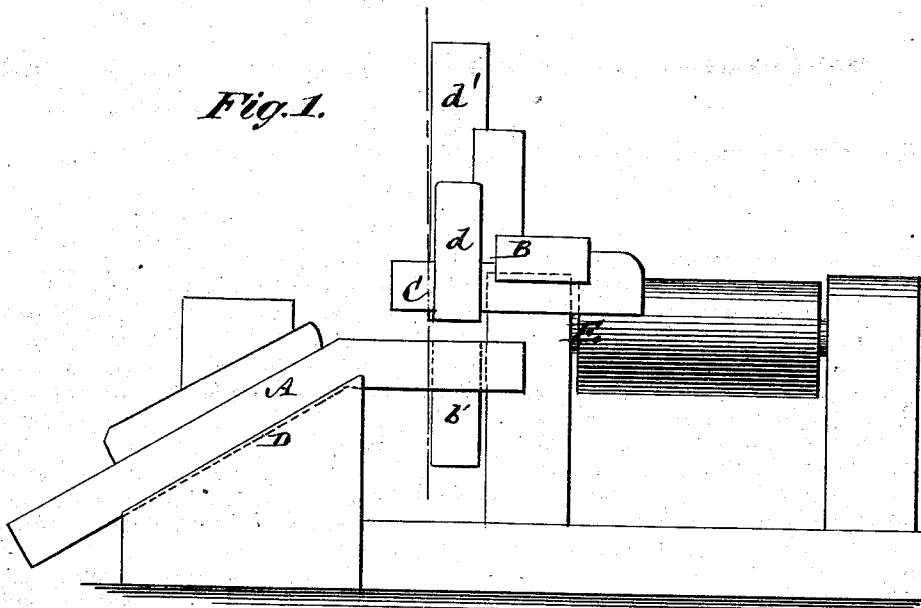


Fig. 2.

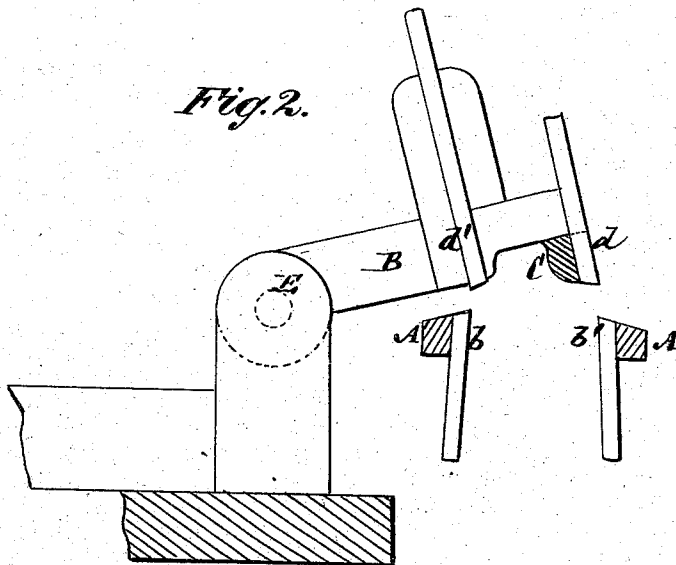
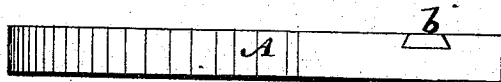


Fig. 3.

Witnesses

John Becker
Fred. Haynes



L. A. Dodge
by his Attorneys
Brown & Allen.

UNITED STATES PATENT OFFICE.

LUCIUS A. DODGE, OF KEESEVILLE, NEW YORK.

IMPROVEMENT IN CUTTERS FOR WROUGHT-NAIL MACHINES.

Specification forming part of Letters Patent No. **155,715**, dated October 6, 1874; application filed August 11, 1874.

To all whom it may concern:

Be it known that I, LUCIUS A. DODGE, of Keeseville, in the county of Essex and State of New York, have invented an Improvement in the Cutting Devices of Apparatus for Wrought-Nail and Spike Forging Machines, of which the following is a specification:

This invention relates to machines for making wrought-nails and spikes, constructed to operate substantially as described in Letters Patent No. 25,183, issued to Daniel Dodge, August 23, 1859, and since extended, and in which the nail or spike rod is conveyed by grippers to the forging or pointing apparatus, is held there during the pointing or forging operation, and is afterward conveyed to the cutters, which cut off the nails or spikes after they have been forged or pointed.

The invention consists in a certain combination of repairing pieces or stationary detachable cutters with the holders thereof of horizontal construction at their forward ends, and an inclined bed or portion along which the holders of the stationary cutters are adjustable toward or from each other, whereby increased facilities are provided for repairing or sharpening said cutters, and of adjusting them to their work.

In order to explain the nature of my invention, it will here be stated that the spike or nail rod in said machine of Daniel Dodge's was fed over a rest to the forging or pointing apparatus, and over two stationary cutters, whose edges were horizontal and about level with the face of the rest, said cutters being at a distance apart equal to the intended length of the nails, the one of said stationary cutters serving to cut the nails from the rod, and the other of said cutters serving to cut any surplus metal from the points of the nails, the rod or bar, after forging of the nail or spike, being moved backward between the cutters for the purpose. These cutters were so applied and secured by keys in a part of the framing, and by a clamp, as to be capable of adjustment nearer to or farther from each other to cut nails of various lengths; also adjusted up or down an inclined bed to bring their cutting-edges on a line with the rest over which the bar was slid or fed. Above these stationary cutters were two adjustable cutters attached to an arm of a rock-shaft,

said cutters operating, in combination with the stationary cutters, to cut off the nails from the rod after the same had been forged or pointed. In such machine, the cutters were formed of adjustable bars, whereas in this invention I use adjustable cutter-holders, with the cutters themselves fitted within dovetail grooves in the holders, which gives an enlarged facility for grinding or replacement of the cutters, while the holders afford every facility as regards adjustment.

Figure 1 is an end view of the cutting portion of the apparatus, having my invention applied. Fig. 2 is a sectional side elevation thereof; and Fig. 3 a top view of one of the cutter-holders, with a stationary cutter attached.

A A are the holders of the stationary cutters, adjustable to or from each other by means of a clamp, keys, and a bed or portion, D, of the frame, as in the stationary cutters of Daniel Dodge's machine, hereinbefore referred to, and to which, excepting as regards their forward cutting-edges, they correspond, the forward portions of said cutter-holders being horizontal and on a level, or thereabout, with the rest over which the nail-rod was fed, but instead of said forward portions being sharpened to cut, they are fitted, by means of dovetail grooves within or up through them, with repairing pieces or cutters proper *b b'*, which may readily be removed for repair or grinding, or be set up or down to meet the exigences of wear. The upper cutters *d d'*, or at least the one *d* of them, is similarly fitted to a holder, C, adjustable in direction of its length, and carried by the arm B of the rocking-shaft E, forming a portion of the combination of devices hereinbefore referred to in the Daniel Dodge machine.

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

The combination of the repairing pieces or detachable cutters *b b'* with the cutter-holders A A of horizontal construction at their forward ends, and the bed or portion D, substantially as and for the purposes herein set forth.

LUCIUS A. DODGE.

Witnesses:

DANIEL DODGE,
GEORGE D. BARNETT.