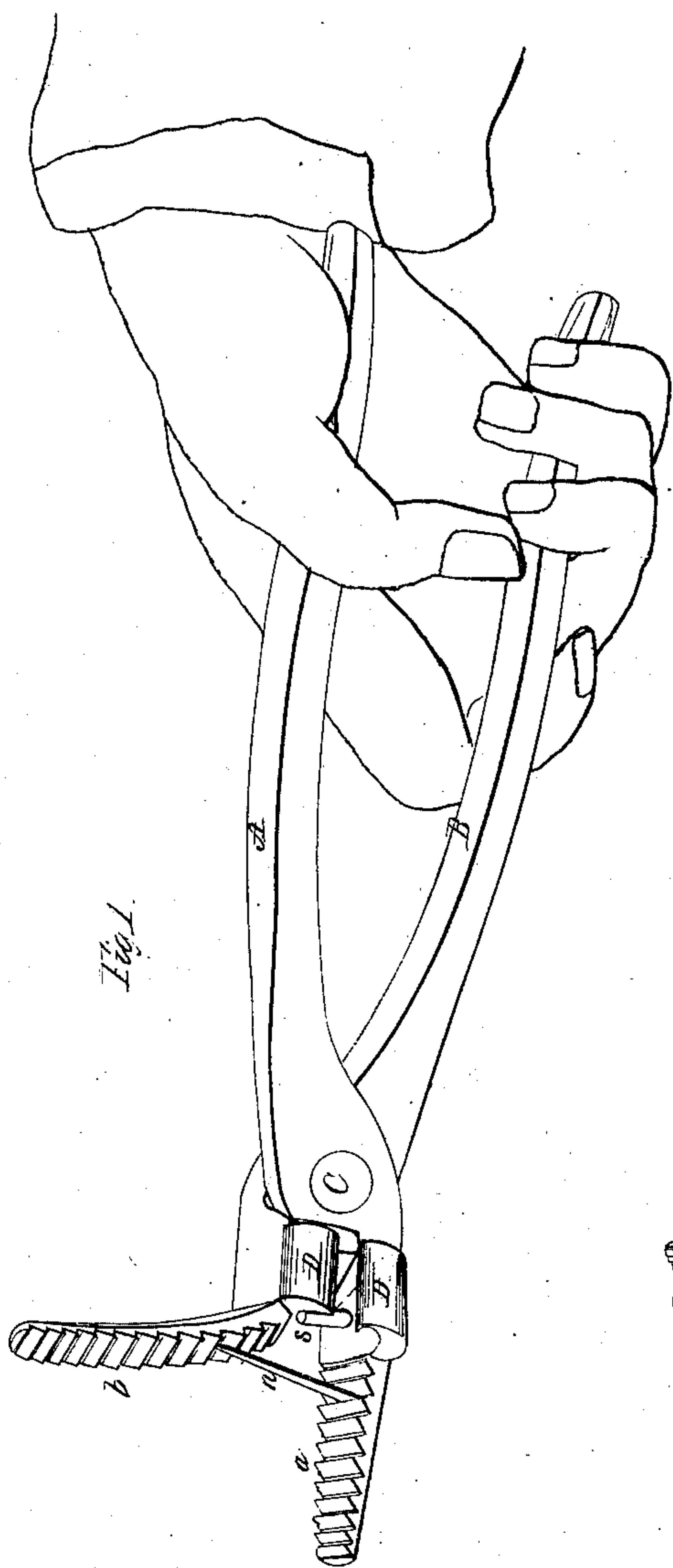


*J. E. Giles,*

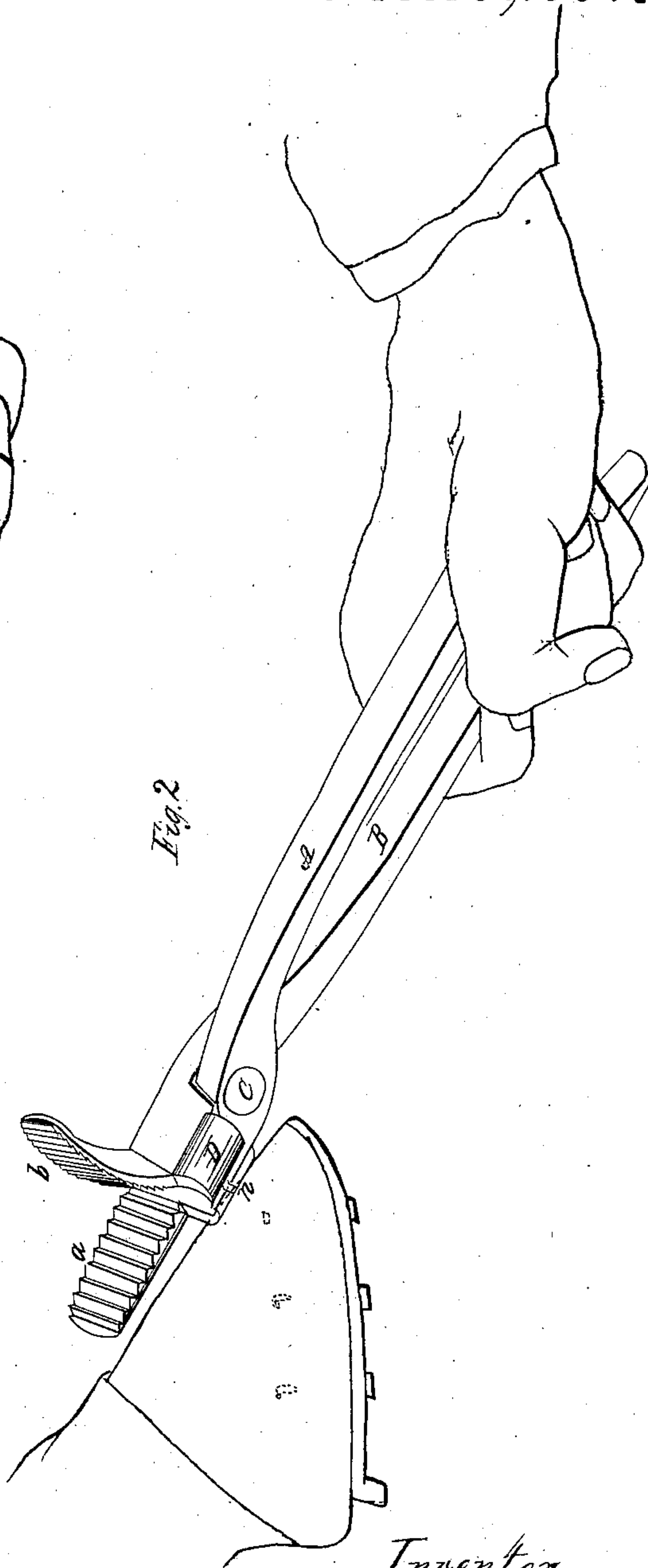
*Horseshoe-Nail Clincher.*

*N<sup>o</sup> 41,695.*

*Patented Feb. 23, 1864.*



*Fig. 1.*



*Fig. 2.*

*Witnesses:*

*George Johnson,  
James A. Trines*

*Inventor:*

*Joel E. Giles*

# UNITED STATES PATENT OFFICE.

JOEL E. GILES, OF MARSHALL, MICHIGAN.

## IMPROVED TOOL FOR CLIPPING AND CLINCHING HORSESHOE-NAILS.

Specification forming part of Letters Patent No. **41,695**, dated February 23, 1864.

*To all whom it may concern:*

Be it known that I, JOEL E. GILES, of the city of Marshall, in the county of Calhoun and State of Michigan, have invented a new and Improved Combination-Tool for Clipping and Clinching Horseshoe-Nails when Driven Through the Horse's Hoof; and I do hereby declare the following to be a full, clear, and exact description of the construction and manner of using the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the tool as held in the act of clinching. Fig. 2 represents the same as clipping the point of the nail previous to clinching the said point.

Similar letters refer to like parts in both of the figures.

My improved clipping and clinching tool consists of two crossed levers similar in general arrangement to a pair of tongs for blacksmiths, the long legs or handles being indicated at A and B, and the corresponding short legs or jaws by *a* and *b*, respectively. These levers A and B are attached by a stout fulcrum-pin at C, so as to open and shut freely but not loosely. The blades or jaws *a* and *b* are forged and swaged to the form indicated more clearly in Fig. 1, the portion marked *a* being drawn out nearly in a direct line with the handle B when the tool is closed, while the jaw *b* is curved upward so as to form a spherical angle with the line *a* B. The opposing faces of the jaws *a* and *b* are serrated or notched laterally, in the manner of a ratchet-wheel, for a purpose to be hereinafter explained.

Between the inner termination of the serrated portion of the jaws *a* and *b* and a point as close as may be practicable to the pivoted center C a cutting-lip, D, is formed on each face side of the levers, which projects slightly, and is bent over and nearly at a right angle to lie nearly or quite parallel with said face. The lips D D should be made of the best cast-steel, and also the jaws *a* and *b*, which may be welded onto the attached levers A B; or the whole tool may be forged and swaged out of solid steel to advantage, as it can then be made much lighter to handle. The inner or opposing edges of the lips D D are made thin and tempered properly, and resemble, when together, in their form and functions, a pair of ordinary cutting-pinchers.

S is a small stud-pin securely fixed in one of the jaws, to prevent the edges of the cutting-lips D D from coming into actual contact when the levers A and B are forcibly drawn together.

The manner of operation is as follows: The shoe being fitted to and the nail (shown at *n*) driven through the shoe and the horse's hoof in the usual manner, the workman, grasping the tool in a manner somewhat as shown in Fig. 2, cuts off with the side cutters, D D, nearly or quite all of the projecting portion of the nail *n* beyond the hoof, as represented by the dotted lines. Then shifting the tool one-quarter round in his hand to the position exhibited in Fig. 1, he spans that portion of the hoof through which the nail is driven with the two jaws *a* and *b* in such manner that the straight jaw *a* will rest against the bottom of the shoe, the projecting head of the nail *n* resting between two of the notches. When drawing the lever or handles A and B together, the curved jaw *b* is depressed until the square face of one of its notches is brought against the cut point of the nail, when a forcible "pinch" (holding the tool steadily in place) will upset and sink the said point within the substance of the hoof, and the nail is firmly secured in its place.

This combined clipping and clinching tool in its operation is very convenient and expeditious, and besides leaving the upset or clinched part of the nail in a much safer condition than when clinched by the hammer in the ordinary way, it does not alarm young or skittish horses as the pounding of a hammer does, and renders the operation of horseshoeing much less risky and tiresome than heretofore.

I am aware that a clipping and clinching tool similar in general principle to mine has been patented; but in this the clinching-jaws project at a right angle from the face of the levers that carry the cutting-pinchers, while in mine the upsetting or clinching jaws are in line with the levers. As the difference is not colorable, but radical, I will briefly point out the leading features. The clinching-jaws being at a right angle with the levers and nearest the fulcrum-pin, there is not travel enough in the jaws to accommodate themselves to the various positions round a horse's hoof. Besides, the operator must change his position or use his left hand. If the nail could be



spanned, no ordinary man has sufficient strength of wrist to clinch a nail without the tool slipping, as, in addition to the compression of the levers, he must maintain a constant twist on the handles to keep the curved jaw up to the hoof. With my improvement, inasmuch as the clinching-jaws are in direct line with the levers or handles, no twist of the wrist is necessary to hold the tool to the hoof, and the respective travels of the clinching-jaws *a* and *b* and the cutting-lips *D D* in their relative positions with the fulcrum-pin *C* are exactly graduated to their several necessities and duties.

I do not claim, broadly, combining clinch-

ing-jaws and clipping-pinchers in one and the same tool; but

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

The combined arrangement of the clinching-jaws *a b* and cutting-lips *D D*, arranged relatively with each other, with the levers *A* and *B*, (to which they are respectively connected,) and with the fulcrum-pin *C*, substantially in the manner and for the purposes herein specified.

JOEL E. GILES.

Witnesses:

GEORGE JOHNSON,  
JAMES A. MINER.