

W. Thomas.

Spike Machine.

N^o 1,513.

Patented Mar. 14, 1840.

Fig. 1.

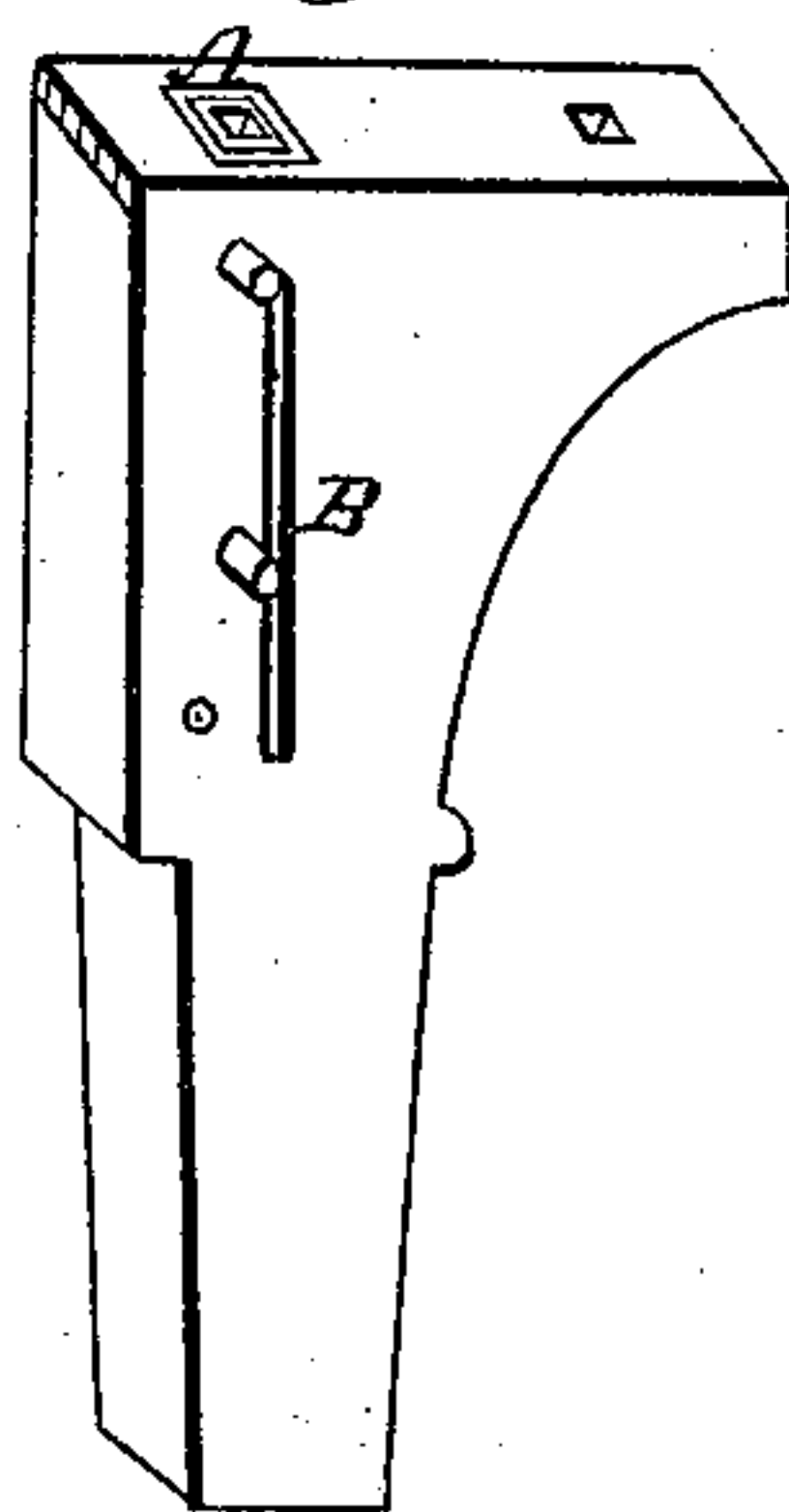


Fig. 3.

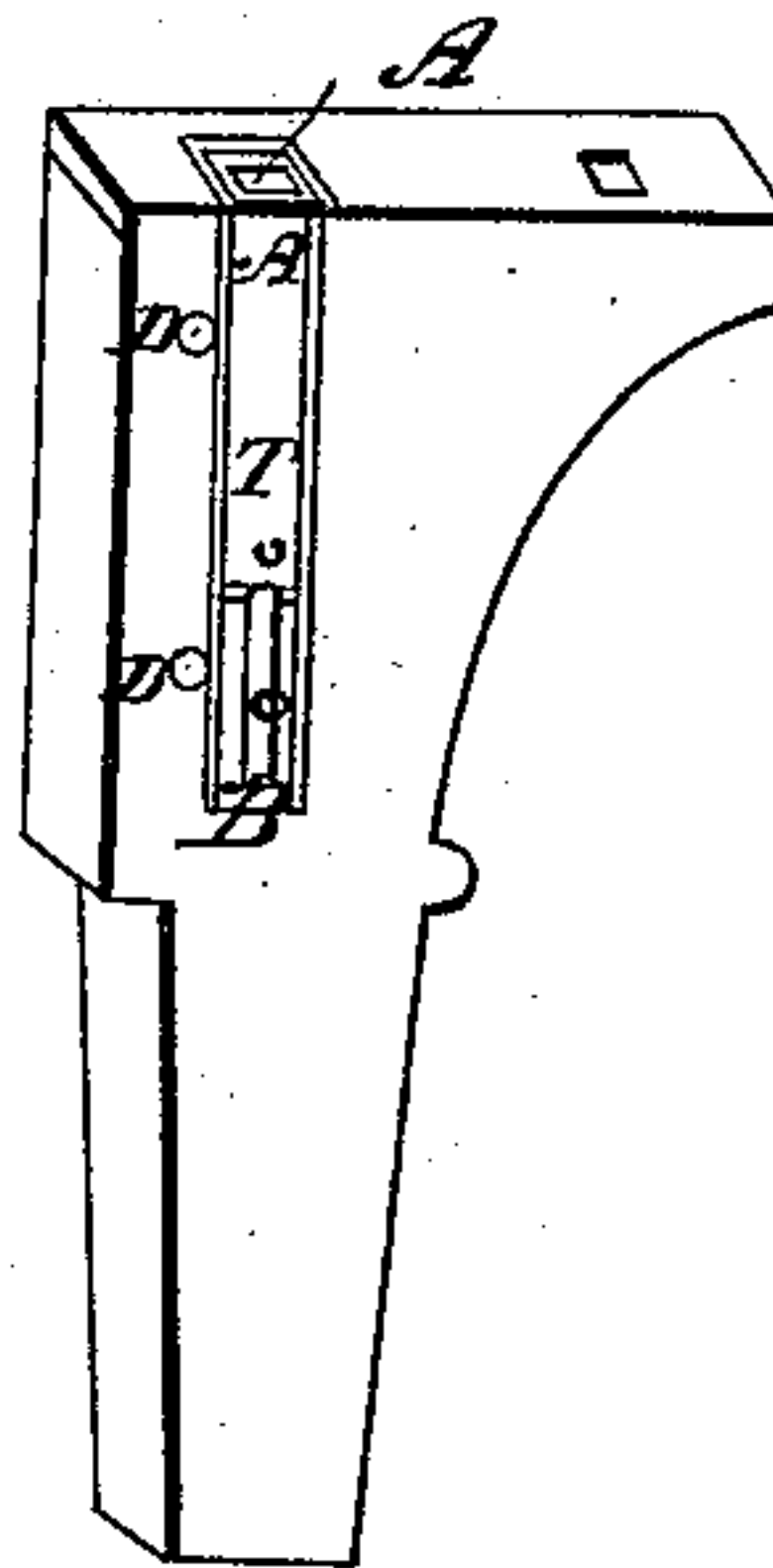


Fig. 5.

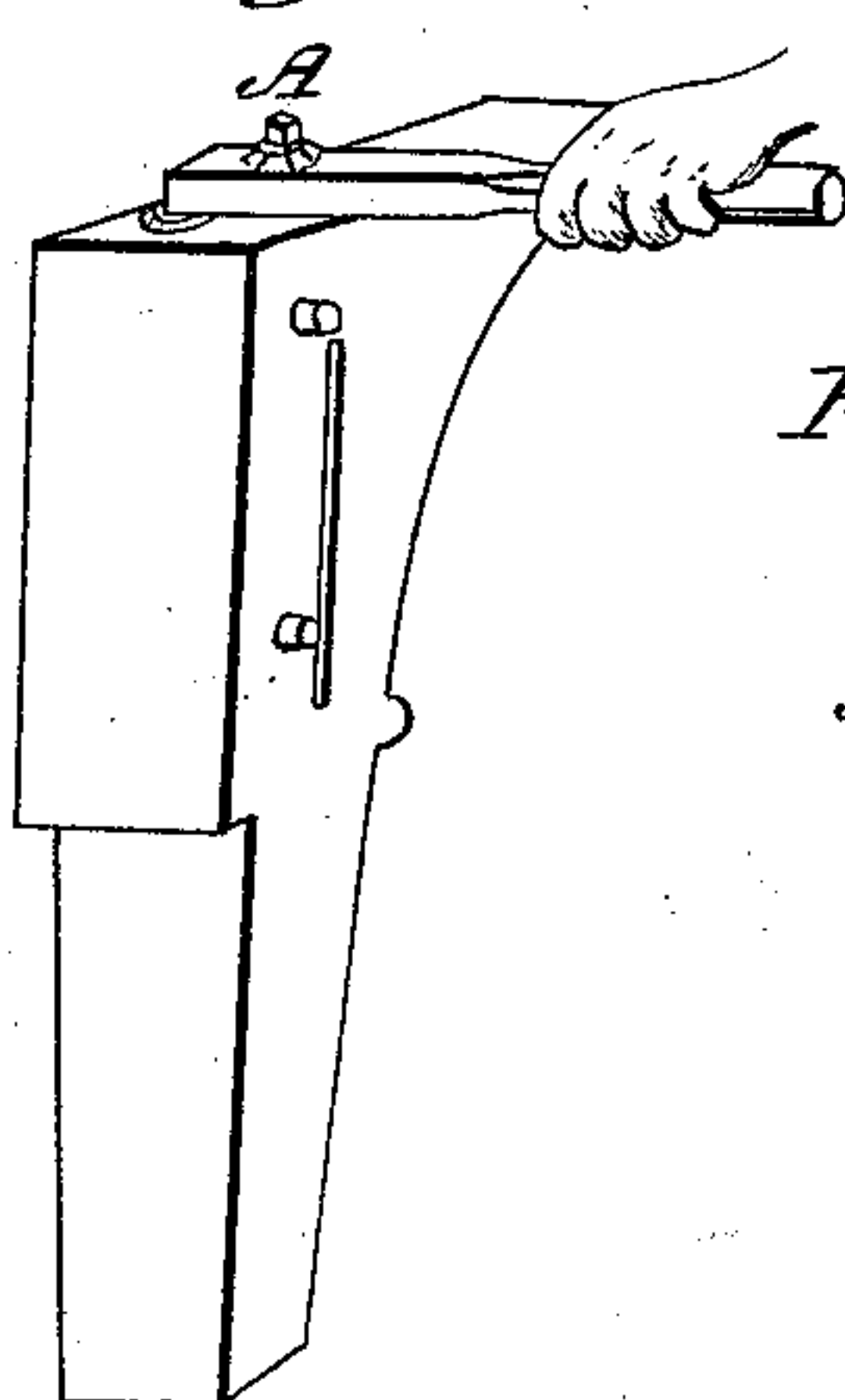


Fig. 2.

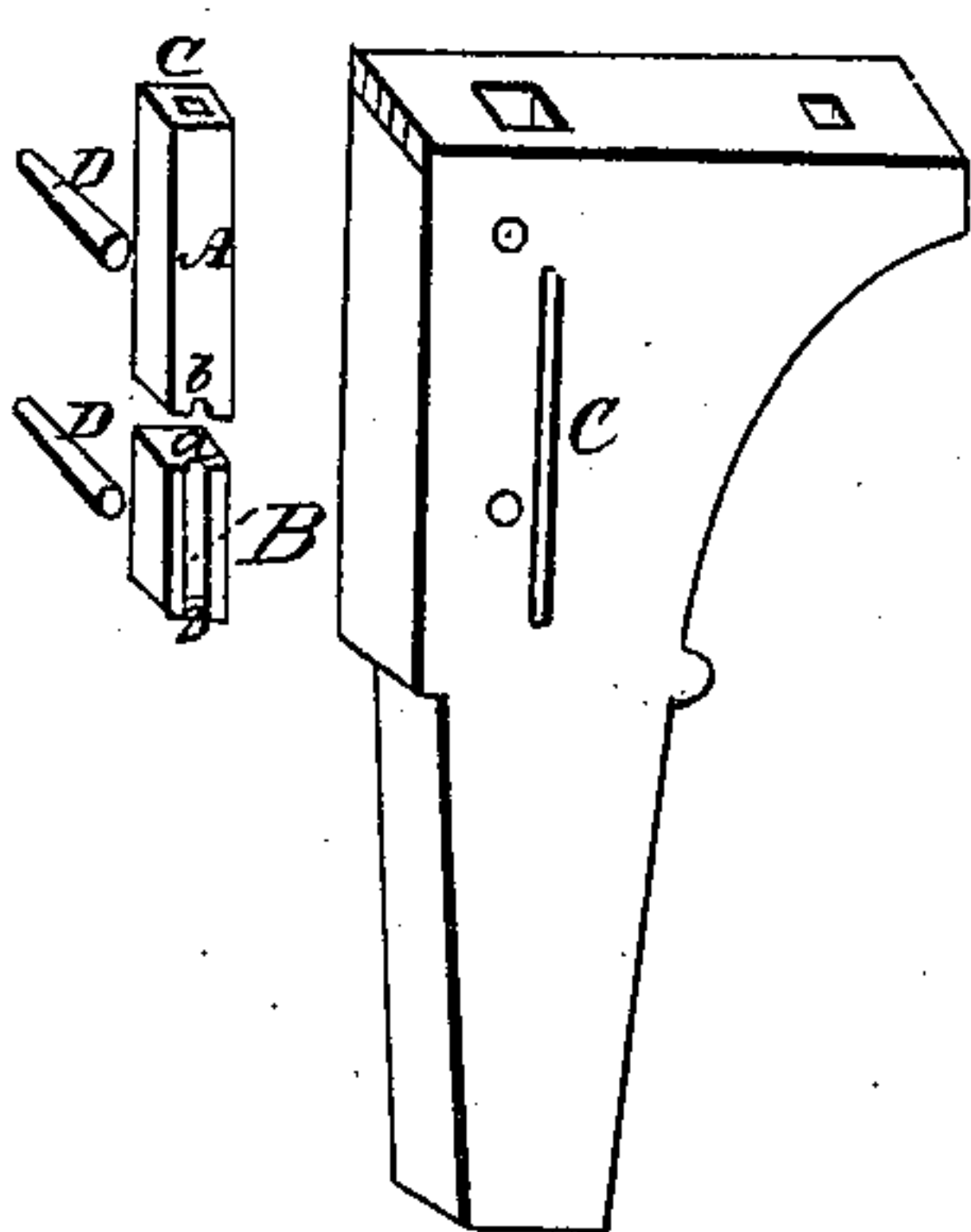


Fig. 4.



UNITED STATES PATENT OFFICE.

WILLIAM THOMAS, OF HINGHAM, MASSACHUSETTS.

MACHINE FOR HEADING SPIKES.

Specification of Letters Patent No. 1,513, dated March 14, 1840.

To all whom it may concern:

Be it known that I, WILLIAM THOMAS, of Hingham, in the county of Plymouth and Commonwealth of Massachusetts, have invented a new and useful Machine for Heading Spikes; and I do hereby declare that the following is a full and exact description of the same.

This machine consists of an anvil (Plate Figure I,) of iron or steel to be firmly fixed at the place of operation. In the top of the anvil there is an opening (Fig. I, A,) of sufficient depth and diameter to admit the tube (Fig. II, A) and the block (Fig. II, B) both of iron or steel. The block aforesaid is inserted in the opening in the top of the anvil (Fig. I, A, also Fig. II, A) and falls and rests upon the bottom of the opening (Fig. III, B). A perpendicular groove is cut in the side of said block (Fig. II, A, *a* to *b*) through which the oxids produced in the process of manufacture pass and fall out of lateral mortised openings in the sides of the anvil (Fig. I, B and Fig. II, C). The tube (Fig. II, A) has a hole through its center (at *c*) perpendicularly and of sufficient size to admit the spike rod. The top of this tube when inserted in the opening in the anvil is nearly on a level with the plane surface of the anvil, being such a little below it, and the bottom of the tube rests upon the top of the block, (Fig. III, A, B). A horizontal groove is cut in the lower end of the tube (Fig. II, A at *b*) from the center to the outside to lead to the perpendicular groove in the side of the block as aforesaid (Fig. II, B, *a* to *b*) through which horizontal groove the oxids above mentioned pass to the perpendicular groove and through the same out of the lateral mortised openings at the sides of the anvil as aforesaid.

The block and tube are kept in their places in the anvil by keys of iron or steel (Fig. II, D, D, also Fig. III, D D) either round or square, passing through the anvil trans-

versely and acting upon the block and tube (Fig. III, D, D). A hand heading tool (Fig. IV) of iron or steel is used with a hole through the center of the same (Fig. IV, A) to rest over the hole in the tube in the anvil as above mentioned.

The spike rods are cut of suitable length for spikes and inserted in the tubes in the anvil as aforesaid (at Fig. I, A), the lower end resting upon the top of the block (Fig. III, A) and the top of the rod is held through the hole in the hand heading tool aforesaid and projects above it a sufficient length of the rod to form the head of the spike (Fig. V, A) and the head is then formed with the hammer, the head end of the rod having been previously heated. The spike is then taken out and sharpened at the lower end on the common anvil. To make spikes of different lengths blocks and tubes of different lengths are used; and to make spikes of different diameters heading tools and tubes with holes through each of different sizes, corresponding with each other, are used. The blocks and tubes are removed from the anvil by a wedge inserted under the bottom of the block through the lateral openings in the anvil.

The relative position of the block, tube and keys and the grooves in the block and tube appear in a section of the anvil exhibiting those parts of the apparatus in their proper places (Fig. III, B, block T, tube D, D, keys G grooves).

What I claim as my own invention, and desire to secure by Letters Patent, is—

The making of an anvil with the openings at the top and sides to receive the blocks and tubes and for the escape of the oxids in the manner and for the purpose herein described.

WILLIAM THOMAS.

Witnesses:

SOLOMON LINCOLN,
BENJAMIN THOMAS.