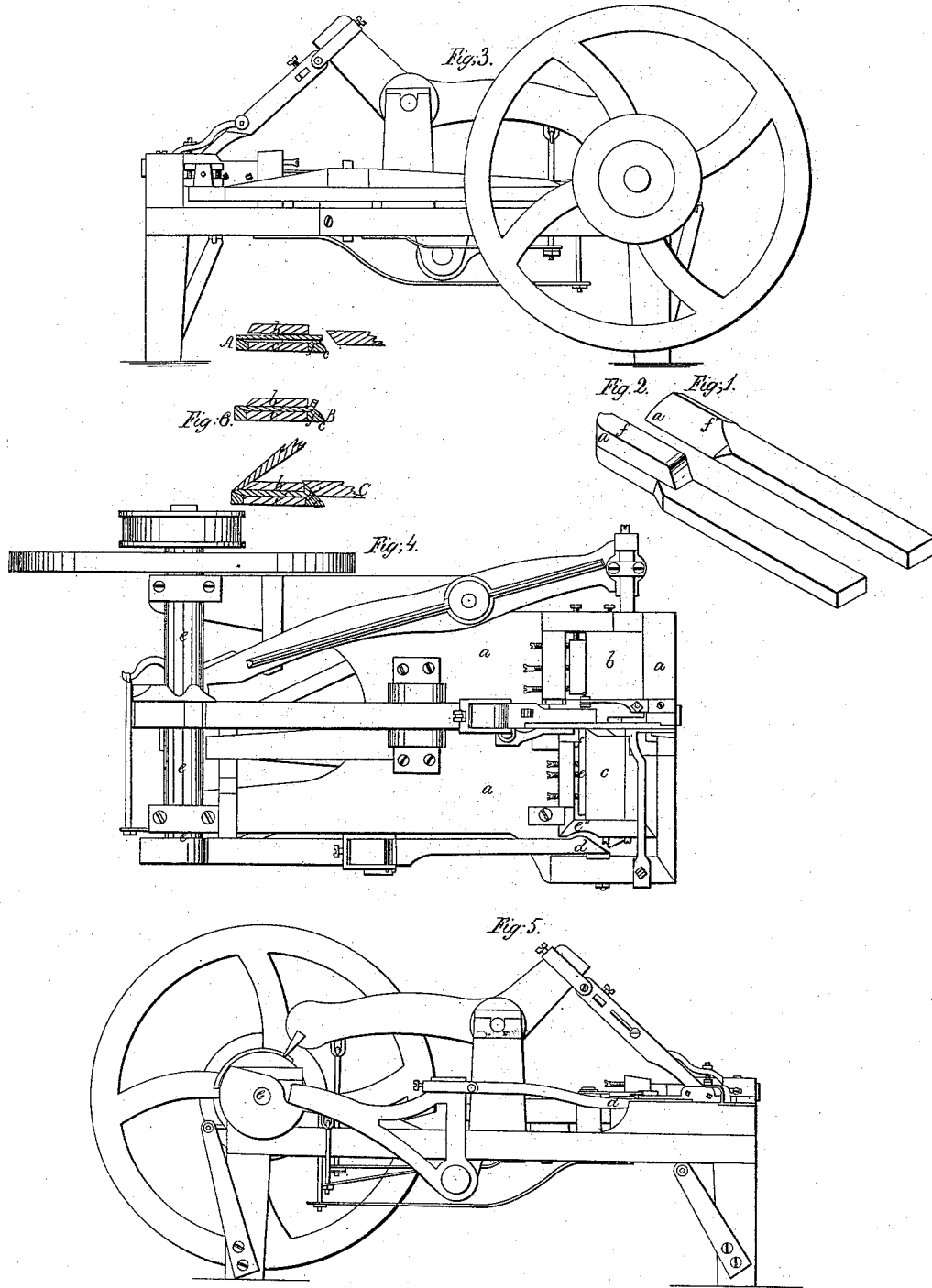


Winslow & Blanchard.

Making Spikes.

N^o 4,043.

Patented May 10, 1845.



UNITED STATES PATENT OFFICE.

J. F. WINSLOW AND ISRAEL BLANCHARD, OF TROY, NEW YORK.

MACHINE FOR MAKING HOOK OR BRAD HEADED SPIKES.

Specification of Letters Patent No. 4,043, dated May 10, 1845.

To all whom it may concern:

Be it known that we, JOHN F. WINSLOW and ISRAEL BLANCHARD, of Troy, in the county of Rensselaer and State of New York, have invented a new and useful Improvement in the Spike-Machine patented by Hunt and Osgood, in March, 1834; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, in which—

Figure 1 is a representation of the improvement for turning the head of spikes. Fig. 2 a modified tool for the same purpose. Fig. 3 is a side elevation of Hunt and Osgood's machine prepared for our apparatus. Fig. 4 a plan of said machine. Fig. 5, an elevation opposite to Fig. 3. Fig. 6, sections showing the heading process.

The nature of our invention consists in adding an improvement to the dies of Hunt and Osgood's machine so as to bend the spike by them before forming the head by which the machinery is simplified and the operation expedited.

The construction is as follows: the machine being represented as now in use in the Figs. 3, 4, 5 in which (*a*) is the frame of suitable dimensions, at one end of which the dies are placed formed in two parts, the upper one (*b*) of which is stationary and the lower one (*c*) slides; this is inclosed in a box (*c'*), in which the plain piece of steel (*c*) is fitted, having the proper form of the spike at the inner end, that slides laterally under the upper die, when moved by a wedge (*d*). This is connected with the cam shaft (*e*); beside the above named steel (*c*) our improvement is fitted into the box (*c''*); it is a bar of steel (*f*), shown more clearly in Figs. 1 and 2 (the second figure being a modification of the first).

In forming hook or brad headed spikes, the heads of which are in a transverse direction with the edge of the points, we use the tool shown at Fig. 1; it is a straight bar as thick as the steel plate (*c*) above named, with a projection (*f'*) above its upper surface at the inner end the side of which, next the plate (*c*) is concave, as represented in the figures.

The rod from which the spike is made, is fed into the machine in the usual way, at (*g*), and its end, of which the head is to

be formed lies upon and projects a little beyond this raised surface (*f*) as shown at A Fig. 6; and as the die box advances it also raises up toward the upper stationary die (*b*) which latter holds the rod down against the lower plate (*c'*) and the end of the spike rod is bent upward, (see B, Fig. 6) before being acted upon by the header as at *c'*; this piece (*f*) also forms a portion of the die for forming the back part of the head as represented in sections, Fig. 6.

If the points of the spikes are to be reversed in relation to the heads from those above described, we introduce the tool, Fig. 2, (in place of Fig. 1) into the moving die box; this has the form on the inner end, and the rod is fed in past its end and on one side, instead of over it as in the first instance, this as the die box advances, turns the end of the rod to one side as the dies close and grips the rod, when the spike is headed as in the first instance.

It will be observed that the above described tools are particularly adapted to the spike machine known as "Osgood and Hunt's machine," the parts and combinations of which are such as to enable us to use the improvement herein described in forming hook headed spikes and its use or application is limited to said machine, and such other machines the gripping and heading parts of which are substantially the same as said Osgood and Hunt's machine.

What we claim therefore as our invention and desire to secure by Letters Patent is

The above described tools for forming hook headed spikes and their application to said Osgood and Hunt's spike machine, which tools are so formed that when introduced into the movable die box of said machine a projection is given to the dies so that that part of the rod of which the head is to be formed receives the requisite bend in the operation of gripping as herein described, when the header described in Osgood and Hunt's specification of March 1834 advances and completes the head.

JOHN F. WINSLOW.

ISRAEL ^{his} × BLANCHARD.
mark

Witnesses:

J. KNOWLSON,
D. BEATTIE.