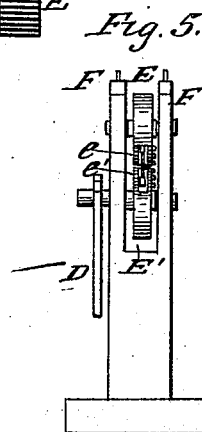
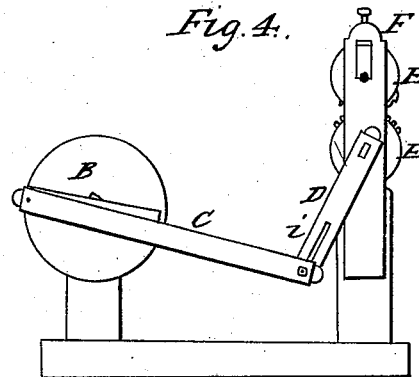
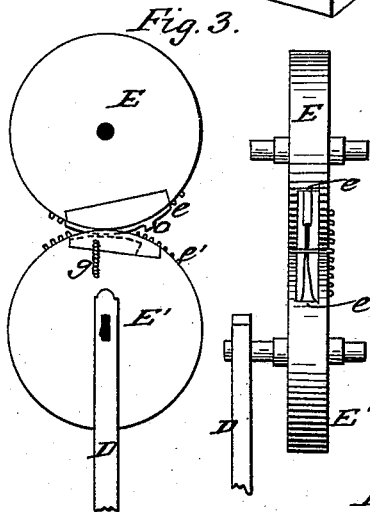
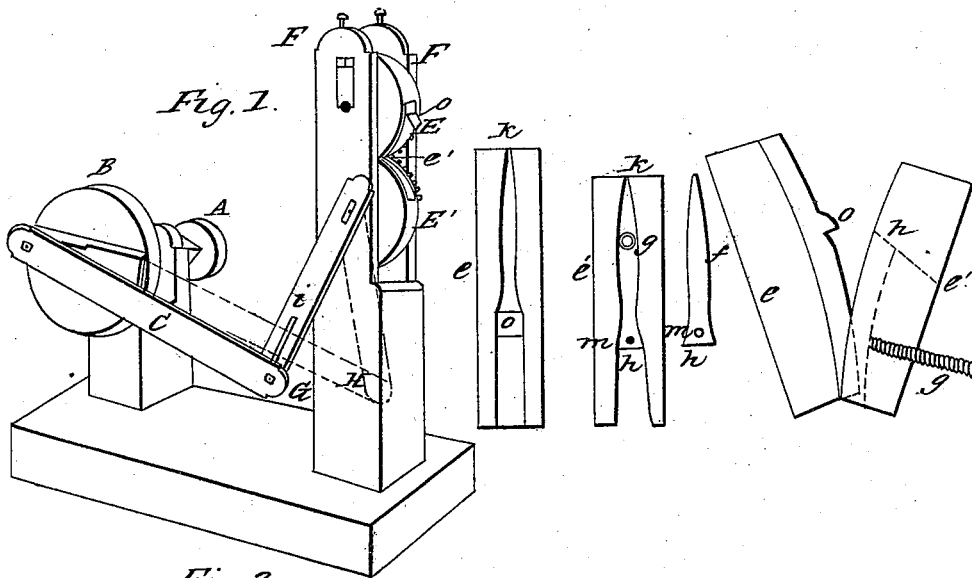


T. SOMERBY.

Machine for Making Wrought Nails.

No. 1,477.

Patented Jan'y 22, 1840.



Witnesses:

Wm. H. Brown
Emory J. Brown

Inventor:

Thos. Somerby

UNITED STATES PATENT OFFICE.

THEOPHILUS SOMERBY, OF WELLS, MAINE.

MACHINE FOR MAKING WROUGHT NAILS.

Specification of Letters Patent No. 1,477, dated January 22, 1840.

To all whom it may concern:

Be it known that I, THEOPHILUS SOMERBY, of Wells, in the county of York and State of Maine, have invented a new and useful
5 Improvement in the Making of Wrought Drawn Nails for Horseshoes or Any other Purpose; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of
10 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 machine. Fig. 3 is an end view of the wheels
15 with the dies and spiral and spring for throwing out the nail inserted. Fig. 2 is a full sized drawing of the dies, spring, spiral and clipper. *h*, *h* is a front view and *l* a side view of the same.

20 A, represents a pulley for communicating motion to the machine; B a pulley for giving a crank motion to the lever; C C, a lever connected with and conveying motion to the reciprocating bar D. The bar D, at each
25 revolution of the pulley B moves from G to H and back again, which gives a reciprocating motion to the pulley or wheel E', which moves by cog work the wheel E. E, E', are two wheels of cast iron ten inches in diameter and two inches thick cast with solid
30 shafts or arbors placed between the two uprights and grooved to receive the male and female dies *e e'*. F, F, are two upright posts, two pieces of cast iron, twenty-two
35 inches long, four inches wide, and two inches thick, with a space of four inches between said uprights.

e, is a male and *e'* a female die represented as inserted in Figs. 1 and 3 and a front
40 and side view detached is shown in No. 2, of

full size. They are made movable, to be placed in a groove in the wheels E, E', and secured by screws to each die.

f is a spring which is to be placed in the female die, and riveted down at the hole at
45 *h*. When the nail is drawn into the machine this spring is pressed down close to the space in the bottom of the die, and when the wheel recedes this spring is thrown up by the spiral and thereby throws out the
50 nail.

o is a shear or clipper for cutting off the rod at *h*.

i is a slot for regulating the motion of the wheels E, E'. 55

Fig. 1 represents the machine in the position to receive the rod, which is heated and placed between the dies when it is drawn or pressed in, pressing down the spring *f*, which fills the bottom of the space in the
60 die. The clipper *o* cuts off the rod at *h*, the wheel then recedes, the pressure is relieved from the spring *f*, the spiral *g*, operates, throws out the nail ready made and the dies are ready to receive the rod again. 65

Those parts of the machine that the size is not named are to be made and proportioned of such size as will give sufficient motion to the dies.

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

The shear or clipper which separates the nail from the rod in combination with the dies, and also the employment of the spiral spring inserted in the female die for throw-
75 ing out the nail, all as described.

THEOPHILUS SOMERBY.

Witnesses:

P. HENRY EASTMAN,
NEHEMIAH EASTMAN.