T. FOWLER.

MACHINE FOR MAKING HORSESHOE NAILS.

No. 64,964. Patented May 21, 1867.

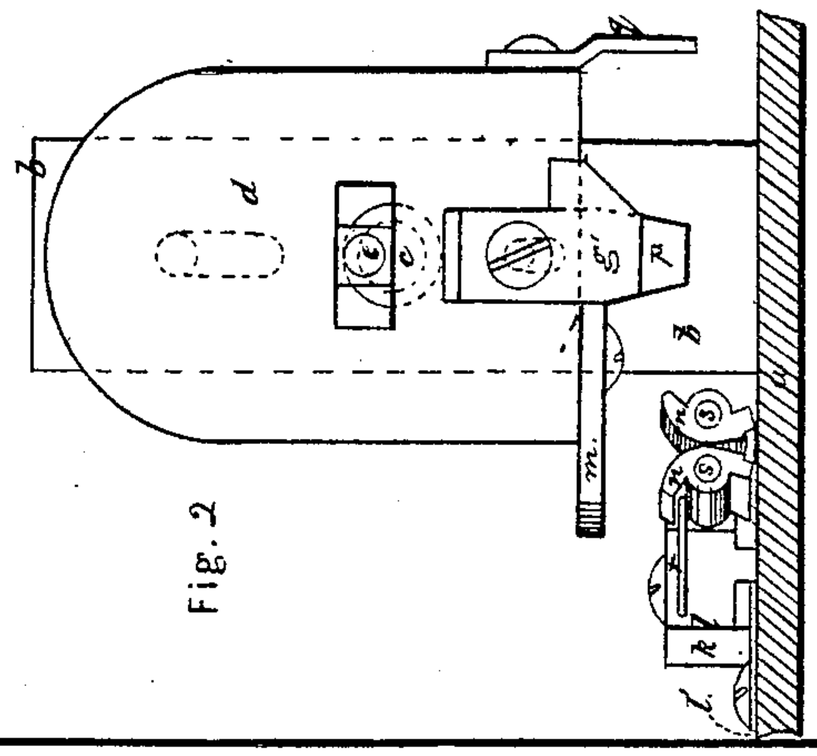

Fig. 2

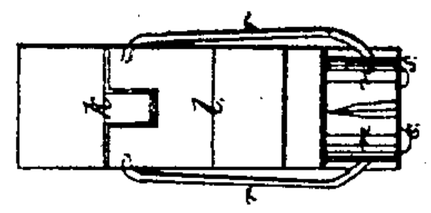

Fig. 3

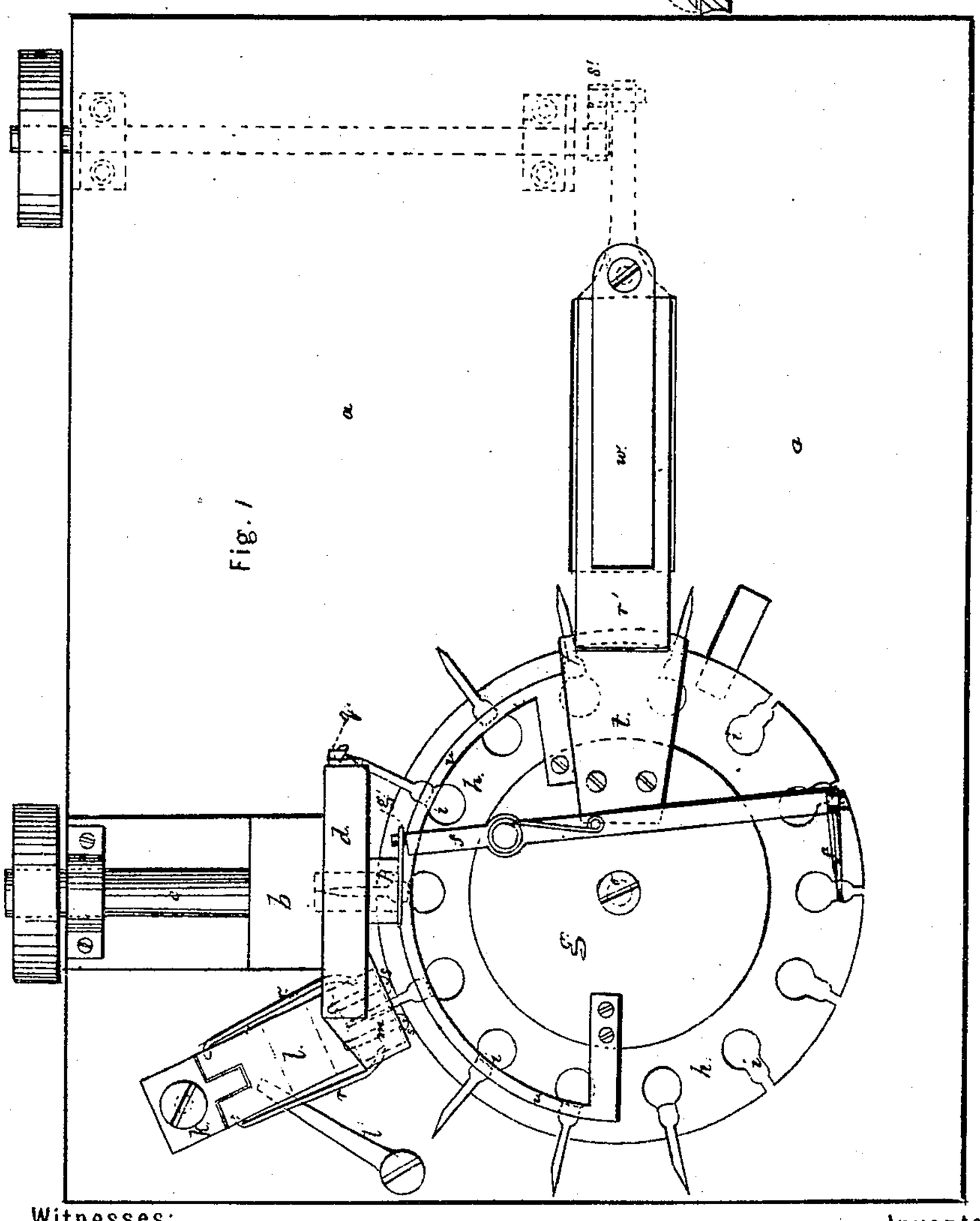

Fig. 1

Witnesses:

Geo. D. Wacker

Chas. H. Smith

Inventor:

Theodore Fowler

United States Patent Office.

THADDEUS FOWLER, OF SEYMOUR, ASSIGNOR TO THE FOWLER NAIL COMPANY, OF NEW HAVEN, CONNECTICUT.

Letters Patent No. 64,964, *dated May* 21, 1867.

IMPROVEMENT IN MACHINES FOR MAKING HORSE-SHOE NAILS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THADDEUS FOWLER, of Seymour, in the county of New Haven, and State of Connecticut, have invented, made, and applied to use a certain new and useful Improvement in Machinery for Making Horse-Shoe Nails; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a plan of my machine.

Figure 2 is an elevation of the straightening-jaws and compressing-dies, the bed being in section; and

Figure 3 is an inverted plan of the straightening-jaws.

Similar marks of reference denote the same parts.

My invention relates to mechanism for taking the nail, after it has been rolled down to form the shank, (leaving the head of the size of the nail-rod,) and straightening said nail by lateral pressure, and then stiffening the same, as well as straightening it in the other direction, by pressure on the side of the body or shank, and at its junction with the head. I also finish the point of the nail by removing the metal on one side.

In the drawing, *a* is a bed, carrying the parts of the machine. *b* is a head-block, carrying the actuating-shaft *c* and a sliding head *d*, that is moved up and down by a crank-pin, *e*, and block running in a slot transversely of the head *d*. Any other competent mechanism might be employed for giving a small but powerful movement to the head *d*. Upon the bed *a* is a circular carrier-plate, *h*, having notches around its edges, as at *i*, of a size and shape adapted to take in the head of the nail; and I move this plate around progressively and automatically by the pawl *f*, that is acted upon by the adjustable plate *g'*, on the head *d*. The pawl *f* has its fulcrum upon a stationary plate, *g*, that is attached to the centre stud, around which the carrier *h* revolves; and this plate *g* may be turned upon its attaching bolt *o* so as to adjust the pawl *f* to make it move the carrier *h* to the right place each time the head *d* commences to descend. The nails are laid into the notches *i* by hand or automatically, and are carried around to the successive operations. *k* is a joint upon the bed *a*, by which the jaw-block *l* is attached. *l'* is a spring just strong enough to turn up or lift this jaw-block *l*, and the parts it carries. *s s* are strong studs projecting horizontally from the block *l*, and carrying the lever jaws *n n*, (see figs. 2 and 3;) and springs *r* are employed to turn these jaws on their studs *s*, so that the jaws will be opened by their lower ends being separated. Upon the head *d* is a plate, *m*, controlling the motion of the jaws *n n*. As the nail is brought around by the carrier *h* it pauses below the open jaws *n n*. As the head *d* descends those jaws are carried down until they rest upon the bed *a*. They are still open, because the spring *l'* yields much easier than the springs *r r*. The further descent of the head *d* closes those jaws by acting upon their bent or lever upper ends, and in so doing the nail is powerfully pressed on its edges by a lateral pressure between the jaws *n n*, and the opening between them being the shape required for the edges of the nail, said nail is [illegible] carrier *h* moves forward, bringing another nail beneath