

W. Malick,
Making Staples,

N^o 84,562.

Patented Dec. 1, 1868.

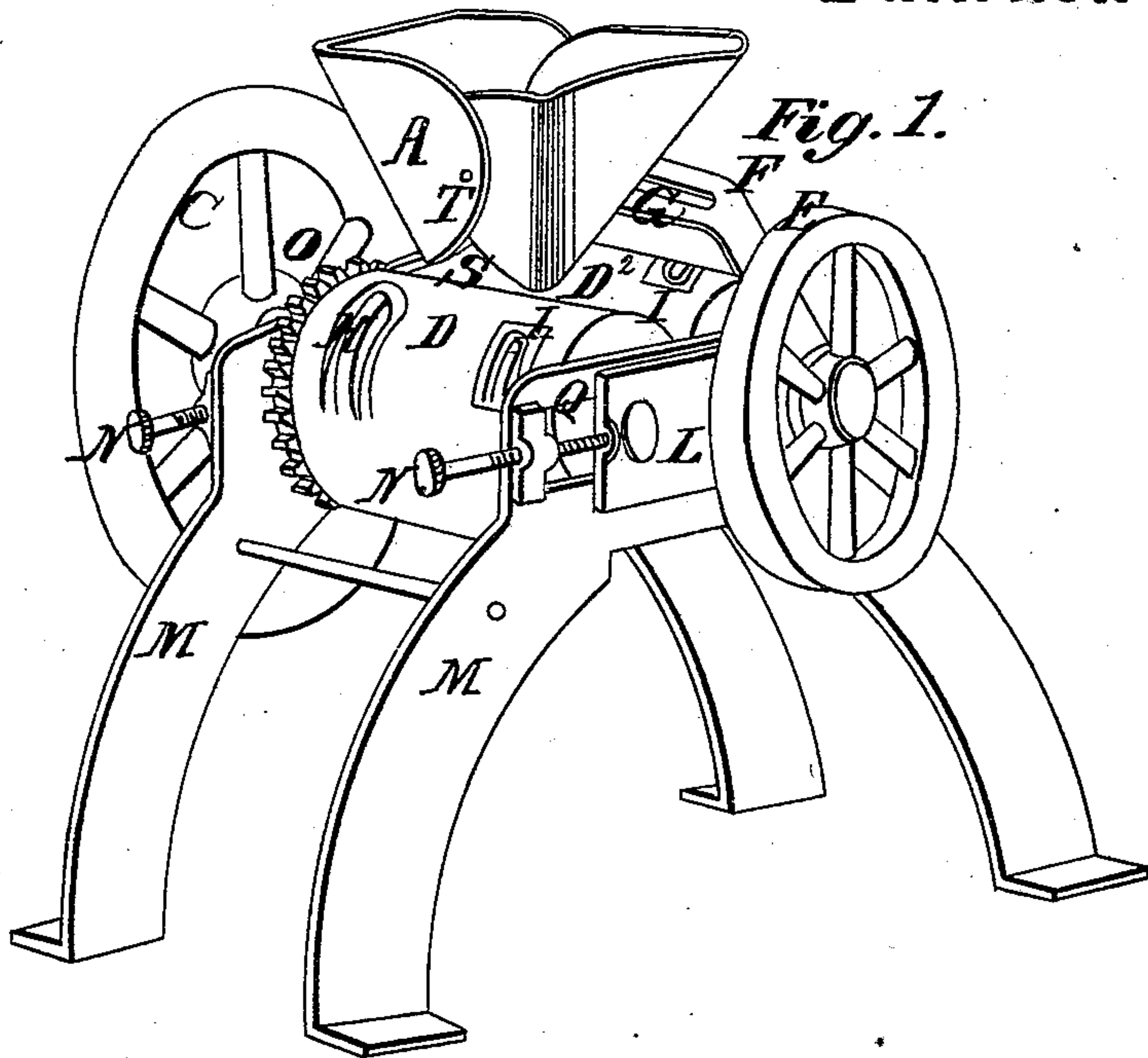


Fig. 1.

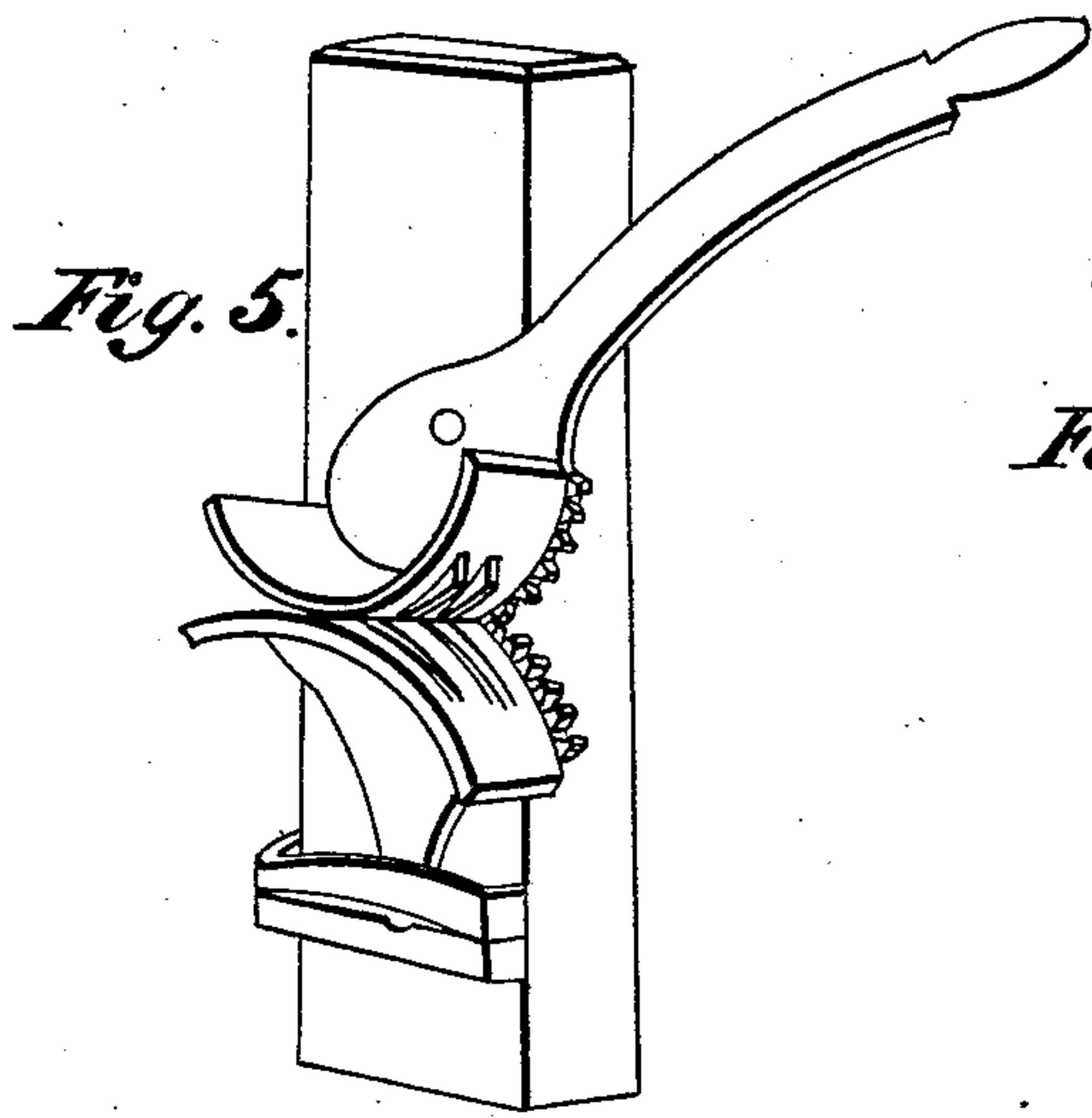


Fig. 5.

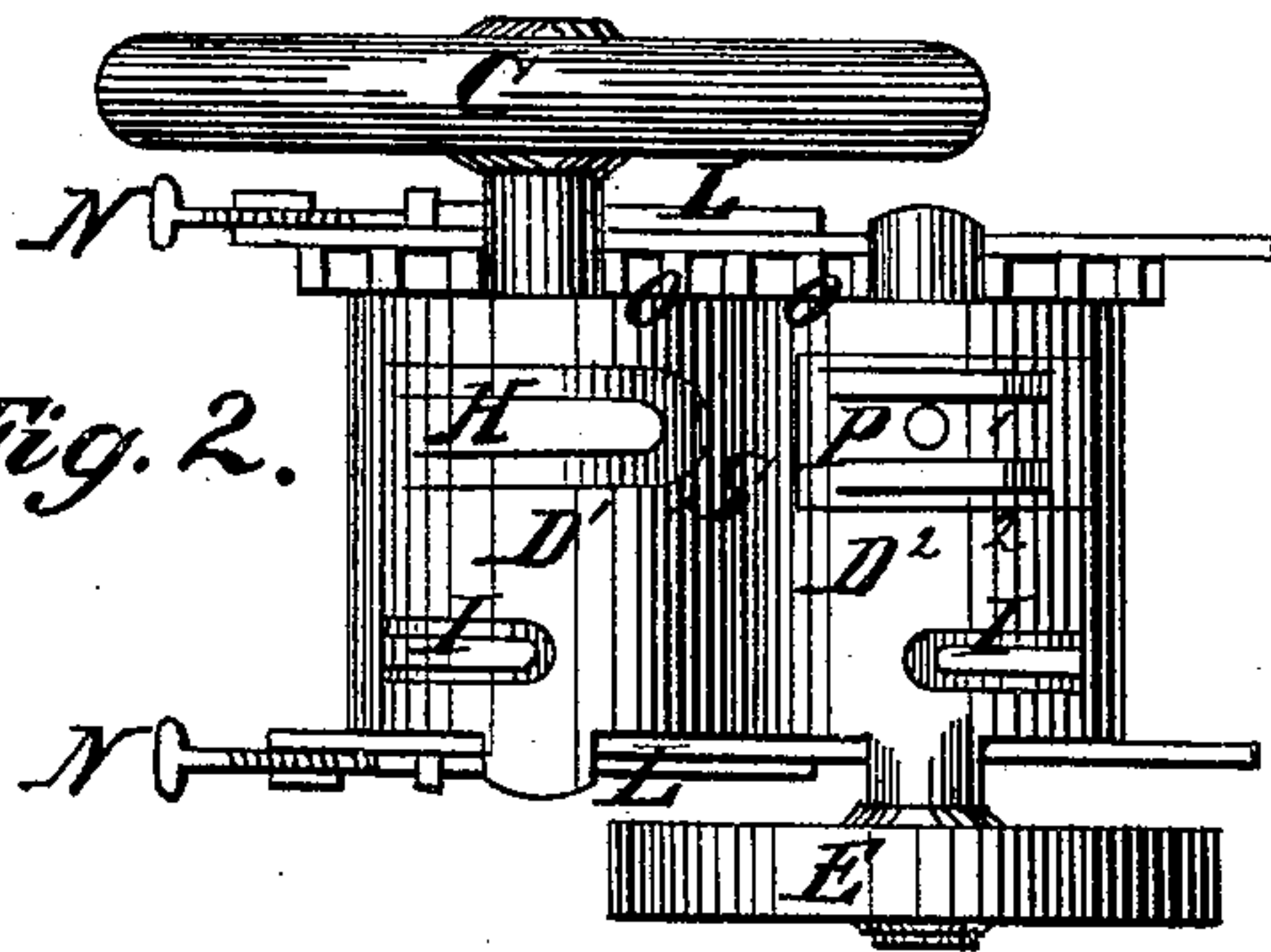


Fig. 2.

Fig. 3.

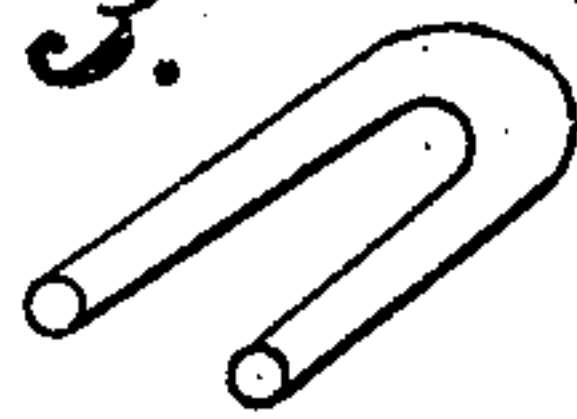
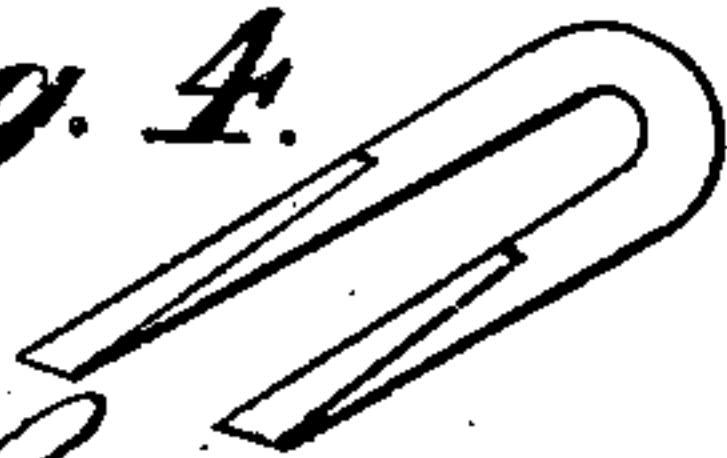


Fig. 4.



Witnesses.

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WESLEY MALICK, OF TIDIOUTE, PENNSYLVANIA.

Letters Patent No. 84,562, dated December 1, 1868.

IMPROVEMENT IN MACHINES FOR POINTING HOOKS, STAPLES, &c.

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, WESLEY MALICK, of Tidioute, in the county of Warren, and State of Pennsylvania, have invented a new and improved and useful Machine for Pointing Staples, Hooks, and other Irons; and I do hereby declare the following to be a full and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and the letters of reference marked thereon, the same being a part of this specification, in which—

Figure 1 is a perspective,

Figure 2 is a top view of my invention.

Figure 3 is a view of a staple previous to being pointed, and

Figure 4 shows a staple after the same has been pointed by my invention.

Figure 5 is a view of my invention in another form, and intended for hand-use, or to be operated by an eccentric, cam, or crank-and-pitman movement.

The way in which I construct a machine is as follows :

I first construct the frame M M, in which I hang the rollers D¹ and D², on one end of which I have cogged gears O.

The roller D² is driven by the belt or pulley-wheel E, and on the roller D¹ is a balance-wheel, C. The roller D¹ has its journals hung in the sliding boxes L L, which work in the slots Q Q.

These sliding boxes L L are gauged by the set-screws N N. The reason of this will be more fully set forth hereafter, in the description of the operation of my machine.

The rollers D¹ and D² are made of cast or wrought-iron, or of steel, or any metal of sufficient hardness. The frame is made of any material desired.

Sunk into the roller D¹ is a female die, H, and represented in fig. 2 as being staple or U-shaped. This may be of any shape to correspond with the shape of the iron which it is desired to point.

In the roller D² is sunk a mortise, in which is fastened a male die, P. This die is removable, and dies of different shape and size may be substituted. This male die P is placed in such a position that, when the rollers are revolved, the male die P will fit in the female die H.

The male die, it will be seen by referring to figs. 2 and 5, is so constructed as to make the roller D², so to speak, eccentric at the points 1 and 2, in figs. 2 and 5.

The female die, it will be seen, is cut deeper at the bow-end, and gradually diminishes in depth to the points.

Now, it will be seen that, if a staple is placed with its bow-end on the rollers, at the point S, as they revolve in the direction indicated by the arrows in fig. 2, the bow of the staple will drop into the bow of the female die, and as they revolve, the eccentrics or inclines of the male die will close in upon the ends of the staple, and, as they come in the shallow part of

the female die, the staple will be flattened or drawn to a point, as seen in fig. 4.

Placed over the rollers, and supported by the frame F, is a hopper, A, through which the unfinished staples are fed.

This hopper is made of two pieces of iron, fashioned as indicated in fig. 1, and fastened together by the bolts T, and its counterpart on the opposite side, and not seen in the drawing, thereby forming a joint, by which means the throat of the hopper may be varied in size, so as to allow the different-sized staples to pass through, and so as to hold the staples or irons in position to be taken in at the proper time. The counterpart of the bolt T is a set-screw bolt.

In the frame F is a slant, G, running the whole length of the same, the object of which is to place the hopper at any point on the rollers, and secure it there by the set-screw, for it is intended to have several different-sized dies on the rollers for different-sized staples.

Seen on the rollers are the small dies I I. These are both female dies. It will be seen that they are corrugated or notched. They are for making small staples, which are not clinched when driven.

The corrugations or notches in the dies give the staples, when pressed in them, a beard, so they will hold in the wood.

Fig. 5, as I have before stated, shows my machine in another form, being designed to be worked by hand, by a pitman and crank, by eccentrics, or by cams.

The way in which I operate my machine is as follows :

The power is applied to the belt or pulley-wheel, (and this may, of course, be a gear-wheel,) so as to revolve the rollers in the directions indicated by the arrows in fig. 2. I then heat the unfinished staples, and place them in the hopper, so the bow-end shall pass through the throat of the hopper first, and rest on the rollers at the point S. They are then drawn in between the dies, as described, and fall upon the floor underneath the machine, pointed and ready for use.

After the machine has been run a short time, the rollers become heated and expand, and to obviate any difficulty from this, I then loosen the set-screws N N.

The machine may be so constructed as to grab the staples at the points, instead of the bow-end, if so desired.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is as follows, to wit :

The frames M M and F, the sliding boxes L L, and the set-screws N N, in combination with the wheels E and C, the rollers D¹ and D², the adjustable hopper A, and the male and female dies H and P, when the same are constructed and arranged as described, and in the aforesaid combination.

Witnesses:

WESLEY MALICK.

BENN B. EVANS,

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