

C. H. SMITH.
Machines for Driving Nails.

No. 147,027.

Patented Feb. 3, 1874.

Fig. 1.

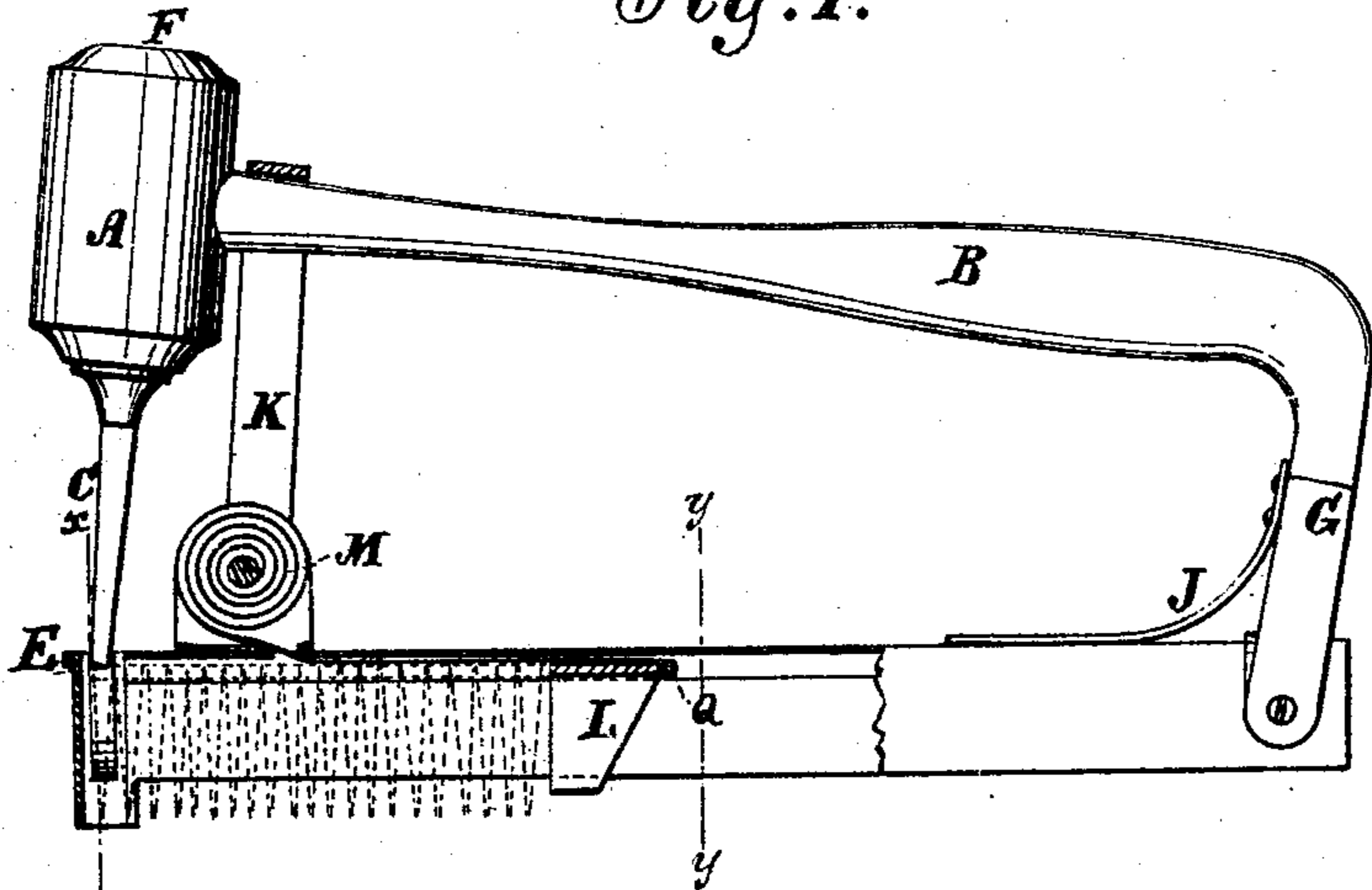


Fig. 3.



Fig. 4.



Fig. 5.

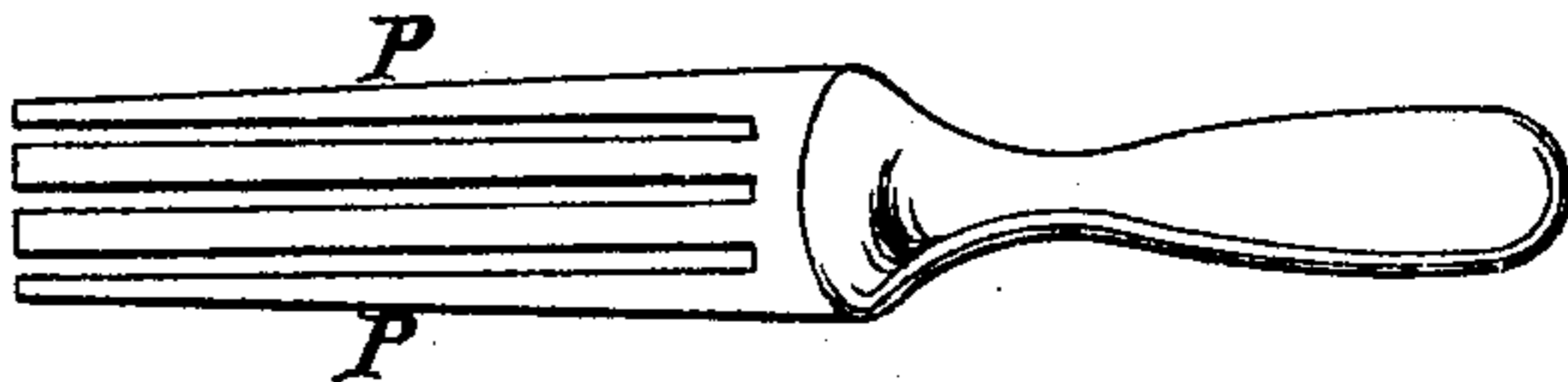
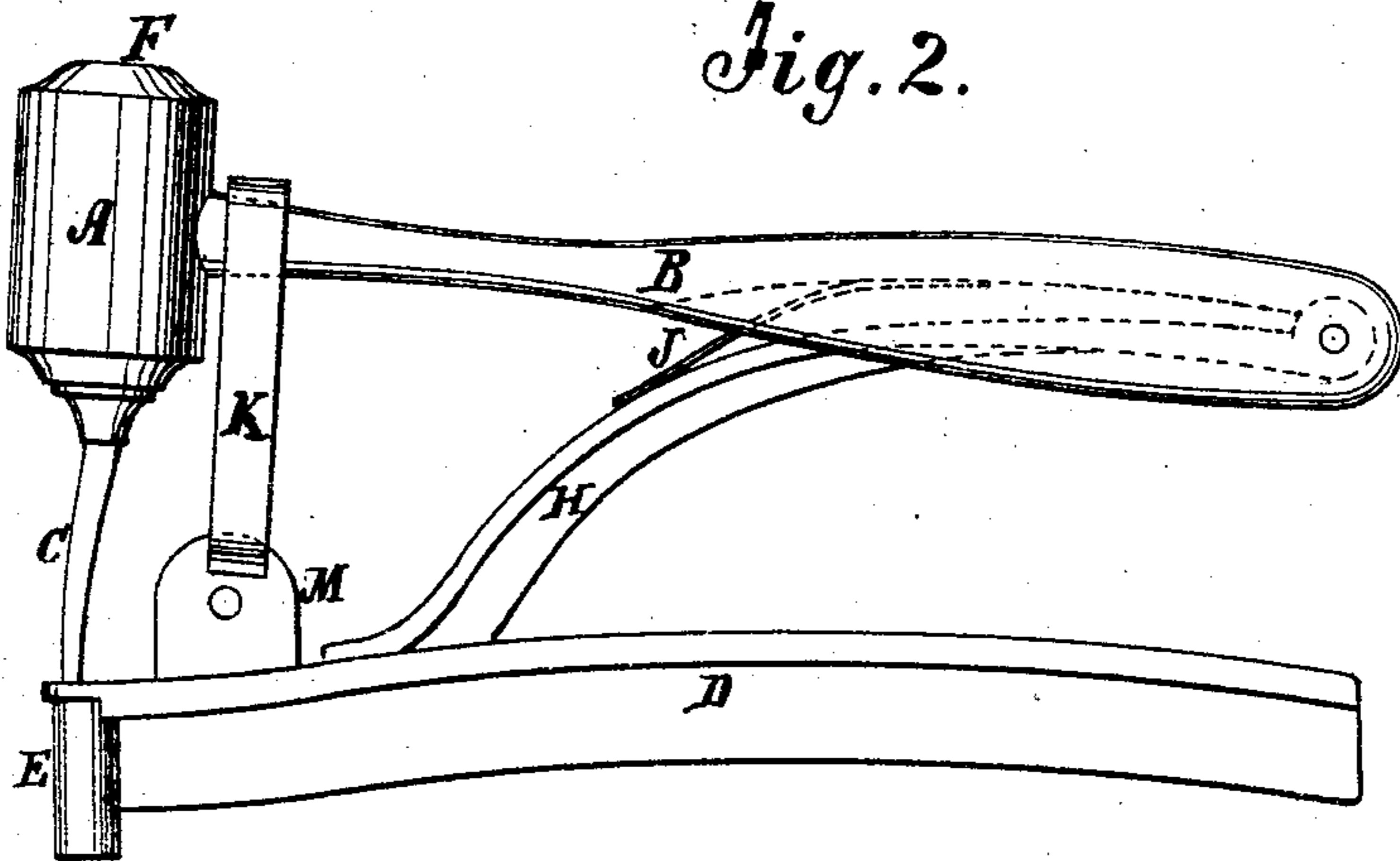


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES H. SMITH, OF BLOOMER, WISCONSIN.

IMPROVEMENT IN MACHINES FOR DRIVING NAILS.

Specification forming part of Letters Patent No. **147,027**, dated February 3, 1874; application filed May 10, 1873.

To all whom it may concern:

Be it known that I, CHARLES H. SMITH, of Bloomer, in the county of Chippewa and State of Wisconsin, have invented a new and Improved Nail Holding and Feeding Hammer, of which the following is a specification:

The invention consists in the improvement of nail holding and feeding hammers, as hereinafter described and pointed out in the claims.

Figure 1 is partly a side elevation and partly a sectional elevation of my improved nail holding and feeding hammer. Fig. 2 is a side elevation of it in a modified arrangement. Fig. 3 is a cross-section of part of Fig. 1 on the line *x x*. Fig. 4 is a cross-section on the line *y y*, and Fig. 5 is a plan view of a device for supplying the nails to the magazine.

Similar letters of reference indicate corresponding parts.

A is the hammer-head, and B the handle. Instead of the ordinary driving-face I provide the head with the long, slender, punch-like driver C, and I attach the nail-magazine D to the handle with a holding tube or socket, E, on it arranged so that the driver C drives through it when the blow is struck and forces the nail in it into the wood, and in the opposite end of the head I have a hammer-face, F, to be turned over to drive the nail "home" in case the first blow by the driver C fails to do it. The magazine which supports the holder F consists of a metal case pivoted at its other end either to the end of an elbow-shank, G, projecting from the hammer-handle, as in Fig. 1, or to the end of the handle itself by a bar, H, as in Fig. 2, so that it swings sufficiently to allow the tube or holder E to move along the driver C its length, or thereabout, so that after each blow it is withdrawn from the driver to allow another nail to be fed into the holder. A spring, J, causes this movement, and a yoke or band, K, arrests it when the holder has withdrawn just far enough to admit the nail, so that it does not allow the driver to escape from the holder. The case or magazine D is constructed in the form of the side of a nail, as represented in Fig. 4, and is open at one end, so as to receive and hold a row of nails

extending nearly from one end to the other, as clearly shown in Fig. 1, and a T-shaped pusher or follower, L, adapted to slide in the case with a spring, M, is put in the case behind the nails after the case is charged, to force them along into the holder E at the termination of the case. The heads of the nails will only project on two opposite sides, so as to avoid any interference of one with another in the holder, which might occur if the heads projected on all sides. The nails known in the trade as finishing-nails will be suitable to use. Springs N may be used in the holder to center and hold the nails, if needed, but the pressure of the pusher will probably be sufficient for holding them, and a suitable form of the holder may probably be relied on to direct them. To fill the case or magazine readily I propose to use a slotted plate, P, for gathering the nails up from a pile and suspending them by the heads in rows, so that they can be pushed into the case quickly when the pusher L is pulled out and the plate is presented to the end of the case, so that the nails can slide from it into the case. The spring which works the pusher is connected to it by a pivot, Q, so that when it is pulled out at the end of the case for putting the nails in it can be turned around on the pivot away from the opening at the end, so as not to interfere with putting in the nails. This connection is also at the rear end of the pusher, so that it will advance nearer to the holder when the nails are nearly exhausted than it otherwise would.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with socket E, of springs N and spring-pressed pusher L, to hold the nail in the manner described.

2. The spring M and pusher L, combined with a magazine, D, open at one end, and having socket E at the other to feed the nail into said socket in the manner specified.

CHAS. HAZER SMITH.

Witnesses:

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