N. C. HUBBELL.

METAL SCREW MACHINE.

No. 186,477. Patented Jan. 23, 1877.

Fig. 1.

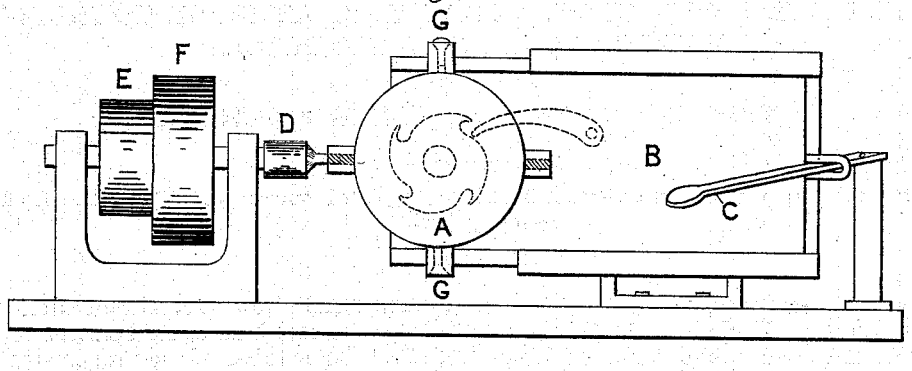
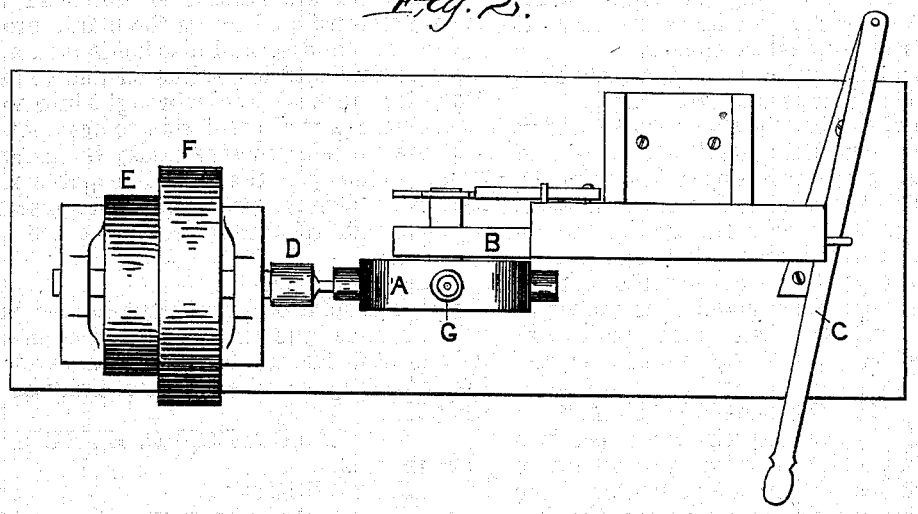


Fig. 2.



WITNESSES:

John M. Ripley.

Frank McLaughlin

Napoleon C. Hubbell

INVENTOR.

UNITED STATES PATENT OFFICE.

NAPOLEON C. HUBBELL, OF NEW YORK, N. Y., ASSIGNOR TO HUBBELL SCREW COMPANY, OF SAME PLACE.

IMPROVEMENT IN METAL-SCREW MACHINES.

Specification forming part of Letters Patent No. **186,477**, dated January 23, 1877; application filed October 26, 1876.

To all whom it may concern:

Be it known that I, NAPOLEON C. HUBBELL, of the city, county, and State of New York, have invented a new and useful Improvement in Machines for Making Metal Screws, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

This invention pertains to the class of machines for making screws for metal work, such as fire-arms, sewing-machines, &c.; and this invention consists in the combination of a blank-holder interposed between the screw-cutting dies on a revolving and sliding head, with a revolving blank-holding mandrel, as will more fully hereinafter appear.

Figure 1 is a side elevation of the machine, and Fig. 2 is a plan as seen from above.

The revolving head is shown at A, and it carries the screw-cutting devices or dies, and it is mounted upon a sliding block or guide, as at B, which is moved to and fro by a lever, as at C, which is under the control of the operator, and by which he is able to operate the head or tool-stock in the operation of cutting screws. The revolving mandrel is shown at D, and is driven by a belt on the pulleys at E or F, and the end of the mandrel is provided with a clamping device, so arranged that it will catch the head of a blank for a screw which has been struck or stamped into shape by dies, as in the ordinary manufacture of such articles. Upon the perimeter of the head A there are mounted between the dies for cutting the screws a carrier or carriers, as at G, for the said blanks, said carrier consisting of a tube or tubes of the proper size to receive the small part of the blank, or the part upon which the thread is to be cut. These tubes or receivers G are mounted on the head A between the dies, and at equidistant points, so that in operating the lever C, reversing the head A, to make it revolve, the carriers G are also revolved, and the blanks, which are introduced by hand or from a hopper, as the case may be, are carried around to a point opposite the center of the mandrel, and by a movement of the hand-lever the head A is moved forward, and forces the blank into the end of the mandrel, and also holds it in a central position until it is adjusted and centered ready for the die—that is, brought into action at the next partial revolution to act upon it.

These tubes or receivers may be arranged at any point upon the head A capable of being revolved to the proper point for insertion into the mandrel, and for centering the same therein.

I therefore claim—

The combination of a blank-holder interposed between the screw-cutting dies on a revolving and sliding head, with a revolving blank-holding mandrel, substantially as described.

NAPOLEON C. HUBBELL.

Witnesses:

JOHN W. RIPLEY,

FRANK MCLAUGHLIN.