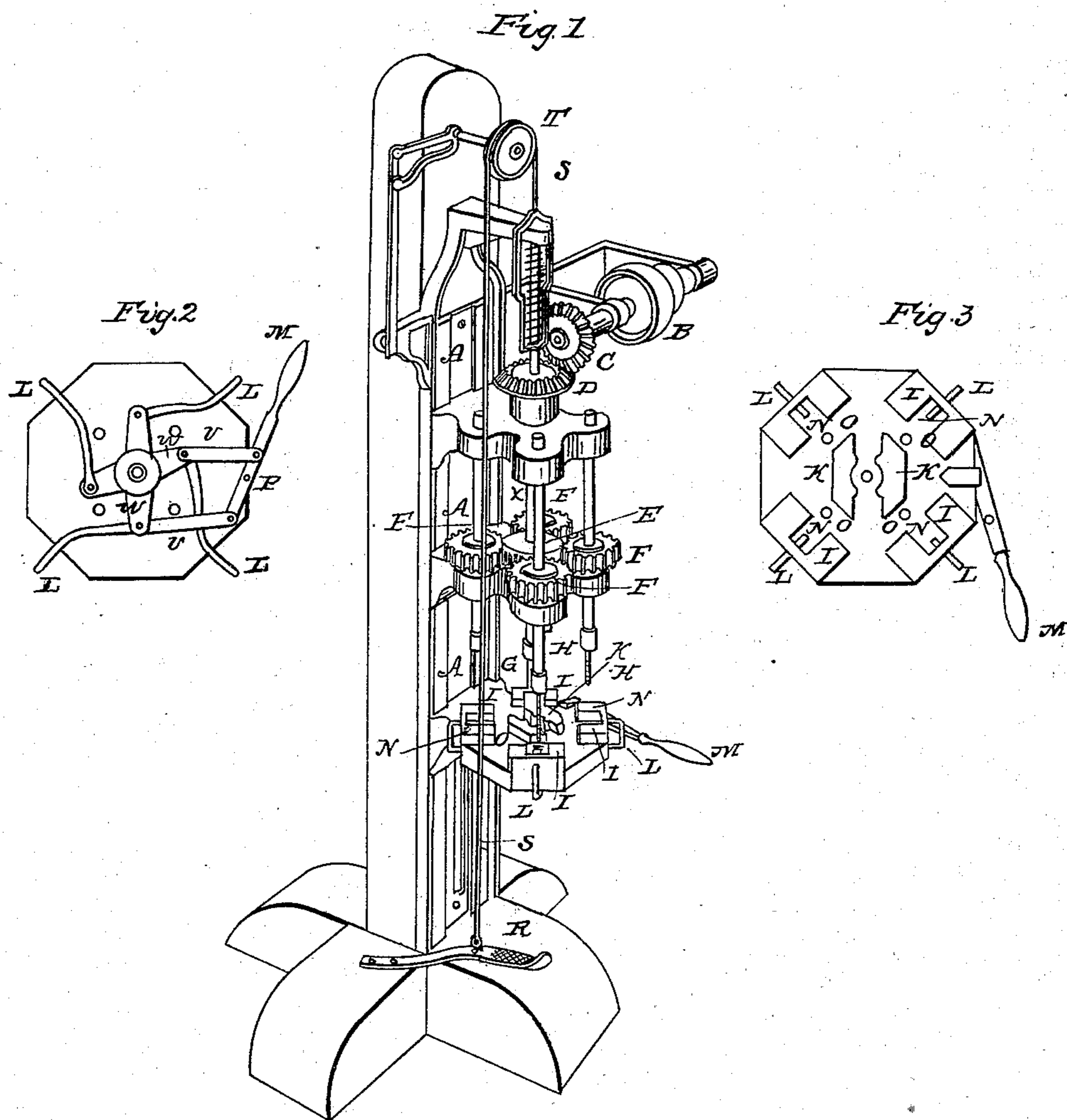


F. VOTTELER.
Nut Tapping Machine.

No. 55,965.

Patented June 26, 1866.



Witnesses
E. L. Hall
S. D. Collins

Inventor
Fred Voteler

UNITED STATES PATENT OFFICE.

FREDERICK VOTTELER, OF CINCINNATI, OHIO, ASSIGNOR TO JACOB W. HOLENSHADE, OF SAME PLACE.

IMPROVED NUT-TAPPING MACHINE.

Specification forming part of Letters Patent No. 55,965, dated June 26, 1866.

To all whom it may concern:

Be it known that I, FREDERICK VOTTELER, of Cincinnati, in the county of Hamilton, in the State of Ohio, have invented certain new and useful Improvements in Machines for Tapping Screw-Nuts; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the said improvements, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a bottom view of the feeding-table. Fig. 3 is a top view of the same.

Like letters refer to like parts in each of the figures.

The nature of my invention consists, first, in combining taps for right and left hand nuts upon the same machine; and, secondly, in a feeding device whereby the attendant may feed simultaneously two or more taps with uncut nuts when the taps are raised, thus greatly saving time.

In the drawings, A represents a cast-iron bed-plate bolted to an upright post, for supporting the mechanism.

B is a driving-pulley operating the beveled gear-wheel C, which, in turn, drives the beveled gear-wheel D, thus transmitting motion to the shaft X. This shaft carries the cog-gear wheel E, and at its lower end the tap G for cutting a screw-thread in a left-hand nut.

The gear-wheel E imparts motion to the cog-wheels F F F F, which consequently revolve in a direction opposite to that of wheel E. The shafts passing through these several wheels carry at their lower ends the taps H H H H, for cutting screw-threads in right-hand nuts. The taps are attached to the shafts by sockets and set-screws, so that they may be readily removed and replaced.

Figs. 1, 2, and 3 contain perspective bottom and top views of the feeding-table. I I I I are projections cast thereon, having channels or grooves N N N N cut in their interior faces, the central line of which channels cuts the center of the holes O O O O, which are located directly under the taps.

L L L L are plungers operated simultaneously by the handle M working on the pin P,

through the medium of the arms V V and levers W W.

K K are projections near the center of the feeding-table, forming a space for the reception of the nut in which the left-hand screw-thread is to be cut.

R is a treadle, S S a cord, and T a pulley for raising the taps simultaneously. They operate directly upon the shaft X, which plays freely through the beveled gear-wheel D, so as to be raised without lifting that wheel.

The shaft X raises the gear-wheel E, and, by a flange on the lower side of the latter, the wheels F F F F and their shafts, thus lifting simultaneously the taps G H H H H.

The operation of the machine containing my improvements is as follows: The lever M is thrown back and the plungers withdrawn from the grooves N N N N. The taps are raised by means of the treadle. The attendant now places a nut under the tap G and one in the outer end of each of the four grooves N. Seizing the lever with the right hand he draws it forward, thus turning the four nuts inward and directly under their respective taps. The taps are lowered and the machinery by which they are driven is thrown into gear. While the taps are cutting the threads in the nuts the attendant throws back the lever and places four uncut nuts in the outer ends of the channels or grooves, as before. As soon as the tapping is completed the taps are raised, carrying with them the nuts, the lever is drawn forward, a fresh supply of nuts is thrown under the taps, and the operation is repeated. When the taps become filled they are removed, the nuts taken off, and the taps replaced.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a tapping-machine, of taps for right and left hand nuts, arranged and operating substantially as described.

2. The combination of two or more taps with a mechanism for adjusting simultaneously a nut to each, arranged and operating substantially as described.

FRED. VOTTELER.

Witnesses:

JAMES MOORE,

JOHN P. CRAIGHEAD.