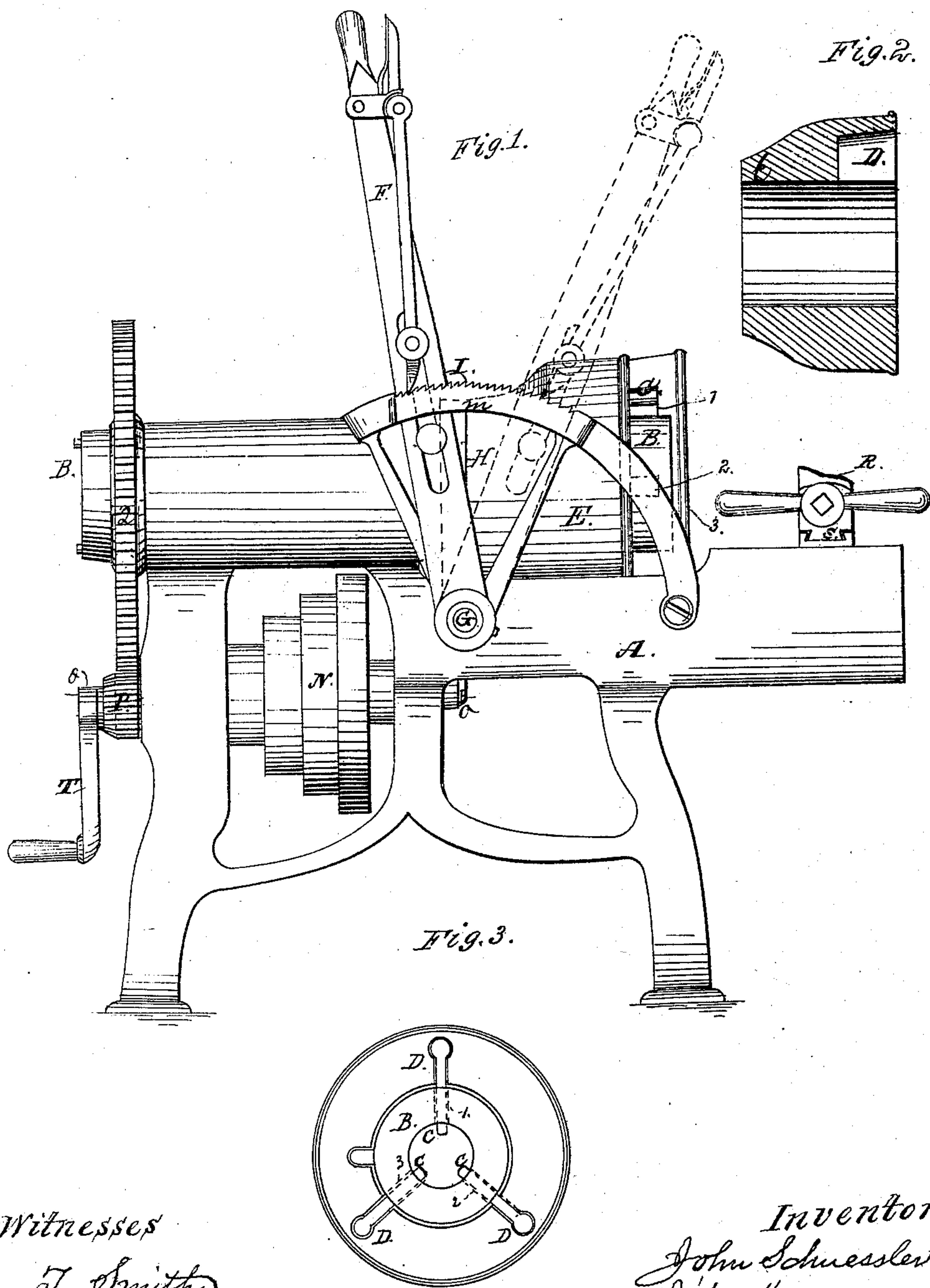


*Schuessler & Kennedy.*

*Cutting Screws.*

*N<sup>o</sup> 82,252.*

*Patented Sept. 15, 1868.*



*Witnesses*

*J. Smith  
L. E. Jones.*

*Inventors:*

*John Schuessler  
John Kennedy  
by Atty. Phil. T. Everett*

# UNITED STATES PATENT OFFICE.

JOHN SCHUESSLER AND JOHN KENNEDY, OF LA FAYETTE, INDIANA,  
ASSIGNORS TO JOHN SCHUESSLER.

## IMPROVED MACHINE FOR THREADING BOLTS.

Specification forming part of Letters Patent No. **82,252**, dated September 15, 1868.

*To all whom it may concern:*

Be it known that we, JOHN SCHUESSLER and JOHN KENNEDY, of La Fayette, in the State of Indiana, have invented a certain new and useful Improvement on Machines for Cutting Screw-Threads on Bolts; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and to the letters and marks thereon, which said drawings form part of this specification, and represent a machine and parts thereof constructed under our invention—

Figure 1 of said drawings being a side view of the machine; Fig. 2, a view, by longitudinal section, of the movable head, and Fig. 3 a front view of the header and hollow shaft separated from the machine.

In each of these figures, where like parts are shown, like marks and letters are used to indicate the parts.

A is the frame of bolt-cutter. The hollow shaft B has slots 1 2 3 for the reception of dies C C C, which are further held in place and regulated by the converging grooves D D D in the movable head E. The horizontal motion necessary to be given to the head E is imparted by the lever F on shaft G, which is placed in the frame at right angle. On this shaft are two cranks, H H, operating the strap I, which encircles the movable head E. The position of the lever F in the quadrant M, as indicated by the graduated scale thereon, determines the size of bolt the machine is ready to cut. Take out the pin, throw the lever F to the left to the full extent of quadrant M, to free the dies from head E, and then a change of dies can be made in a moment.

Of course, we have the ordinary gearing for the transmission of power—the cone N on

shaft O, the small pinion P on same shaft, geared into large pinion Q on hollow shaft B. To run by hand, a crank, T, on shaft O may be used, the end of shaft being left square for that purpose. Bolts, while being cut, are held in place by the vise arrangement R and S.

Our chuck, as we construct it, is composed of the combined head and mandrel or hollow shaft B, in connection with the outside collar or head E, this outside head being provided with grooves or slots D D D, these grooves being cut to match slots 1 2 3 cut through mandrel, so that the steel cutters C C C for cutting threads will move laterally with ease. At the same time the cutters are provided with heads fitting the converging grooves in outside collar or head. The grooves D D D converge to a common center, so that a backward or forward motion of the head on hollow shaft, operated and given by lever F, will enlarge or lessen the cutting capacity of the dies, will open the dies to permit bolts being taken out when cut, and facilitate the changing of dies for cutting finer or coarser threads.

Our claim, based upon what we believe to be new, as described above, is—

1. The arrangement herein described of the hollow slotted mandrel B, the grooved reciprocating head E, and the cutters C.

2. The combination of the devices set forth in the foregoing clause with the lever F and graduated quadrant M, substantially as set forth.

This specification signed this 29th day of May, 1868.

JOHN SCHUESSLER.  
JOHN KENNEDY.

Witnesses:

W. H. HATCHER,  
CORNELIUS HURLEY.