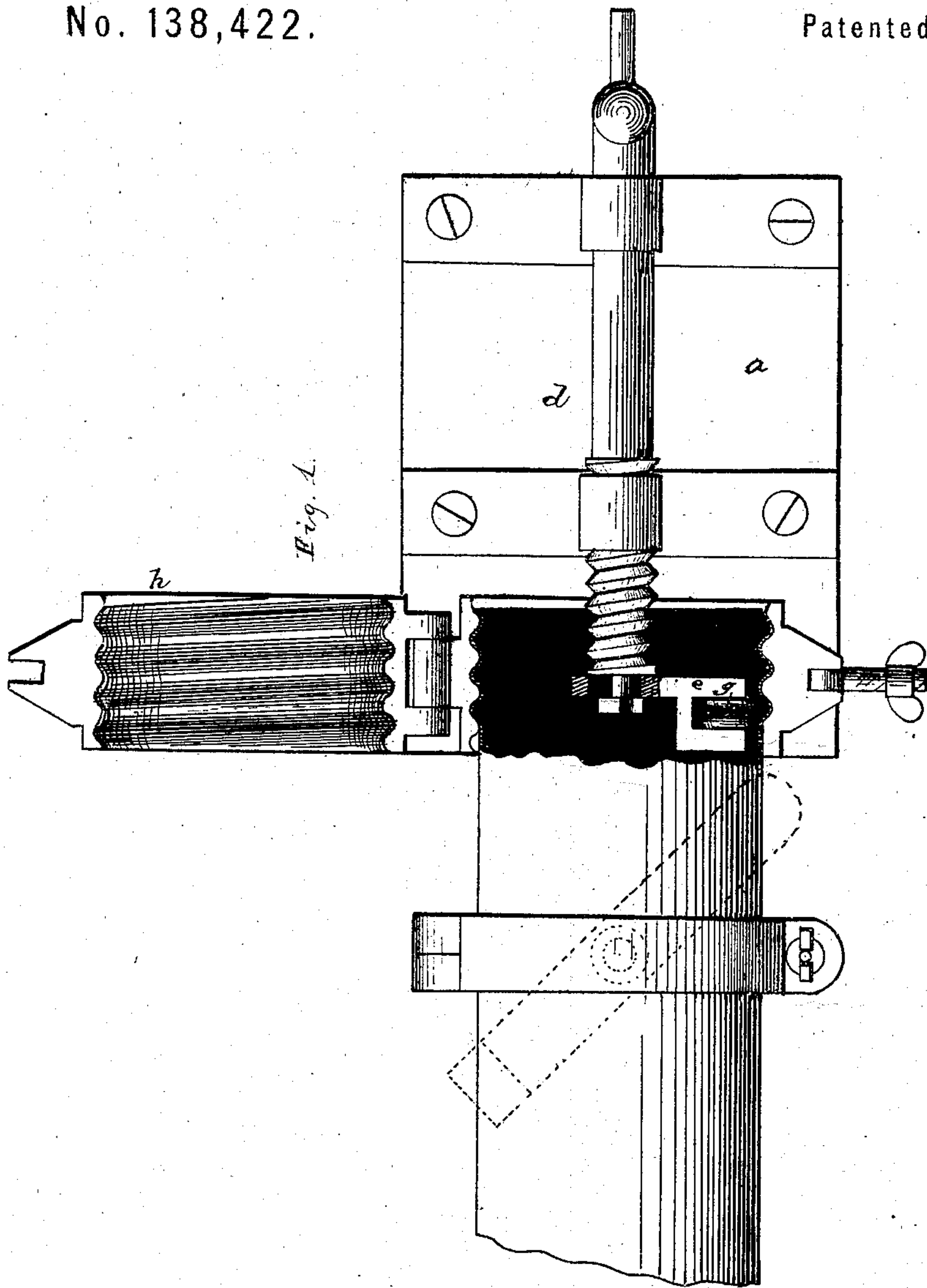


W. A. McCool.  
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No. 138,422.

Patented April 29, 1873.



WITNESSES.

*Alex Davidson*

*H. K. Duhamel*

INVENTOR.

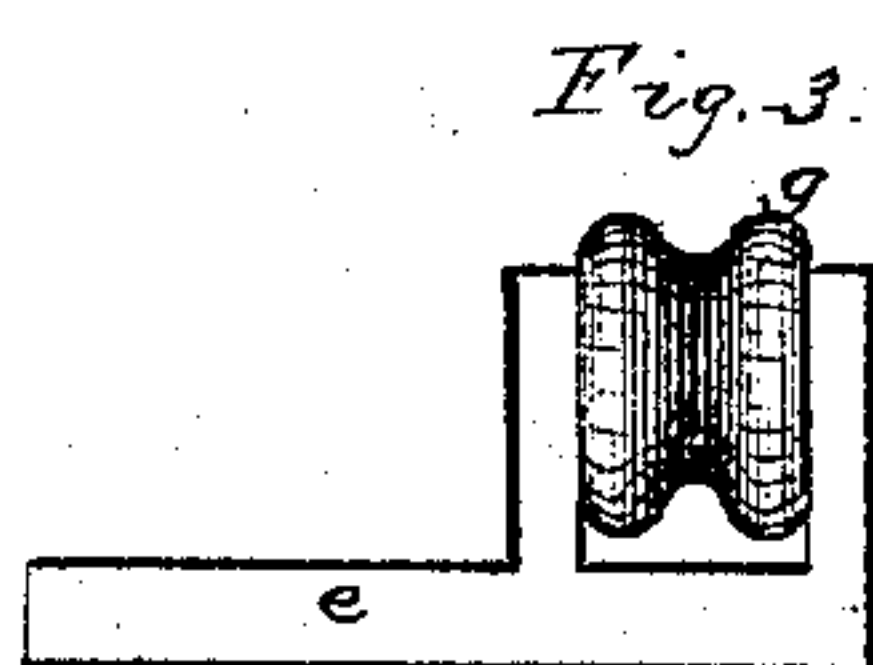
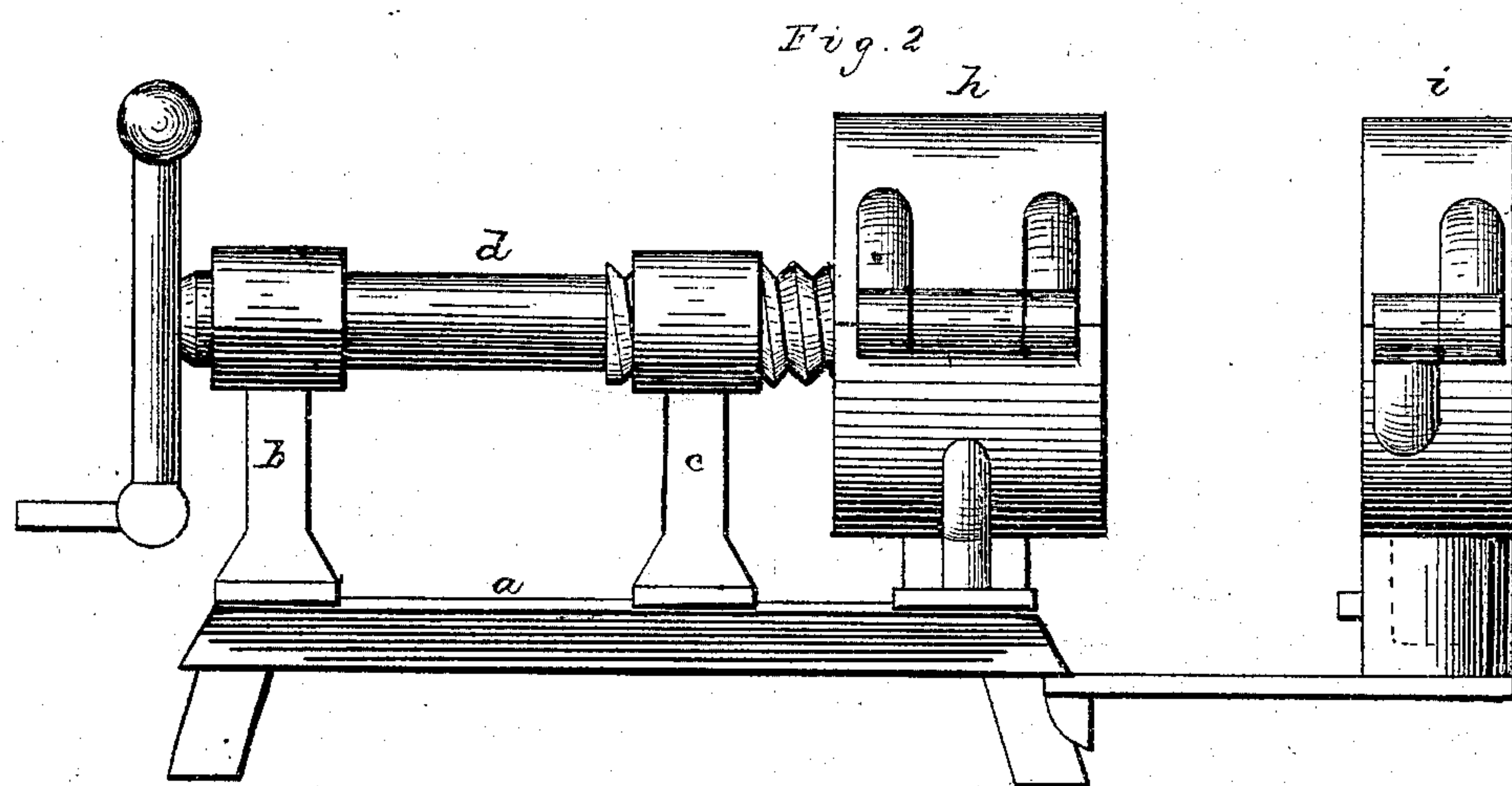
*Wm A M Cool*

*Per H. S. Abbot*  
*Attorney*

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*Per H. A. Abbott*

# UNITED STATES PATENT OFFICE.

WILLIAM A. McCOOL, OF ASHLAND, OHIO.

## IMPROVEMENT IN SCREW-FORMING MACHINES.

Specification forming part of Letters Patent No. **138,422**, dated April 29, 1873; application filed February 18, 1873.

*To all whom it may concern:*

Be it known that I, W. A. McCOOL, of Ashland, county of Ashland and State of Ohio, have invented certain new and useful Improvements in Machines for Forming Screw-Threads upon Pipes, of which the following is a specification:

The nature of my invention relates to the construction of a machine for making screw-threads upon the ends of stove-pipes; and consists in a screw-shaft, carrying a ribbed roller upon its end, which, being made to revolve within a screw-threaded mandrel or former, in which the end of the stove-pipe is placed, presses the pipe outward into the threads and forms the threads upon the pipe, so that any number of sections may be readily screwed together.

The accompanying drawing represents a plan view of my machine, the upper half of the mandrel being thrown back so as to show its interior.

*a* represents the bed-plate, having secured to its top the two standards *b c*, in which the screw-shaft *d* is held, the standard *c* being threaded so as to feed the shaft back and forth. To the end of the shaft is secured the adjustable crank *e*, which can be adjusted to suit the varying thicknesses of pipe, and which carries the ribbed roller *g* for forming the screw-threads on the ends of the pipes. Upon the end of the frame is secured the mandrel *h*, internally threaded, and having its upper half

hinged so as to open and close over the end of the pipe being inserted. Beyond the mandrel is a supporting device, *i*, for holding the pipe while being threaded, and which is held in a socket so as to be turned at any angle, and be adapted to either straight, angular, or curved pipes.

The pipe to be threaded is placed in the holder *i* and mandrel *h*, and, upon turning the shaft *d* so as to feed the roller forward, it enters the pipe, and pressing it outward against the sides of the mandrel forms the screw-thread upon its surface. By adjusting the crank the threads may be formed of any desired depth.

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

1. The adjustable crank *e*, substantially as described, for adjusting the roller to varying thicknesses of pipe.

2. The adjustable holder *i*, substantially as shown.

3. The screw-shaft *d*, adjustable crank *e*, roller *g*, and mandrel *h*, when combined to operate as set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 12th day of February, 1873.

WILLIAM A. McCOOL.

Witnesses:

G. W. VINE,  
SAML. L. ARNOLD.