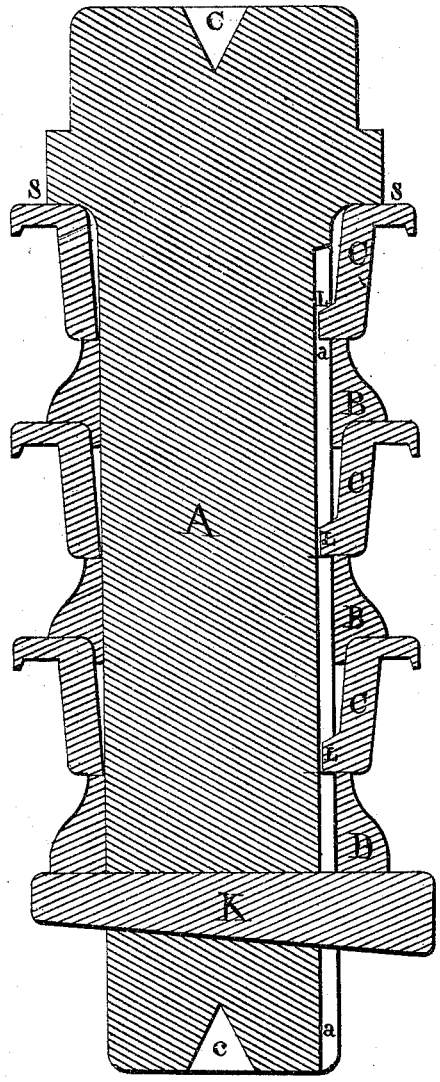
G. E. BRETTELL.

Mandrils for Holding Tapered Cast Rings.

No. 140,113. Patented June 24, 1873



Witnesses

Francis S. Brettell

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GEORGE E. BRETTELL, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN MANDRELS FOR HOLDING TAPERED CAST RINGS.

Specification forming part of Letters Patent No. **140,113**, dated June 24, 1873; application filed October 5, 1872.

To all whom it may concern:

Be it known that I, GEO. E. BRETTELL, of Rochester, in the county of Monroe and State of New York, have invented an Improved Method of Cutting the Thread on Hollow Castings with Taper Holes, (to be used for bushings for the bung-holes of the barrels,) of which the following is a specification:

The object of this invention is to provide the means for cutting the thread on hollow castings with taper holes, to be used for bushings for the bung-holes of barrels, in a rapid and effective manner. Such castings are provided with a lug inside the casting, as shown in the drawing at L, or with a projection or depression at one end to screw them into the barrel, with suitable wrench or tools. My method is to hold a number of castings together, so that they may have the threads cut upon them at one time in a lathe or suitable machine. The lathe or machine must have a tool-holder so arranged as to hold the same number of cutting-tools as there are castings to be cut at one time.

The castings are held by the mandrel A, collars or sleeves B B and D, and the key K. The mandrel A is provided with a groove, *a a*, shoulder *s*, and slot for the key K. The shoulder *s* forms a true bearing for one end of the first casting put upon the mandrel. The castings C C C are separated by the collars or sleeves B B, which are at either end made to conform to the shape of the adjoining end of the castings, as shown, and at one end are turned small enough to leave the end of the casting exposed for the tool to commence cutting at the end, as shown. After the castings C C C and collars or sleeves B B have been put on the mandrel, as shown, the collar D is slipped on and the key K driven in, by which means the castings are held firmly together ready to be operated on. The lug L on the casting fitting in the groove *a a* on the mandrel, prevents the casting from slipping on the mandrel while being cut. When the castings C have no lugs inside, but are provided with a projection or depression at either end, the collars or sleeves B B may be provided with a feather or key to fit in the groove in the mandrel *a a* to prevent the collars or sleeves from turning round on the mandrel, and the ends of the collars or sleeves conforming to the depression or projection on the end of the casting will prevent the castings from turning round on the mandrel while having the thread cut. In this manner ten or twelve castings can have the threads cut on at the same time to great advantage.

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

The method of holding a number of castings together, while the threads are being cut, by means of the mandrel A, collars or sleeves B B and D, and the key K, or its equivalent, substantially as shown and described.

GEO. E. BRETTELL.

Witnesses:

FRANCIS S. BRETTELL,

JAMES S. GRAHAM.