

C. ARCHER.

Improvement in Lathe-Chucks.

No. 129,705.

Patented July 23, 1872.

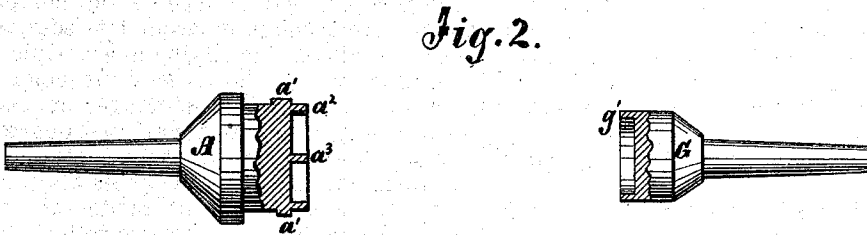
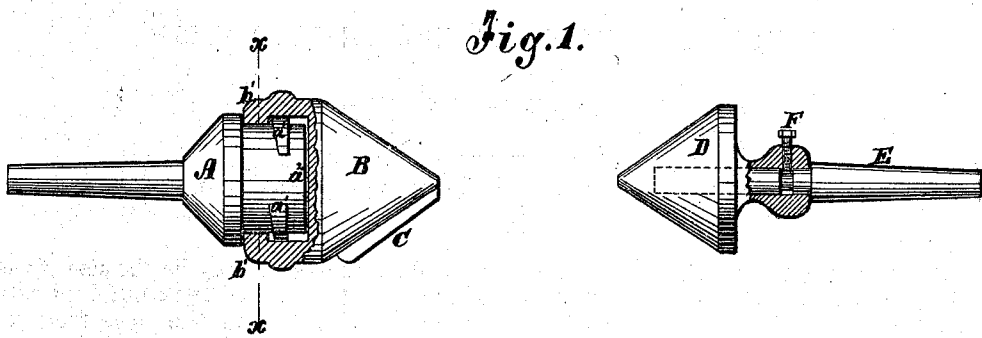


Fig. 3.

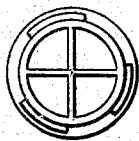


Fig. 4.

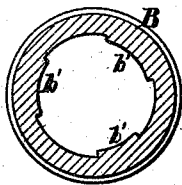
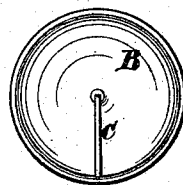


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

CORNELIUS ARCHER, OF NELSONVILLE, OHIO.

IMPROVEMENT IN LATHE-CHUCKS.

Specification forming part of Letters Patent No. 129,705, dated July 23, 1872.

Specification describing a new and useful Improvement in Lathe-Chucks, invented by CORNELIUS ARCHER, of Nelsonville, in the county of Athens and State of Ohio.

Figure 1 is a side view of my improved chuck adjusted for turning pieces having a hole formed through them, parts being broken away to show the construction. Fig. 2 is a side view of the same adjusted for holding columns, half and quarter columns, parts being broken away to show the construction. Fig. 3 is a face view of one of the parts shown in Figs. 1 and 2. Fig. 4 is a detail sectional view of a part of the same taken through the line *xx*, Fig. 1. Fig. 5 is a face view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved lathe-chuck for holding pieces having different-sized holes formed through them, and for holding columns, half and quarter columns while being turned or polished, without the necessity of gluing, and which shall be simple in construction, convenient in use, and effective in operation; and it consists in the construction and combination of the various parts as hereinafter more fully described.

A is a holder, the stem of which is designed to be inserted in the lathe-mandrel, and the head of which is made cylindrical to enter the hollow base of the cone B, and has inclined lugs a^1 formed upon its outer surface to interlock with corresponding lugs b^1 formed upon the inner surface of the hollow base of the cone B, so that the said cone B may be carried around with the said holder A, in its revolution. The cone B is designed to enter the hole in the piece to be turned or

polished, whatever may be the size of the said hole. To the side of the cone B is attached a blade, C, to prevent the piece from turning while being operated upon. D is a cone to receive and hold the other end of the piece to be turned or polished. The cone D is swiveled to its stem E by a set-screw, F, which enters a groove in the said stem E, as shown in Fig. 1. The stem E is designed to be inserted in the tail-stock of the lathe. The forward end or face of the holder A is made with a flange, a^2 , around its edge to prevent the pieces from flying apart while being operated upon. The face of the holder A is also provided with cross-flanges or blades a^3 to adapt it for holding half and quarter columns while being operated upon. When turning or polishing solid pieces the flange a^2 and the cross-flanges or blades a^3 are designed to be let into the piece to be held. G is a holder designed to hold the pieces to be operated upon, and which is made with a flange, g^1 , around its face to prevent the pieces from flying apart. The stem of the holder G is designed to be inserted in the tail-stock of the lathe. By this construction of the holders no gluing will be necessary to keep the pieces together while being operated upon.

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

The cone B having blade C combined with holder A having inclined lugs a^1 , circular flange a^2 , and cross-flanges a^3 , as and for the purpose described.

CORNELIUS ARCHER.

Witnesses:

VACHEL ARCHER,
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