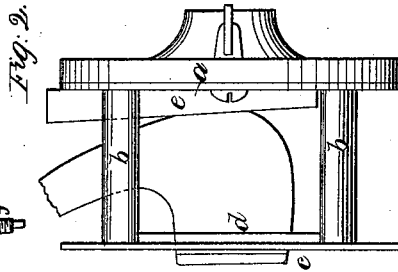
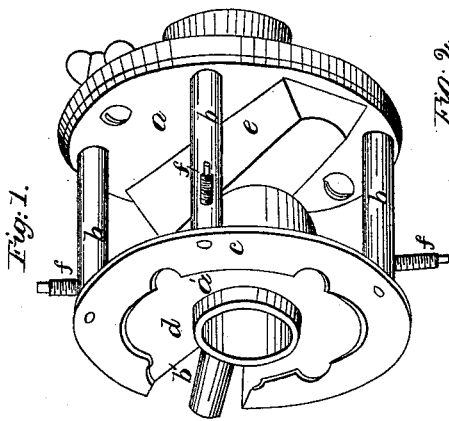
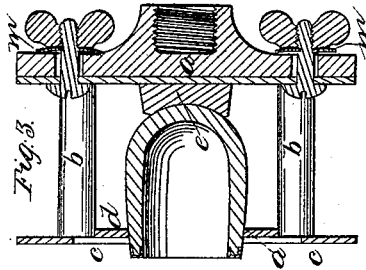


W. Kerr, Jr.

Turning Irregular Forms.

N^o 60,742.

Patented Jan. 1, 1867.



Witnesses:
C. M. Baklin.
C. W. Chase.

Inventor:
William Kerr Jr.
by his attorney,
Frederick Curtis.

United States Patent Office.

WILLIAM KERR, JR., OF BOSTON, MASSACHUSETTS.

Letters Patent No. 60,742, dated January 1, 1867.

IMPROVEMENT IN CLAMPS FOR HOLDING SMOKING PIPES FOR FINISHING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, WILLIAM KERR, Jr., now residing in the city of Boston, county of Suffolk, and Commonwealth of Massachusetts, have invented an improved Chuck for holding Smoking Pipes while boring their bowls; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is a perspective view.

Figure 2 is a side elevation; and

Figure 3 is a vertical and longitudinal section of the aforesaid invention, the object of which is to produce a simple and effective chuck, or implement for holding a smoking pipe while turning out or shaping the interior of its bowl, as well as for adjusting and polishing its "mountings," or the finish around the mouth of the bowl, or the cover of the same, as occasion may require.

The following explanation shows in what the invention consists, and the construction of the same.

As shown in the accompanying drawings, *a* is a circular plate of metal, supporting by four or any suitable number of standards, *b b*, &c., a flat metallic ring, *c*. Placed within the standards *b b*, and retained in place by them, and resting against the under side of the ring *c*, is a flat auxiliary plate, *d*, having a tapering hole, *a'*, made centrally in it to receive the upper part of the bowl of the pipe, which should fit tightly into it; the bowl being forced tightly into such hole, by the action of a wedge, *e*, driven between the bottom of said bowl and the bed-plate *a*. Both the ring *c* and the plate *d* should have a notch, *b'*, cut in one side of them, as shown in fig. 2, to allow of the tilting of the stem of the pipe while introducing the latter into the chuck. The above-described arrangement of parts is for holding a pipe whose bowl has a tapering form. For holding a pipe, the sides of whose bowl are parallel, the plate *d* is to be dispensed with, and a series of set-screws, *f f*, &c., are to be screwed through the standards *b b*, and are to be screwed up against different sides of the bowl, to form bearings or supports for it in place of the plate *d*, the wedge *e* being used in the same manner as with the tapering bowl. These screws are screwed tightly up against the sides of the bowl. Where pipes of different lengths are used in the chuck, wedges of varying thicknesses must be employed. The same may be said with regard to the plate *d*, as a series of them may be made with their holes corresponding in size to the diameters of the different pipe bowls. The chuck so made is to be applied, when in use, to the ordinary face-plate of a lathe by an adjustable connection, such as will allow the pipe bowl to be placed in line of axis of the lathe arbor, or being "centered," as it is termed by mechanics. As shown in the accompanying drawings, this connection is made by a screw-bolt passing through an enlarged opening made in the face-plate, and having a thumb-nut screwed upon its extremity, a small plate-spring, *m*, being placed between the thumb-nut and the rear side of the face-plate, to retain the two plates in position while determining the centre of the pipe bowl. By placing the pipe within the chuck, and putting the latter in revolution, we have only to place a stick or small tool against the outer edge of the pipe bowl to bring it into line with the axis of the lathe arbor. By stopping the revolutions of the lathe, and screwing up the thumb-nuts tightly, the chuck will be securely clamped to the face-plate, the spring, as before mentioned, serving in the mean time to confine the two in their relative positions.

Having described my invention, and the manner in which it is or may be carried into effect, what I claim, and desire to secure by Letters Patent, is as follows:

In apparatus as herein described, I claim the combination with the thumb-nuts and enlarged recesses formed in the face-plate of springs, arranged and operating substantially as shown and set forth.

WILLIAM KERR, JR.

Witnesses:

FRED. CURTIS,
RICHARD A. RIPLEY