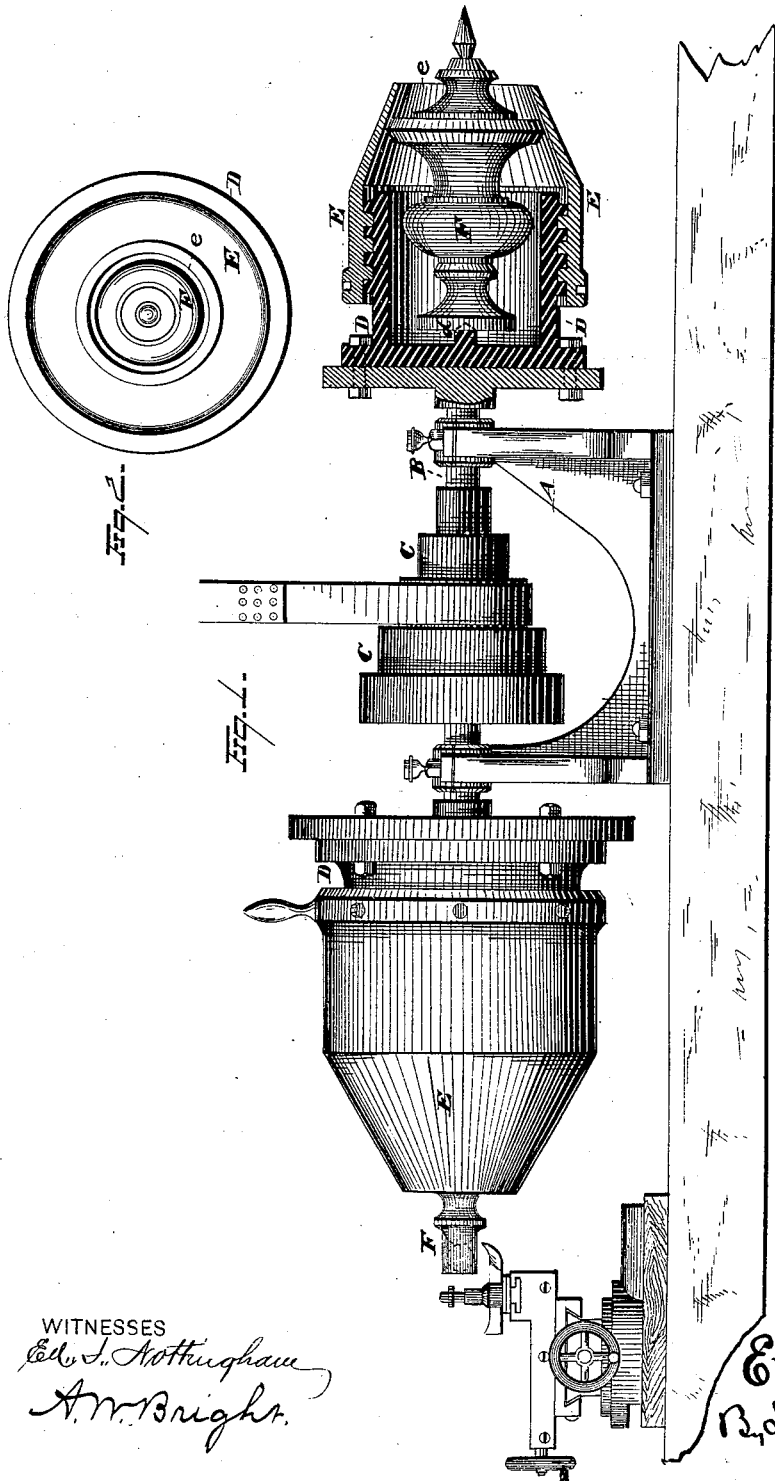


E. ROGERS.
Lathe-Chuck for Turning Stone.

No. 199,935.

Patented Feb. 5, 1878.



WITNESSES

Ed. S. Nottingham
A. M. Bright

INVENTOR

Ethan Rogers
B. Leqgett & Leqgett
ATTORNEYS

UNITED STATES PATENT OFFICE.

ETHAN ROGERS, OF CLEVELAND, OHIO, ASSIGNOR TO JAMES C. GAINES,
OF SAME PLACE.

IMPROVEMENT IN LATHE-CHUCKS FOR TURNING STONE.

Specification forming part of Letters Patent No. **199,935**, dated February 5, 1878; application filed
January 4, 1878.

To all whom it may concern:

Be it known that I, **ETHAN ROGERS**, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Lathe-Chucks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in lathe-chucks, designed more especially for use in turning marble, stone, and other similar material—as, for instance, marble and stone urns, &c.

My invention consists in a chuck designed to receive bodily the article to be turned or dressed, and composed of a base or stationary section with a movable cap-section, the said cap-section provided with an opening, through which the portion of the article to be turned or dressed may project, and constructed to center the article as the cap is secured in place, as will be hereinafter more fully set forth and claimed.

In the drawings, Figure 1 is a longitudinal central section of a lathe, showing two of my improved chucks as applied to the turning and dressing of the ends of marble or stone urns. Fig. 2 is an end elevation of the same.

Heretofore, in the manufacture of marble or stone urns and other like devices, it has been customary to secure the stone between the head of a lathe and its tail-stock, and the work turned to the desired conformation; but this necessarily leaves an unfinished end. This end has been usually chipped off, and dressed and polished, if necessary, by hand, and very frequently the operator so damages the adjacent parts as to destroy the work or mar its appearance.

My invention is designed to overcome this difficulty, and enable the operator, after the body of the work has been turned, to remove it from between the head and tail stock, and introduce it into my improved chuck, which will automatically center it, and enable him to dress and finish the end as readily as he did

the body of the piece, and with similar lathe-tools.

Since the particular style of lathe or method pursued in turning the body of the urn or other work forms no part of my invention, I have only shown, and will only describe, my improved device for turning and dressing the raw ends.

A is a suitable frame, and B a shaft, suitably geared with the power by a pulley, C, or other contrivance. D is the head of my improved chuck. It is preferably provided with the ordinary central spud or center *d*, for fitting into the cavity formed by the first lathe in the stone. This spud serves readily to center the article in my chuck.

E is a removable screw-cap, provided with a central opening, *e*, through which the unfinished end of the article to be turned or dressed may project. F represents a marble or stone urn in position to have its unfinished end dressed to any desired conformation, as shown by the dotted lines.

The interior of the cap E, together with the head D, forms a cavity, in which the urn or other device is held, and the interior of the cap is preferably of such conformation that it shall have an annular bearing at some point upon the part already turned. This, with the spud *d*, insures the exact centering of the article to be dressed.

The operation of the device is apparent. The urn or other article to have its end dressed is brought against the head D, and is centered upon the spud *d*. The cap E is then put on, and screwed down until it finds a firm bearing on the urn. The lathe is then set in motion, and the projecting rough end is turned or polished, as the case may be.

The spud *d* may be dispensed with and other contrivances be employed for centering that end of the article—as, for instance, the interior of the head D might be of such conformation as to find an annular bearing upon some part of the article where it has already been turned, which, in connection with the cap, would center the article.

I would not have it understood that my lathe-chuck is limited to lathes for turning or

dressing or polishing marble or stone, for it is equally applicable in dressing similar parts of castings, wooden ware, or other device, as also for drilling.

It is evident that the same chuck may be employed for articles varying considerably in length and thickness; but where the differences are very great, chucks of different sizes may be employed, or a longer spud or concentric, *d*, might be used, and, as shown in the drawings, there might readily be two different sizes in the same shaft.

Instead of making the cap in the nature of a screw-cap, it may be constructed simply to be placed in its proper position, and be then keyed or otherwise secured, and the male and female screw adjustment be dispensed with. This last-named construction might be desirable in case where the turning of the screw-cap is liable to injure a polished surface.

What I claim is—

1. A chuck adapted to receive and retain the article to be turned or finished, consisting, essentially, in an enlarged centering-head and an open-ended adjustable cap, the latter constructed to be longitudinally adjusted, and of such form that it will hold the article against lateral displacement, substantially as set forth:

2. A chuck adapted to receive and retain the article to be turned or finished, consisting of an enlarged centering-head, the barrel of which is screw-threaded on its outer surface, and an open-ended cap, provided with a screw-thread, said cap being constructed to hold said article at a point without the end of the barrel of the centering-head, substantially as set forth.

3. A chuck adapted to receive and retain the article to be turned, consisting, essentially, of an enlarged centering-head, provided with a centering-spud for holding one end of the article in a central position, and an adjustable open-ended cap, adapted to hold the opposite end of said article against either lateral or longitudinal displacement by its direct engagement with the surface of a portion of said article, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ETHAN ROGERS.

Witnesses:

F. TOUMBEY,

W. E. DONNELLY.