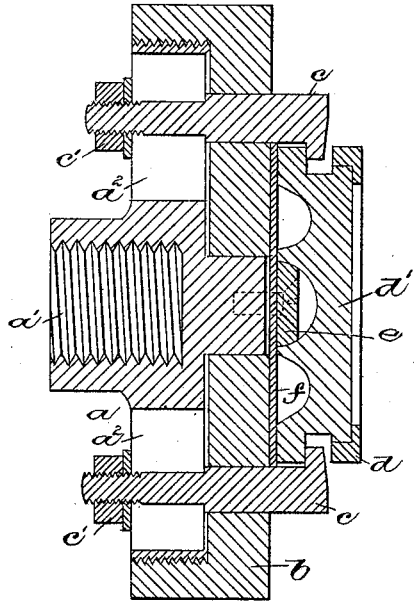
(No Model.)

J. T. PAGET.

LATHE CHUCK.

No. 370,083. Patented Sept. 20, 1887.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH T. PAGET, OF BOSTON, MASSACHUSETTS.

LATHE-CHUCK.

SPECIFICATION forming part of Letters Patent No. 370,083, dated September 20, 1887.

Application filed June 28, 1887. Serial No. 242,705. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH T. PAGET, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Lathe-Chucks, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

For turning the face of valve-disks and other plain surfaces it is the common practice to turn the same in a lathe, and afterward true them by grinding or scraping; but even after they have been turned and ground or scraped the surfaces are not accurately true, from the fact that in turning, the disks bear against a rigid surface and the tool acts upon them as a planing-tool, causing the said disks to warp or spring as soon as released by the dogs.

This invention has for its object to overcome the difficulty of springing or warping in the lathe; and the invention consists in providing the lathe chuck with a yielding cushion, against which the disk or plain surface has its bearing, so that the said disk may yield slightly as the tool bears against it.

In carrying out this invention I have provided the face of the chuck with a leather cushion, against which the disk to be turned or trued bears.

The drawing shows in vertical section a lathe-chuck embodying this invention.

The hub *a*, screw-threaded at its center, as at *a'*, to fit upon the screw-threaded end of the spindle of the lathe, is provided with slots a^2, two of such slots being herein employed.

The hub *a* is provided with peripheral screw-threads, upon which is turned a face-plate, *b*, said face-plate having an annular projection, *b'*, interiorly screw-threaded for such purpose. The face-plate *b* is also provided with openings which register with the slots a^2 of the hub, and dogs *c* pass through the said openings and slots, and are held in position by nuts *c'*.

The hub *a* and face-plate *b* form the head of the chuck.

The disk to be turned is held in position by the dogs *c c*.

The disk herein shown, for which my invention was especially designed, is a valve-disk, it consisting of a soft metallic ring, *d*, secured to an iron base-plate, *d'*. This form of valve-disk forms the valve proper of valves commonly known as the "Peet" valve. The block *d'* is provided on its under side with deep grooves, and to center the disk a bar, *e*, is secured to the face of the lathe-chuck, said bar entering the central groove of the block. A yielding cushion, *f*, herein shown as a piece of leather, is secured to the face of the chuck by the same screw which fastens the bar *e*, and the block or "valve-disk," as it may be called, bears against said yielding cushion, being held firmly by the dogs, the engaging ends of which enter a recess cut in the block. The nuts *c'* may be turned so as to draw the disk as firmly against the yielding cushion as desired.

It is obvious that several dogs may be employed, if desired; but for work for which the chuck is especially designed only two dogs are required.

It will be seen that the disk has a very slight yielding cushion, so that the tool in acting upon its face causes it to slightly yield, so that when the dogs *c c* are released to permit the disk to be removed there will be no liability of the said disk springing or warping, as is now the case when the tool acts against the face of the disk having a rigid bearing.

By providing the yielding cushion the tool acting upon the face of the disk will not "chatter" or vibrate, as the cushion absorbs the vibration.

It is obvious that the chuck herein described is applicable for all kinds of disks or plain surfaces, so I do not desire to limit my invention to its employment for valve disks.

I claim—

A lathe-chuck having dogs, combined with a yielding cushion placed against the face of said chuck, substantially as described.

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

JOSEPH T. PAGET.

Witnesses:

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