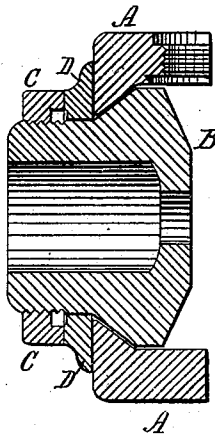


F. ARMSTRONG.

LATHE-CHUCK.

No. 189,168.

Patented April 3, 1877.



Witnesses.

John J. Brown
John Eyles

Inventor

Frank Armstrong

By Atty.

A. C. Antise

UNITED STATES PATENT OFFICE

FRANK ARMSTRONG, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN LATHE-CHUCKS.

Specification forming part of Letters Patent No. **189,168**, dated April 3, 1877; application filed February 28, 1877.

To all whom it may concern:

Be it known that I, FRANK ARMSTRONG, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Lathe-Chucks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, making a part of this specification.

My invention relates to certain improvements in lathe-chucks, such as are fully shown and described in Letters Patent No. 154,162, dated August 18, 1874.

My invention has for its object to prevent any unevenness of wear incidental to the frictional contact between the central bevel-gear and its containing shell; and consists in forming the rear supporting portion of the shell with a beveled face, and the gear with a correspondingly-shaped face, so that any wear taking place will not affect the axial relation of the parts, as will be hereinafter more fully set forth.

In the accompanying drawing I have represented a central longitudinal section of only so much of such a chuck as is shown in the patent hereinbefore referred to as is necessary to illustrate the feature of my invention.

A represents the rear half-shell, which incloses the central bevel-gear B, which are held in contact by means of a nut, C, and washer D. Those portions of the gear B and shell A which are in frictional contact are beveled toward the axis of the gear, as clearly shown in the drawing, and as all wear taking place is concentric with the axis of the gear, it follows that the axial relation between the gear and shell is always maintained.

I am aware that it is not new to return the shell A and form therein an annular V-shaped groove adapted to receive a corresponding V-shaped rib on contact-face of the gear, nor do I wish to lay claim thereto; but

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

The shell A and gear B, having their contact-faces beveled toward the axis of the gear, combined substantially as shown and described, and for the purposes set forth.

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

FRANK ARMSTRONG. [L. S.]

Witnesses:

JNO. J. BONNER,
ARTHUR L. MCINTIRE.