J. FLOWER.

CHUCKS FOR HOLDING PIPE-FITTINGS.

No. 189,445. Patented April 10, 1877.

Fig. 1.

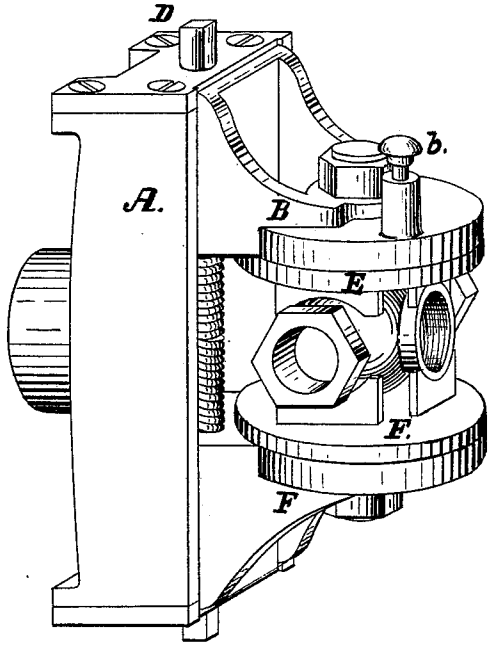
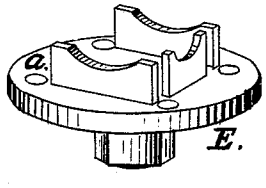


Fig. 2.



Attest:
Edward Barthel.
Chas. J. Hunt

Inventor:
J. Flower
By Atty
Thos. S. Sprague

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES FLOWER, OF DETROIT, MICHIGAN.

IMPROVEMENT IN CHUCKS FOR HOLDING PIPE-FITTINGS.

Specification forming part of Letters Patent No. **189,445**, dated April 10, 1877; application filed January 4, 1877.

To all whom it may concern:

Be it known that I, JAMES FLOWER, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Chucks; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective of a chuck, showing my improvement, with a globe-valve shown therein. Fig. 2 is a like view of one of the rotating heads detached.

Like letters indicate like parts in each figure.

The nature of my invention relates to an improvement in chucks for lathes, planing and other machines; and it consists in the construction, combination, and arrangement of the several parts of my improved chuck.

In the drawings, A represents a chuck-frame of the ordinary construction, provided with two chuck-heads, B C, the lower ends of which engage, in the usual way, with the right and left handed screw D, by means of which the heads are forced toward each other or retracted, as may be desired. Secured to each of the chuck-heads are the revolving heads E F, by means of suitable bolts passing through them and the stationary heads B C. One of these chuck-heads, B, is provided with a spring-bolt, *b*, which passes through the head and engages with one of the holes *a* in the revolving head E. These holes are drilled at regular intervals, and there may be as many as desired. When the article to be finished up is secured by the dies on the inner faces of the rotating heads it may be rotated with the heads to any desired position, by withdrawing the spring-bolt *b*.

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

The combination, with the chuck-frame A, stationary chuck-heads B C, and right-and-left-hand screw D, of the revolving heads E F, and the spring-bolt *b*, constructed and arranged substantially as described and shown.

JAMES FLOWER.

Witnesses:

CHAS. J. HUNT,

H. S. SPRAGUE.