

United States Patent Office.

CHARLES F. STACKPOLE, OF WOBURN, MASSACHUSETTS.

Letters Patent No. 106,420, dated August 16, 1870.

IMPROVED SLIDE-CHUCK FOR LATHES.

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

To all whom it may concern:

Be it known that I, CHARLES F. STACKPOLE, of Woburn, in the county of Middlesex and State of Massachusetts, have invented a new and improved Slide-Chuck for Lathes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a face view of my improved chuck.

Figure 2 is a rear view of the same.

Figure 3 is a detail sectional view of the same, taken through the line *x x*, fig. 1.

Figure 4 is a detail sectional view of the same, taken through the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved slide-chuck for lathes, designed more particularly for holding crank-axles while being turned, but equally applicable for holding other work, and which shall be simple in construction and easily adjusted; and

It consists in the construction and combination of the various parts of the chuck, as hereinafter more fully described.

A is the face-plate of the chuck, which is secured in place by screws or bolts in the ordinary manner, the screw-holes being shown in fig. 2.

The face of the plate A has a dovetailed groove formed in it, as shown in figs. 1 and 3, into which groove is fitted the dovetailed slide B.

The slide B is moved longitudinally to adjust it by the screw C, as shown in figs. 3 and 4. The screw C may be swiveled to the face-plate A, as shown in fig. 4, or to the slide B, as may be desired.

In the first case the screw C is stationary, and passes through a nut, D, attached to the slide B, so that the said slide and nut may be moved by turning the said screw.

In the last case the nut D is attached to the face-plate A, and the screw C travels with the slide B.

In the slide B, near its ends, are formed two holes, *x*

z, provided with set-screws *b'* to hold the crank or a pin and bushing, E, according to the character of the work to be held.

In the face-plate A are formed two holes, provided with set-screws *a'*, to receive and hold the studs F, as shown in figs. 1 and 3.

The studs F are also provided with set-screws *f'* to hold the work or the dog, as may be desired.

In turning crank-axles, another chuck similar to this is necessarily employed.

The first step in the operation consists in adjusting each slide B so that its center *e* shall be in the center of the disk. The axle is then centered at its extreme ends, and firmly secured by a dog attached to the chuck of the dead spindle.

When said end has been turned, the axle is reversed to repeat the operation on its opposite one.

Each slide B is then readjusted so as to occupy its original position, with its ends flush with the periphery of the disk A, as in figs. 1 and 4, and the turned ends of the axle inserted in corresponding holes in the disks, care having been previously taken that these shall be of the requisite size, and the set-screws *f* adjusted to center the wrists of the cranks.

After turning said wrists the axle is reversed, as before, and the operation completed.

G are the gibs, which are set up by set-screws in the ordinary manner, and which may have a scale of division-marks formed upon them, for convenience in adjusting the chuck.

Having thus described my invention,

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

The combination with the face-plate A, of the slide B, provided with holes *x*, centering-pin E, set-screws *b'*, the reversed screw C, and nut D, adjustable dogs F, and set-screws *a'* and *f'*, all constructed as described, and arranged to operate as and for the purpose set forth.

CHARLES F. STACKPOLE.

Witnesses:

N. J. SIMONDS,
JAMES BUEL.