S. P. M. TASKER.

Lathe Chuck.

No. 105,860. Patented July 26, 1870.

FIG. 3

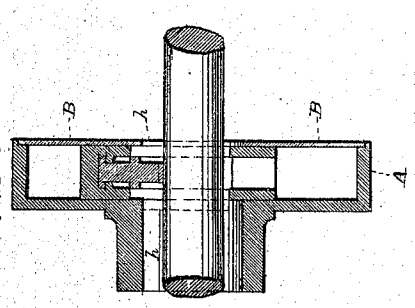


FIG. 2

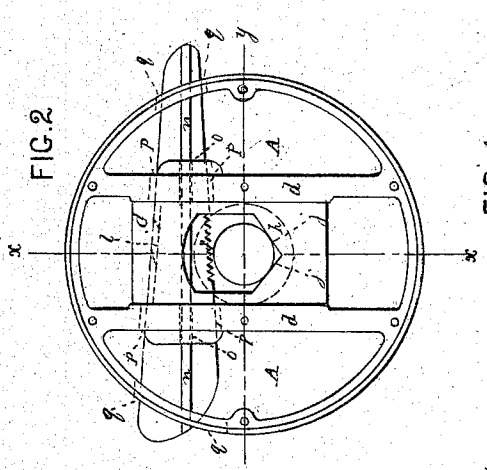


FIG. 4.

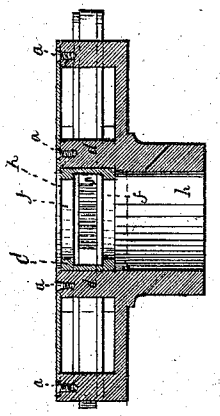


FIG. 1.

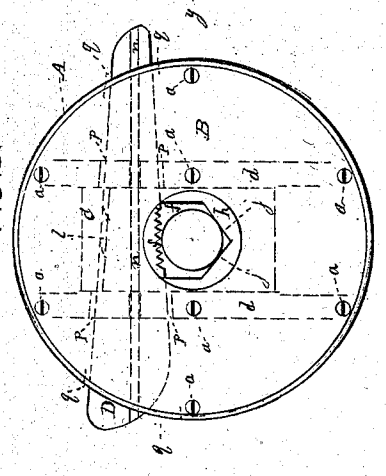
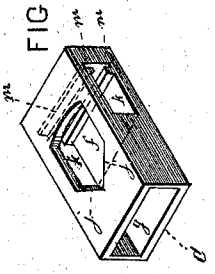


FIG. 5.



WITNESSES.

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STEPHEN P. M. TASKER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 105,860, *dated July* 26, 1870.

IMPROVEMENT IN CHUCKS.

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

I, STEPHEN P. M. TASKER, of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Griping-Chucks, of which the following is a specification.

The nature of my invention consists in the combination and arrangement of a hollow slide and toothed wedge with the body of the chuck, in such a manner as to provide for the piece to be chucked being placed between double angular cheeks of the slide, which bite it on one side, and a toothed edge of the wedge, which bites it on the other side.

The wedge is connected with the stationary part of the chuck by means of tongues and grooves, and also with the slide, by means of angular grooves and tongues, which slide in the same, in such a manner that, when it is driven forward, it tightly gripes the piece to be chucked, as hereinafter described.

In order to keep the chucked piece in its central position with the chuck, the guiding ribs of the wedge are placed at an angle, with the griping-edge of the same, of one-half the degrees assumed by the angle of the grooves in the slide.

The wedge is so arranged with the chuck that its forward or tightening motion shall be in the line of motion of the chuck, so that the action of the latter shall tend to increase the gripe of the device.

To enable others skilled in the art to which my invention appertains to apply the same to practice, I will now give a detailed description thereof.

In the accompanying drawing, which makes a part of this specification—

Figure 1 is a face view of the improved chuck.

Figure 2 is a like view of the interior, the cap-plate B being removed.

Figure 3 is a cross-section at the line *x x* of fig. 2.

Figure 4 is a like view at the line *y y* of fig. 2.

Figure 5 is an isometrical view of the hollow griping slide C.

Like letters in all the figures indicate the same parts.

A represents the body of the chuck, which has a cap-plate, B, confined by means of screws *a*.

Between the standing plate *b* and the said cap-plate B and the parallel ribs *d d* is situated a hollow slide, C, which is seen in detail in fig. 5.

The said slide has cross-slots *f f* through its longitudinal opening *g*, to admit of a piece to be chucked passing through, as it is placed centrally in the chuck, in the center openings *h h*, and also for the formation of the double inclines *j j*, for griping the bar to be chucked.

The slide also has cross-openings *k k*, at right angles to the openings *f f*, to admit of the passage of the griping-wedge D, having inclined lugs *l l* on its sides, which move in the inclined grooves *m m* of the slide C, and also inclined ribs *n n*, which move in and are guided by the cross-grooves *o o*, in the sides of cross-slots *p p* of the ribs *d d*.

There are slots *q q* on the opposite edges of the chuck A for the free passage of the wedge D.

When the rod to be chucked is placed in position, and the wedge D is forced in the direction of the arrow, the slide C is drawn forward, bringing the double inclines *j j*, at each side of the slide, against one side of the rod, and the toothed edge *s* of the wedge against the other side, so as to firmly gripe the rod.

When the latter has to be removed from the chuck, it is loosed by backing the wedge D.

The angle formed by the toothed edge *s* of the wedge D and the ribs *n n* is just one-half as great as that of the grooves *m m* of the slide, so as to preserve the central position of the rod in the griping operation.

For other purposes than chucking, the wedge and slide may be used to gripe a rod or other piece without the use of the standing parts A B. In this case I give an extension to the forward end of the wedge, to form a handle for operating the same.

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

The combination of the slide C and wedge D with the part A and cap B, substantially as described, and for the purpose specified.

In testimony that the above is my invention, I have hereunto set my hand and affixed my seal this 13th day of June, 1870.

STEPHEN P. M. TASKER. [L. S.]

Witnesses:

THOMAS J. BEWLEY,

STEPHEN USTICK.