S. H. BELLOWS.

Improvement in Chucks.

No. 130,103. Patented Aug. 6, 1872.

Fig. 1.

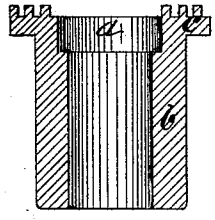
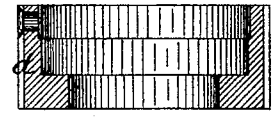
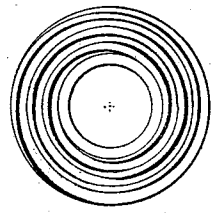


Fig. 2.





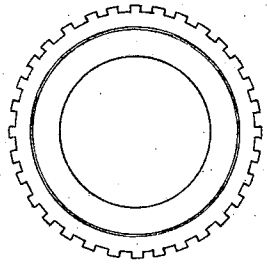
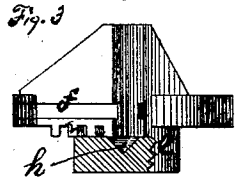
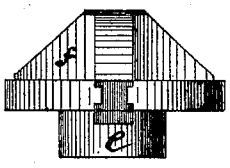


Fig. 3





Witnesses.

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UNITED STATES PATENT OFFICE.

STEPHEN H. BELLOWS, OF MIDDLETOWN, CONNECTICUT.

IMPROVEMENT IN CHUCKS.

Specification forming part of Letters Patent No. **130,103**, dated August 6, 1872.

To all whom it may concern:

Be it known that I, STEPHEN H. BELLOWS, of Middletown, county of Middlesex, and State of Connecticut, have invented certain new useful Improvements in the Construction of Drill-Chucks; and to enable others skilled in the art to manufacture the same I will proceed to describe the invention, referring to the drawing, in which the same letters indicate like parts.

The nature of this invention consists in the peculiar construction of the chuck. The object is to cheapen the manufacture, and at the same time produce a substantial, durable, and effective drill-chuck.

In the accompanying drawing, Figure 1 is a sectional view of a socket screw-flange spindle, by which it may be held—in the common way—to a lathe or drill-spindle. In the face of said flange is cut a spiral screw-thread. This socket-spindle screw-flange is fitted closely and turns freely in the chambered orifice of the corrugated gripe-collar, shown in Fig. 2.

In the recess which is directly in front of the spiral screw-plate in the gripe-collar is fitted a hub jaw-plate holder, shown in Fig. 3, having three-way slits in the face thereof, into which the joint portion of the jaws is fitted closely, and works freely therein in the common way. The hub jaw-plate holder is fitted closely and firmly into a recess in the gripe-collar, and is secured thereon by pins or screws passing through the said collar into the edge of the plate. While the hub of said plate is fitted to work closely and freely inside of the orifice in the face of the spiral screw-plate, this hub is provided with a central countersink for the purpose of guiding the shank-end of the drill to a true center position between the jaws, whether the drill be larger or smaller.

a is the socket of the screw-flange. *b* is the screw-spindle. *c* is the spiral screw-flange. *d* is the corrugated gripe-collar. *e* is the hub of the jaw-plate. *f* are the jaws. *h* is a central countersink.

Thus it will be seen that by this mode of manufacture a drill-chuck is produced in a cheap, simple, effectual, and perfect manner, and far less liable, from constant usuage, to get out of order.

I believe I have thus shown the nature, construction, and advantage of this invention so as to enable others skilled in the art to make the same therefrom.

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

The jaw-plate *e*, constructed as described, having the countersink *h*, in combination with the jaws *f*, spindle *b*, screw-flange *c*, and gripe-collar *d*, as and for the purpose specified.

STEPHEN H. BELLOWS. [L. S.]

Witnesses:
E. M. LAY,
JEREMY W. BLISS.