

E. HORTON.
Chucks.

No. 142,163.

Patented August 26, 1873.

Fig. 1.

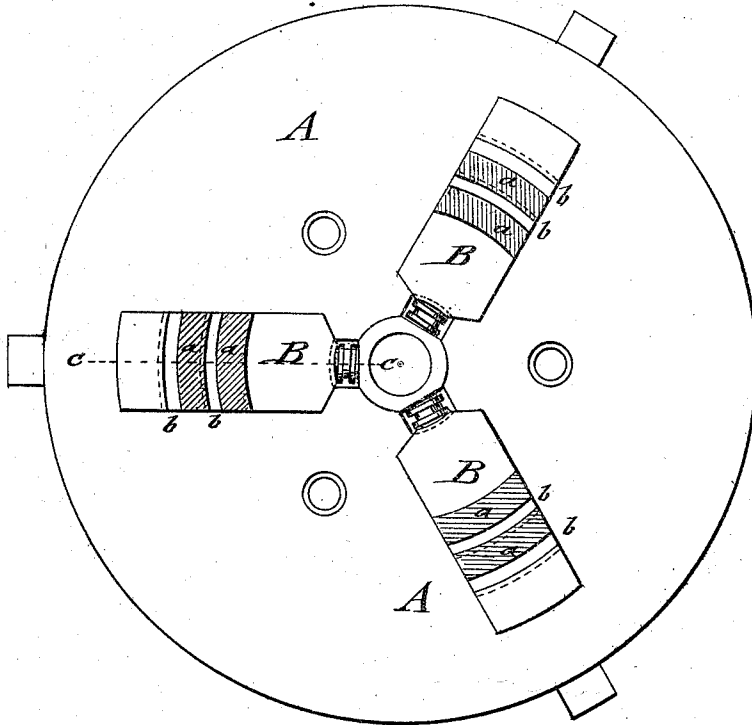
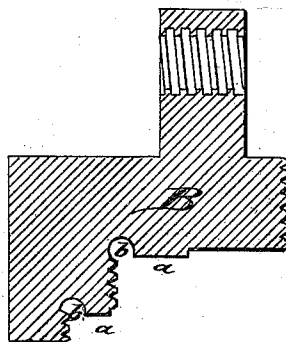


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

ELI HORTON, OF WINDSOR LOCKS, CONNECTICUT.

IMPROVEMENT IN CHUCKS.

Specification forming part of Letters Patent No. **142,163**, dated August 26, 1873; application filed July 26, 1873.

To all whom it may concern:

Be it known that I, ELI HORTON, of Windsor Locks, in the county of Hartford and State of Connecticut, have invented a new and Improved Chuck, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of my improved chuck; and Fig. 2, a detail vertical transverse section through one of the jaws on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to improve the jaws of a chuck that they may be ground perfectly true, and become therefore more reliable in holding the work so that it turns perfectly true.

It is a well-known experience in case-hardening jaws that the relative position of the metallic particles change more or less, so that it is almost impossible to hold work and get it perfectly true. I have tried to overcome this difficulty, and have for this purpose introduced on the face of the jaw a raised seat, together with a groove between the face and bite of the jaw, rounding off thereby the corner, and allowing the use of a tanite or vitrified emery wheel, by which the raised seat may be ground perfectly true.

In the drawing, A represents a chuck, and B the jaws of the same. On the face part of each jaw, on which the work rests for turning,

is introduced a raised seat, *a*, of suitable size, together with a groove or recess, *b*, formed in the corner of the bite and face of the jaw, removing and rounding off the same. The groove *b* admits the use of an emery-wheel for grinding off the raised part *a*, so that work coming to a sharp corner will rest upon the ground seat *a* and the bite of the jaw only, and assume a perfectly true position thereon, as an equal pressure is exerted on the same. Another advantage of the groove *b* is, that a grinding-wheel without a perfect corner can do its work accurately, as it projects beyond the raised part into the recess formed by the groove, grinding the seat perfectly without fracture at the edges.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

As an improvement in chucks, the jaws B, which gripe the work placed between them, provided with raised seats *a* on the face part of the same, and grooves *b* for rounding off the corners of the face and bite parts, to hold the work perfectly true, and allow the accurate grinding of seats *a*, substantially as set forth.

ELI HORTON.

Witnesses:

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