

F. DEZENDORF.
 Bit-Clamp for Boring-Machines.

No. 198,280.

Patented Dec. 18, 1877.

Fig. 1.

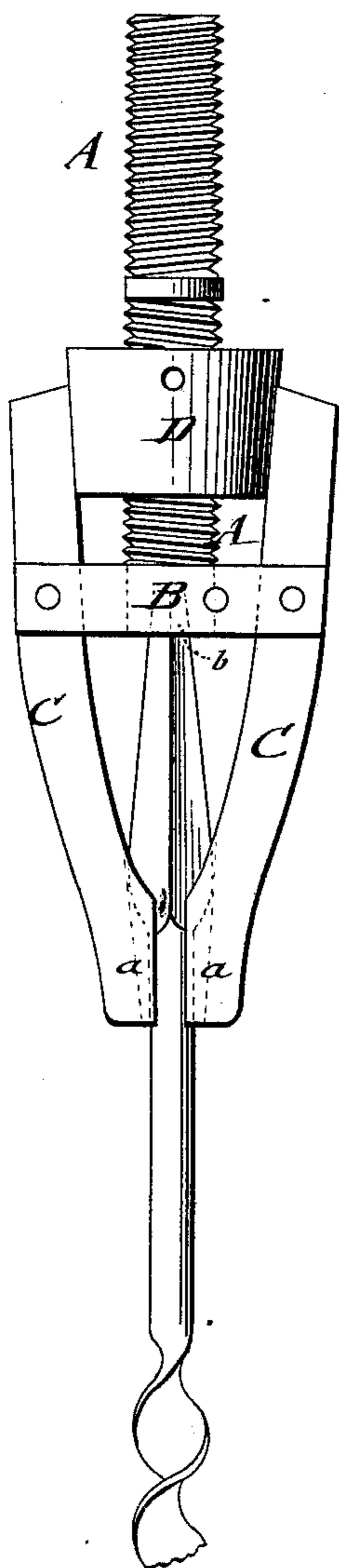
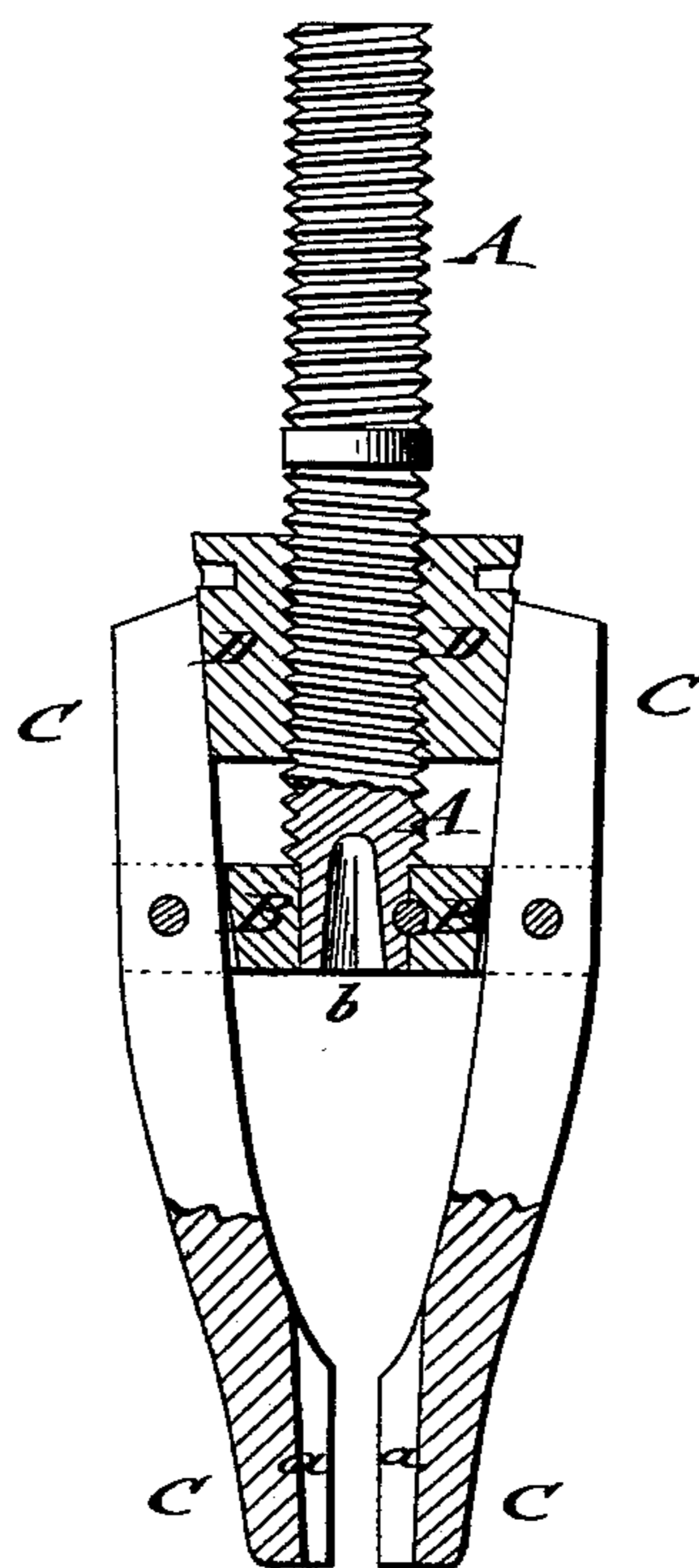


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FREDERICK DEZENDORF, OF CORNWALL-ON-HUDSON, NEW YORK.

IMPROVEMENT IN BIT-CLAMPS FOR BORING-MACHINES.

Specification forming part of Letters Patent No. **198,280**, dated December 18, 1877; application filed November 3, 1877.

To all whom it may concern:

Be it known that I, FREDERICK DEZENDORF, of Cornwall-on-the-Hudson, in the county of Orange and State of New York, have invented a new and Improved Bit-Clamp, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a side elevation of my improved bit-clamp, and Fig. 2 a vertical central section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved bit-clamp for power-machines, which is quickly adjusted to differently-sized shanks of bits, so as to firmly hold and quickly release the same without working loose by the motion of the machine; and the invention consists of two bit-holding jaws, that are fulcrumed to the ends of a rigid T-piece of a threaded center-piece, the jaws being adjusted by a conical nut turning on the threaded center-piece, and acting on the upper concaved ends of the jaws.

Referring to the drawings, A represents the center-piece, that is screwed into the lower end of the stock of the power-machine, the lower part of the same being threaded in opposite direction to the thread on the upper part, and provided at the lower end with a fixed cross-head or T-piece, B, that is rigidly keyed thereto.

To the recessed ends of the T-piece B are fulcrumed the jaws C, which are provided in the customary manner, at the inside, with angular recesses or grooves *a*, for taking hold of the bit-shanks, in connection with a square socket-hole, *b*, of the center-piece.

A conical nut, D, works on the lower screw portion of the center-piece, and bears on the concaved upper ends of the jaws, so as to bring the lower ends closer together when the screw-nut is turned, while admitting the ready spreading or opening of the jaws or screwing the nut up. By turning the nut down, a bit-shank of any size may be firmly clamped for work, and by turning the nut up the same may be quickly taken out. The screw-nut D is provided with holes for the insertion of an adjusting lever-pin, by which the required turns of the nut are readily given until the shank is firmly clamped or released.

In this manner a powerful and quickly-adjusted bit-clamp for bit-shanks of all sizes is furnished that is self-centering, and holds a bit so as not to work loose by the motion of the machine, gripping all ordinary bit-shanks and auger-shanks equally well, and being readily attached to the stock of a power-machine by the threaded shaft.

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

A bit-clamp for power-machines, consisting of a threaded center-piece, with bottom T-piece, fulcrumed jaws, and a vertically-adjustable conical screw-nut bearing on the upper ends of jaws, for setting them to the bit-shank, substantially in the manner set forth.

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Witnesses:

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