J. O. REILLEY.

Drill-Chuck.

No. 160,954. Patented March 16, 1875.

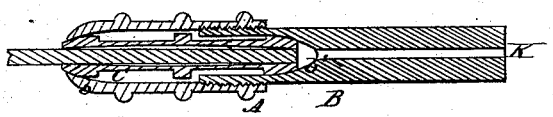

Fig. 1

Fig. 2

Witnesses
J. P. Connolly
Anthony A. Connolly

John O. Reilley Inventor

By Connolly Bros

Attorney

UNITED STATES PATENT OFFICE.

JOHN O. REILLEY, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN DRILL-CHUCKS.

Specification forming part of Letters Patent No. **160,954**, dated March 16, 1875; application filed February 16, 1875.

To all whom it may concern:

Be it known that I, JOHN O. REILLEY, of Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Drill-Chucks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a vertical central section through cylinder spindle and clamp, and Fig. 2 a horizontal section.

This invention has relation to drill-chucks; and consists in the construction and combination of parts, having reference particularly to an adjustable clamp or jaw-piece having elastic jaws at both ends to grasp the bit-shank and hold the bit in a rigid true position.

Referring to the accompanying drawing, A designates the chuck-cylinder, threaded on its inner surface to receive the end of the screw-stock B. C designates the clamp or jaw-piece, consisting of a bar of suitable metal bored through the center for the reception of the bit, and radially slotted from both ends toward the middle, where it is re-enforced or enlarged laterally to give it sufficient strength and body. The slots produce jaws *a a*, which are elastic, so that they may be compressed to bind the bit when the latter is inserted, or expanded to allow the bit to be withdrawn.

The ends of the clamp are made slightly conical, as shown, to adapt them to the conical or beveled form of the inner surface of the chuck-cylinder at its lower end *b*, and the inner end of the recess *b'* in the shank.

The jaws of the clamp are compressed to bind the bit by turning the cylinder A, which forces ends of the clamp, respectively, into the recess *b'* and against the beveled surface *b*. By this means the bit-shank is held above and below the middle part of the clamp instead of, as heretofore, at one point only, and is thereby kept in a true and rigid position.

K designates a hole through the center of the spindle, through which, if desired, a wire or rod may be passed.

Having fully described my invention, I claim—

In combination with the chuck-cylinder A and stock B, the jaw-piece C, in one piece, and slotted at both ends, as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of April, 1874.

JOHN O. REILLEY.

Witnesses:

SAMUEL I. HERTFORD,

PETER N. HORSLEY.