

J. RUSSELL.
Holder for Chisels.

No. 53,884.

Patented April 10, 1866.

Fig. 1.

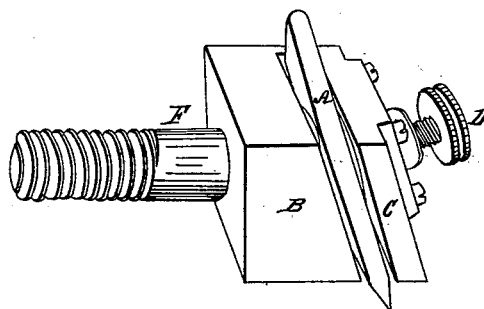


Fig. 2.

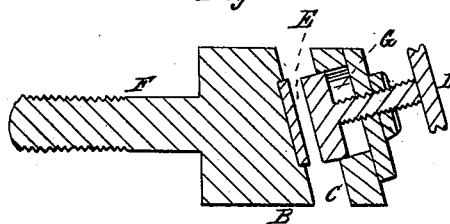


Fig. 3.

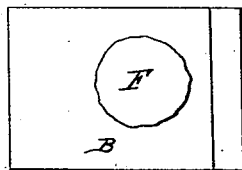
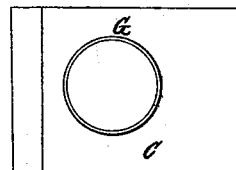


Fig. 4.



Witnesses:

L. D. Lau
W. R. Donald

Inventor:

John Russell

UNITED STATES PATENT OFFICE.

JOHN RUSSELL, OF SING SING, NEW YORK.

IMPROVEMENT IN HOLDERS FOR CHISELS.

Specification forming part of Letters Patent No. 53,884, dated April 10, 1866.

To all whom it may concern:

Be it known that I, JOHN RUSSELL, of Sing Sing, in the county of Westchester and State of New York, have invented a new and useful Improvement in the Construction of the Holders of Chisels Used in Cutting Files and for Similar Purposes; and I do hereby declare that the following is a full, clear, and exact description thereof, and of the mode or manner of operation, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and making a part of this specification.

The nature of my improvement or invention consists in so constructing the chisel-holder that, while it will firmly and steadily hold the chisel to receive the blows of the hammer, it will at the same time allow of such variation in the position of the chisel in the holder that the chisel can adapt itself to any inequalities there may be in the surface of the blank to be cut, and by which also the machinery is greatly relieved from the shock of the blows upon the chisel.

Figure 1 is a perspective view of the chisel-holder with the chisel in position. Fig. 2 is a vertical sectional view of Fig. 1 with the chisel removed. Figs. 3 and 4 are views of the inside surfaces of the jaws of the chisel-holder.

The same letters refer to like parts in the several figures.

The chisel A is held between the jaws or plates B and C, and is fastened therein by means of the set-screw D. The chisel and its holder are connected with the machinery or to any place desired by the screw E.

To the inner face of the jaw or plate B, I fix a piece of india-rubber, gutta-percha, or other similar elastic or yielding material, F, and to the inner end of the screw D, or to that part

of the inner face of the jaw or plate C which is moved and worked by such screw D, I also fix a like piece of rubber, gutta-percha, or other similar elastic substance, G. The chisel, when in position in the holder, is held between and supported by such two elastic or yielding surfaces. It will be readily apparent that the chisel so held and supported can have and take some motion between such elastic or yielding surfaces independent of the holder or without affecting it. If, therefore, the blank to be cut should happen to be uneven in any degree upon its surface, the chisel as it is struck can at once accommodate itself to any such irregularities or unevenness of the surface of the blank, and the impression will be of the same width and depth throughout, whereas if the chisel were held rigidly between the jaws or plates B and C it could not accommodate itself to any such irregularities of surface in the blank, and the cut or impression would, therefore, necessarily be more or less uneven, and the cut face be more or less wanting in uniformity. The use and application of the elastic substance in the chisel-holder also greatly lessens and almost entirely destroys the shock produced by the continuous blows of the hammer upon the chisel, thereby insuring increased steadiness to the whole machinery and greater accuracy to the action of the chisel.

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

Clamping the chisel between two disks of india-rubber or gutta-percha by means of the set-screw D, or its equivalent, substantially as and for the purposes set forth.

JOHN RUSSELL.

Witnesses:

S. D. LAW,

W. R. RONALDS.