

No. 720,950.

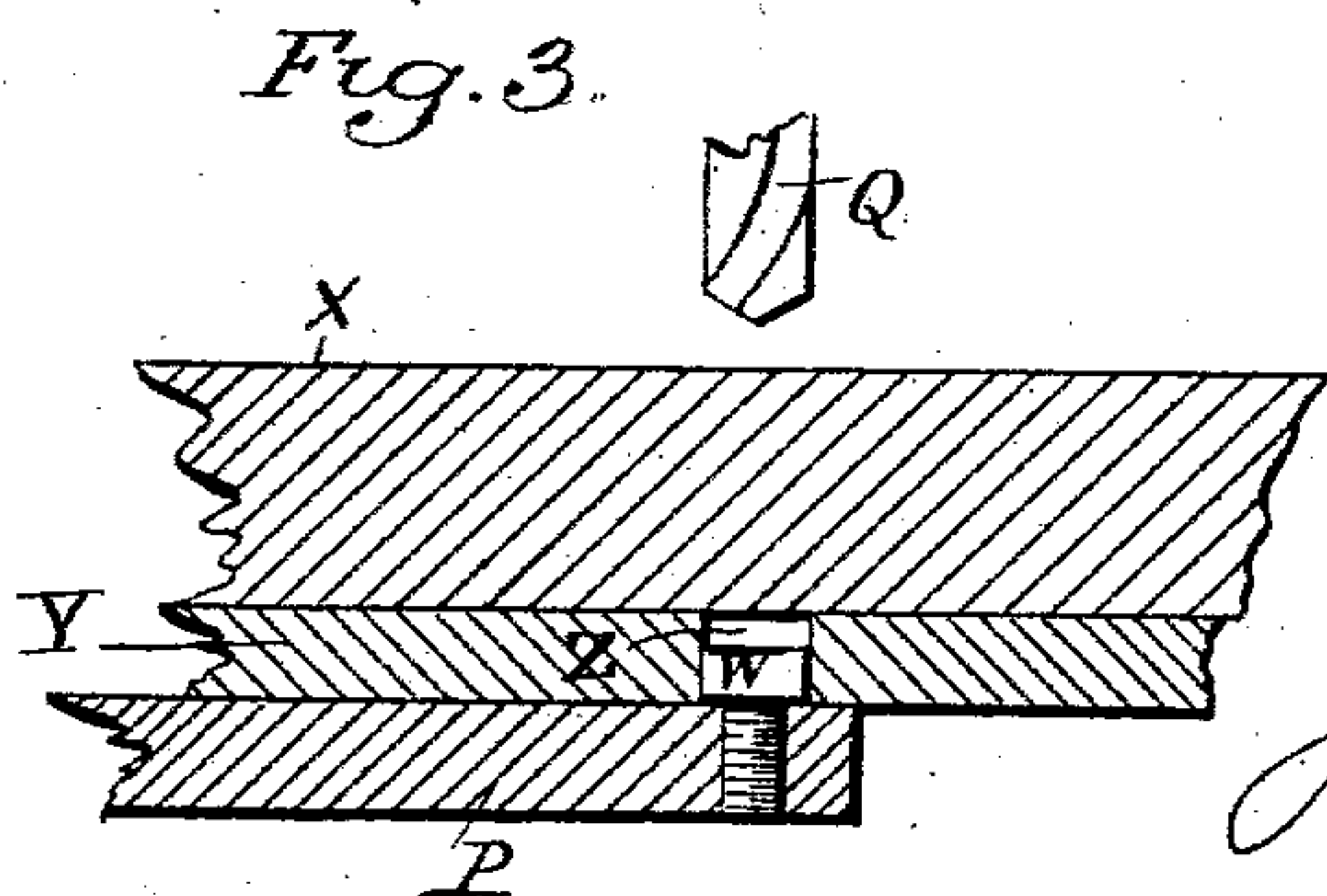
PATENTED FEB. 17, 1903.

J. H. McWEENEY.

## BIT BRACE GUIDE.

APPLICATION FILED SEPT. 30, 1902.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN H. McWEENEY, OF NEW HAVEN, CONNECTICUT.

## BIT-BRACE GUIDE.

SPECIFICATION forming part of Letters Patent No. 720,950, dated February 17, 1903.

Application filed September 30, 1902. Serial No. 125,405. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. McWEENEY, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Bit-Brace Guides; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view, partially in section, of a bit-brace and guide constructed in accordance with my invention; Fig. 2, a side view of three centering-plugs adapted to be used in connection with my device; Fig. 3, a broken view of the lower end of the bit and the outer end of the centering-arm, illustrating their co-operation.

This invention relates to an improvement in guides for bit-braces, the object of the invention being to provide an attachment readily applied to bit-braces of ordinary construction and one which will indicate on the under side of an article the point where the cutter will appear; and the invention consists in the construction, as hereinafter described, and particularly recited in the claims.

As shown in the accompanying drawings, the bit-brace is of ordinary construction, including a handled shank A and a chuck-shank B. Surrounding the shank A and beneath the handle C is an eye D, mounted in the end of a horizontal arm E, while upon the chuck-shank B above the chuck F is an eye G, corresponding to the eye D and like the eye D is mounted in the end of a horizontal arm H. These arms are connected at their outer ends, so as to stand parallel with each other, by a vertical tube I. In the lower end of this tube is a plug J, having a square hole K, and extending transversely into the plug is a set-screw L. About midway the length of the tube is an annular groove M, forming an internal shoulder N. Extending upward into the lower portion of the tube is a slide O, square in cross-section and provided at its lower end with an arm P, which extends into line with the bit Q, and in this arm in line with the said bit is a threaded hole R. Mounted in the upper end of the slide O is a

round pin S, provided at its upper end with a head T. Surrounding the pin S is a coiled spring U, bearing at its ends against the said head T and the shoulder N. Into the threaded hole R a point V is placed, or instead of this point plugs W may be inserted, the heads of the plugs corresponding in diameter to the diameter of the hole to be cut.

In operation the slide O is drawn downward, so that the arm P passes beneath the article or device to be drilled and the point V located at the point where it is desired that the center of the bit shall appear. The brace is then operated in the usual manner, and when withdrawn after it has cleared the surface of the article being cut the screw L is turned to clamp the slide and permit the device to be withdrawn and held in so-called "open" position ready for further use, or, if desired, the slide may be held in its open position by the hand.

A device of this character is particularly useful in carriage-work—such, for instance, as indicated in Fig. 3—where it is desired to drill a strip of wood X, which is provided on its under side with a band Y of iron, the band having a hole Z for the reception of a bolt, it being desired to bore a hole through the wood in line with this hole Z. For such use the end of the arm P is provided with a plug W the head of which corresponds in diameter to the diameter of the hole Z. The slide is drawn outward and the arm P passed beneath the strips and the head of the plug W inserted into the hole Z. With the brace then held in a vertical position it is assured that the hole cut by the bit will be in line with the hole in the iron strip.

I am aware that guides have been attached to bit-braces, and therefore do not wish to be understood as claiming, broadly, such as my invention.

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

1. The combination with a bit-brace having a handle-shank and a chuck-shank, of a guide consisting of horizontal arms connected with the brace, the ends of said arms connected by a vertical tube, a spring-actuated slide in said tube, formed at its lower end with an arm adapted to pass beneath the

work, the tendency of the spring being to lift the slide, substantially as described.

2. The combination with a bit-brace having a handle-shank and a chuck-shank, of a  
5 guide consisting of horizontal arms connected with said shanks, the ends of said arms connected by a vertical tube, a spring-actuated slide in said tube, the tendency of the spring being to raise the slide, and means for clamp-

ing the slide to the tube, substantially as described. 10

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN H. MCWEENEY.

Witnesses:

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