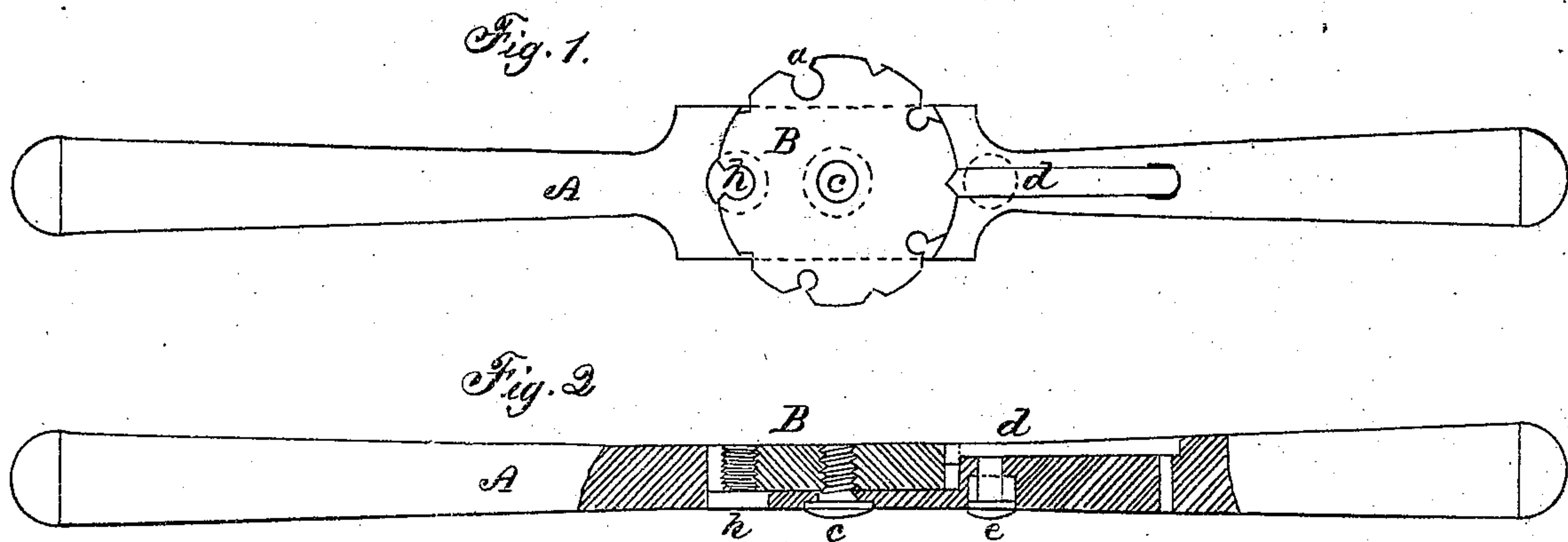


Geo. W. Brown & A. T. Gifford's
Imp'd Screw Plate.

No. 119,565.

Patented Oct. 3, 1871.



Witnesses:

Fred^d A Fairbrother
John Hamilton.

Inventors.

Geo. W. Brown
A. T. Gifford.

UNITED STATES PATENT OFFICE.

GEORGE W. BROWN AND A. T. GIFFORD, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN SCREW-CUTTING DEVICES.

Specification forming part of Letters Patent No. 119,565, dated October 3, 1871.

To all whom it may concern:

Be it known that we, GEORGE W. BROWN and A. T. GIFFORD, of Providence, in the county of Providence and in the State of Rhode Island, have invented a new and useful Improvement in Screw-Plates; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and letters of reference marked thereon making a part of this specification, in which—

Figure 1 is a plan. Fig. 2 is a longitudinal section.

This invention consists of a screw-plate provided with a solid die for threading bolts, screws, &c., the die of which is so constructed that the teeth or cutting parts may be sharpened by grinding on a stone, as will hereinafter more fully appear.

To enable those skilled in the art to make and use our invention, we now proceed to describe its construction and operation.

Similar letters in drawings refer to like parts.

A represents a plate or die-holder made of malleable iron or other suitable material. B represents a steel disk, with holes drilled and tapped (with a screw-tap) through it near the outer edge. A part of the stock between the tapped holes and outer edge of the disk is then filed out, thus forming cutting-edges to the die, as shown at *a* in Fig. 1.

When arranged for use the die B is held in

plate A by means of screw *c* and spring-catch *d*, as shown in Fig. 1. The disk may contain five (more or less) tapped holes, toothed as described, thus forming several dies in one piece or plate. By pressing on the pin *e* the spring-catch *d* will be raised, allowing the die to be turned on screw *c*, so that the required thread may be brought directly over the hole *h* through the plate A, ready for use.

The cutting parts of the die B may be sharpened, when dulled, by grinding on the corner of an ordinary grindstone.

We are aware that dies made complete in one piece of steel, technically called solid dies, are in use; but such dies are toothed on the inside, and cannot be sharpened without annealing, which process decarbonizes the steel, rendering it less fit for cutting purposes.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In combination with the stock A, the circular plate B pivoted to said stock and constructed with a series of holes near its edge, and with the metal intervening between each hole and the edge filed out or otherwise removed, as described, to form cutting-teeth that may be sharpened by grinding, all as set forth.

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Witnesses:

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