(No Model.)

# J. R. RAND.

## CENTERING TOOL.

No. 430,299. Patented June 17, 1890.

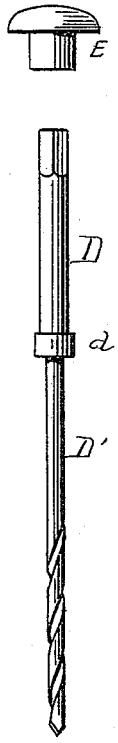



Fig. 2.

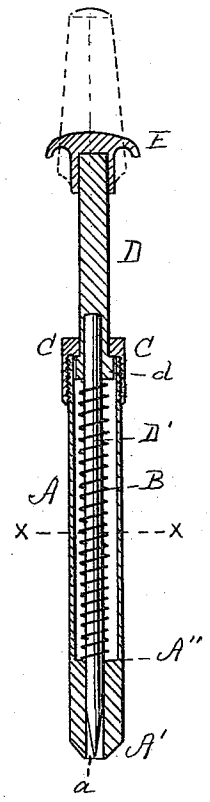



Fig. 1.

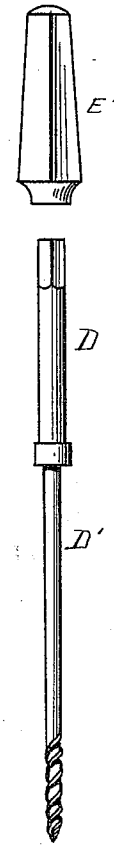



Fig. 3.

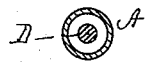



Fig. 4.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

JULIAN R. RAND, OF BRATTLEBOROUGH, VERMONT.

## CENTERING-TOOL.

SPECIFICATION forming part of Letters Patent No. 430,299, dated June 17, 1890.

Application filed March 13, 1890. Serial No. 343,732. (No model.)

*To all whom it may concern:*

Be it known that I, JULIAN R. RAND, of Brattleborough, in the county of Windham and State of Vermont, have invented a new and useful Improvement in Centering-Tools, of which the following is a specification.

This invention relates to center-marking and center-boring tools; and it consists in the novel combination and arrangement of parts below described, and illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal vertical section of my improved device with the tool proper formed in the shape of an awl. Fig. 2 is an elevation of the tool removed from the tube and formed in the shape of a drill. Fig. 3 is similar view with the tool formed in the shape of a gimlet and adapted to be operated by a bit-brace. Fig. 4 is a cross-section on line *x*, Fig. 1.

A is a tubular body, preferably of metal, and tapered at the end A′. The bore in this tube A is at its lower end *a* of diameter to fit over and guide the tool, which plays in it, while above the point of the shoulder A″ it is larger and accommodates a spring B. The upper end of this tube is provided externally with a screw-thread, whereby the perforated cap C is applied and held.

The tool proper consists of the shank D and the operative portion D′. This shank extends through and plays in the cap C, and is thickened or provided with an annular rigid ring at *d*, whereby it is prevented from being pulled out of the cap, said portion *d* and the shoulder A″ forming the bearing-points for the spring B, which surrounds the operative portion D′ of the tool. The upper end of the shank D is squared or otherwise formed to receive a head E or the shank E′ of a bit or other rotative device, as desired. When the portion D′ is awl-shaped, as in Fig. 1, the tool is operated by being taken in the left hand and the tapered end A′ placed in a screw-hole of a hinge, for example, and a light blow struck with the right hand on the head E, thus marking the wood in the place where the screw is to be driven. When it is to be used as a drill, as in Fig. 2, or as a gimlet, as in Fig. 3, the centering is produced in the same manner, and then the tool proper may be rotated by the bit-brace or other means, said tool being free to reciprocate vertically and rotate in the holder or tubular body A, which is held stationary in the hand. The simplicity of the construction and the fact that the tool may be rotated with a stationary body or holder are elements of advantage over devices previously constructed for centering purposes.

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

The herein-described centering-tool, comprising the tool proper, consisting of the shank D, annular thickening *d*, and operative portion D′, the tubular body A, provided with the shoulder A″, the spring B, and perforated cap C, said tool proper being free to reciprocate vertically and rotate in said tubular body, substantially as set forth.

JULIAN R. RAND.

Witnesses:
E. D. WHITNEY,
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