D. B. WRIGHT.

Hub-Boring Machines.

No. 145,142. Patented Dec. 2, 1873.

Fig. 1.

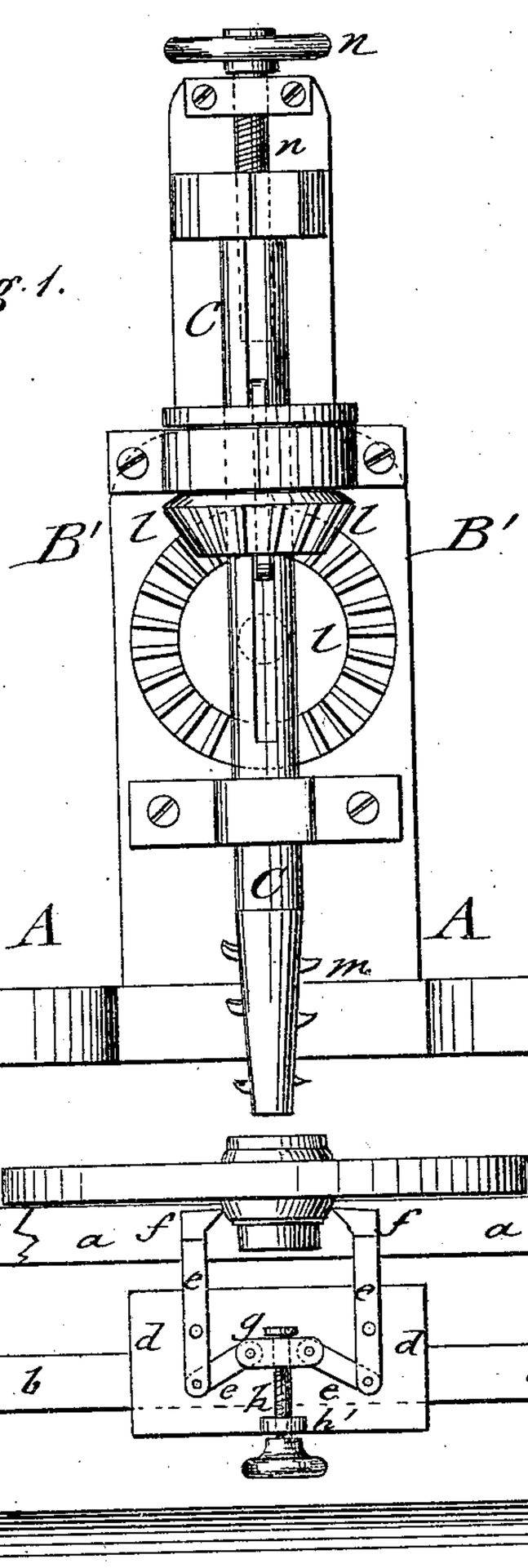


Fig. 2.

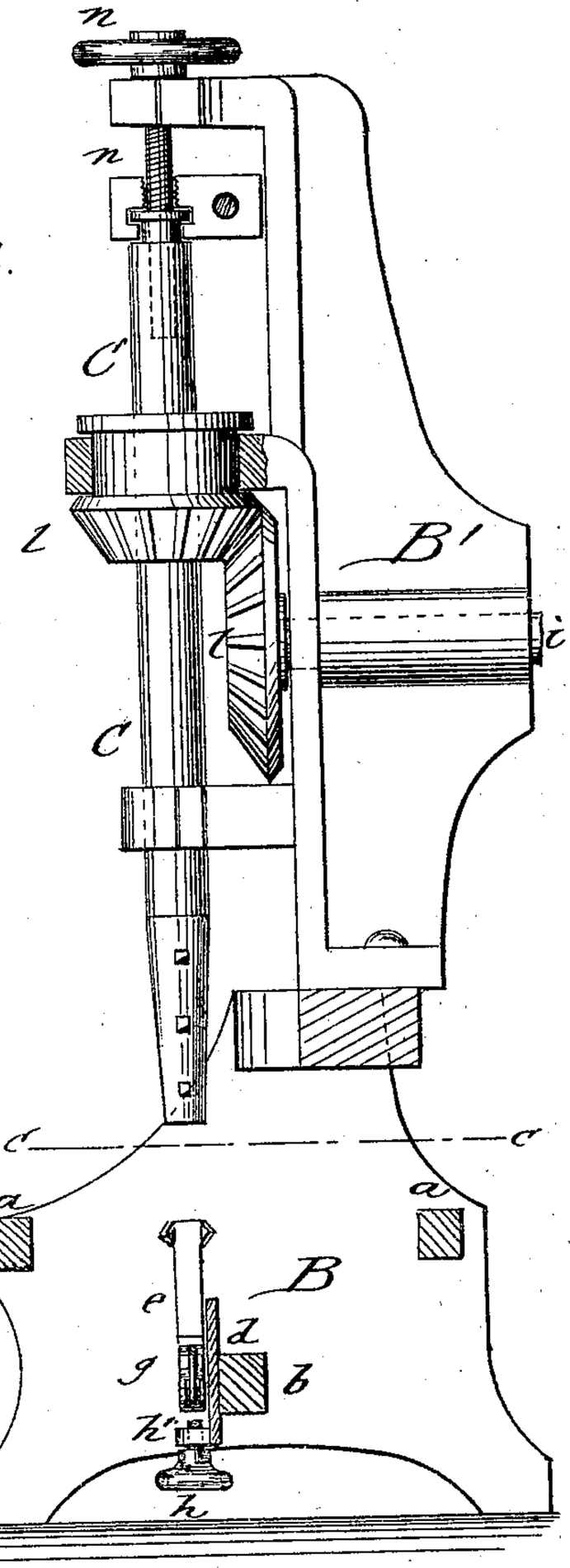
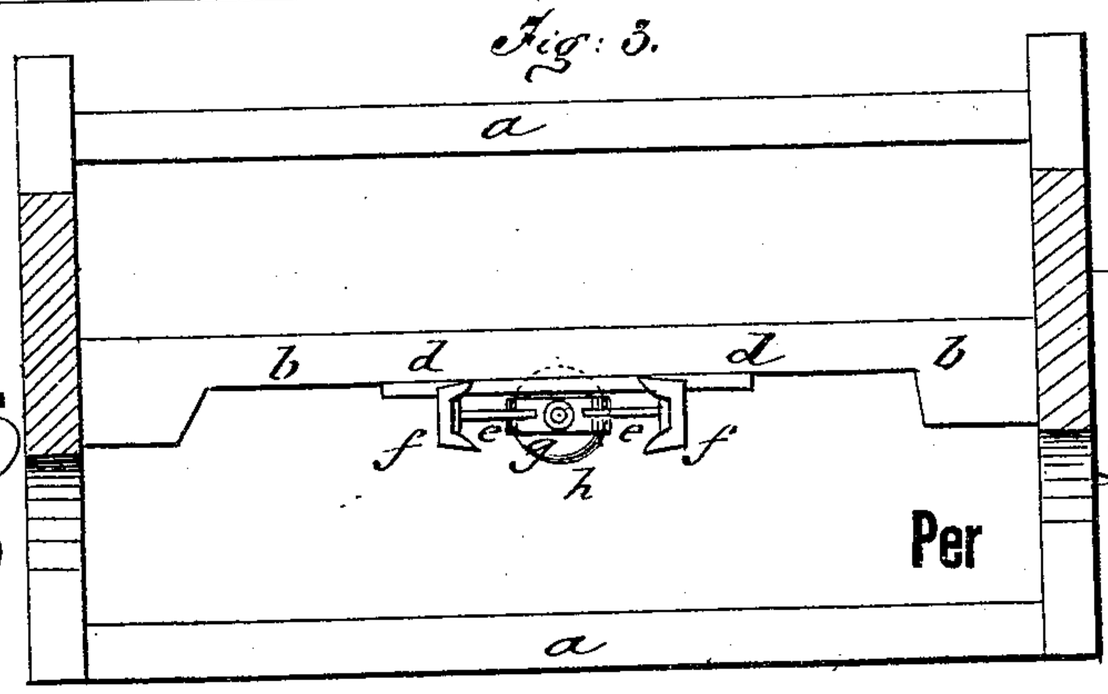


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

DAVID B. WRIGHT, OF SOUTH AMESBURY, MASSACHUSETTS, ASSIGNOR TO CYNTHIA A. WRIGHT, OF SAME PLACE.

IMPROVEMENT IN HUB-BORING MACHINES.

Specification forming part of Letters Patent No. **145,142**, dated December 2, 1873; application filed October 11, 1873.

To all whom it may concern:

Be it known that I, DAVID B. WRIGHT, of South Amesbury, in the county of Essex and State of Massachusetts, have invented a new and Improved Hub-Boring Machine, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved hub-boring machine; Fig. 2, a sectional side elevation; and Fig. 3 a horizontal section of the same on the line *c c*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish a hub-boring machine for hand or other power, which is simple in construction, and effective in operation, supporting and centering accurately the hubs of the wheels to be bored.

The invention will first be fully described and then pointed out in the claim.

In the drawing, A represents the frame of the hub-boring machine, which consists of a larger base part, B, and the vertical standard B′ supported thereon. The base part B is laterally connected by pieces *a*, which support the wheel to be bored in horizontal position, forming a platform for the same, to which it may be rigidly fastened, if desired, by applying strong clamps to the outer rim of the same. A lower lateral piece, *b*, carries centrally a vertical plate, *d*, to which are pivoted the toggle-levers *e*. Levers *e* have jaws *f* at their upper ends, which take hold of the hub at diametrically-opposite sides, and center it accurately below the boring-mandrel *b*. Jaws *f* are adjusted to the hub by link *g*, connecting the toggle-levers and screw *h*, which is placed vertically below the axis of the mandrel C, securing thereby the exact central position and bore of the hub. Screw *h* turns in a lug, *h′*, of plate *d*, and carries link *g* and jaw *f* onto or off the hub, as necessary.

The mandrel C is set, in the usual manner, in vertical position on standard B, and driven by hand or other power, applied to driving-shaft *i*, by the intermeshing conical wheels *l*. The cutters *m* are keyed at opposite sides, one slightly below the other, into the tapering end of mandrel C, so as to cut evenly and steadily into the hub. The degree of depth of the entering cutters is regulated by means of a hand-wheel and screw, *n*, applied on the top of mandrel C, by which the cutters can be fed as required for the different sizes of hubs and box recesses.

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

The toggle-levers *e* having jaws *f*, the socket-threaded link *g* and the screw *h*, combined with a plate, *d*, having lug *h′*, and attached to platform, B *a b*, as and for the purpose described.

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