

(No Model.)

C. ROBIN.

BORING AND REAMING TOOL.

No. 395,920.

Patented Jan. 8, 1889.

Fig. 1.

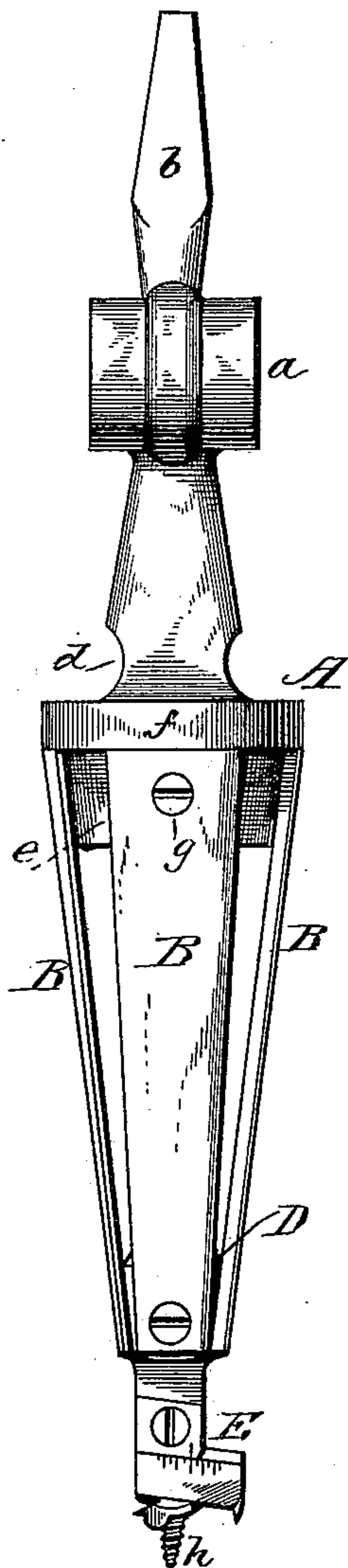


Fig. 2.

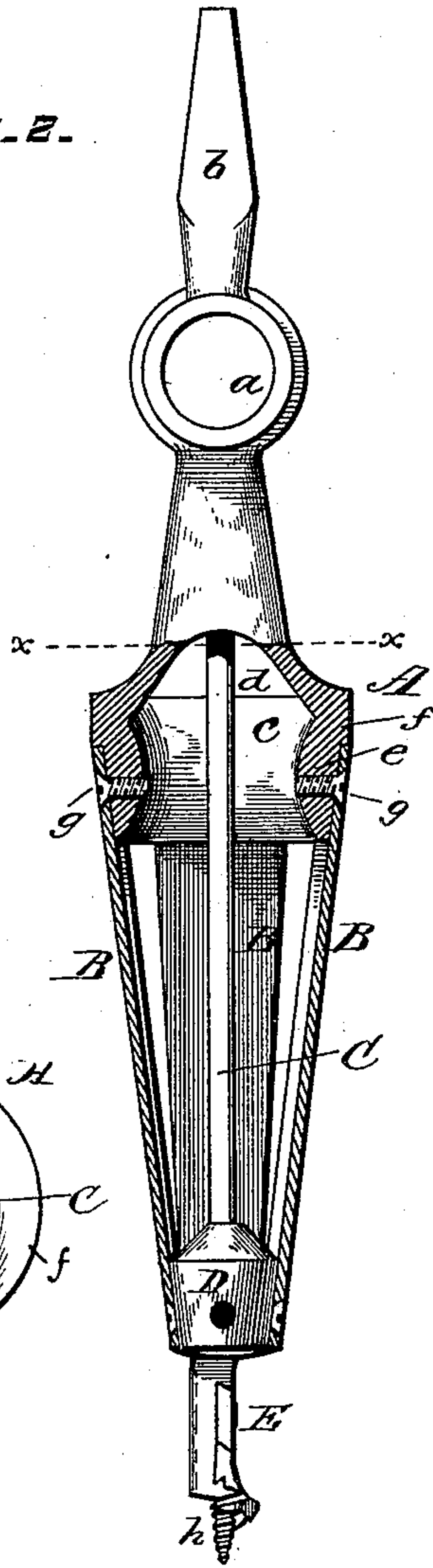
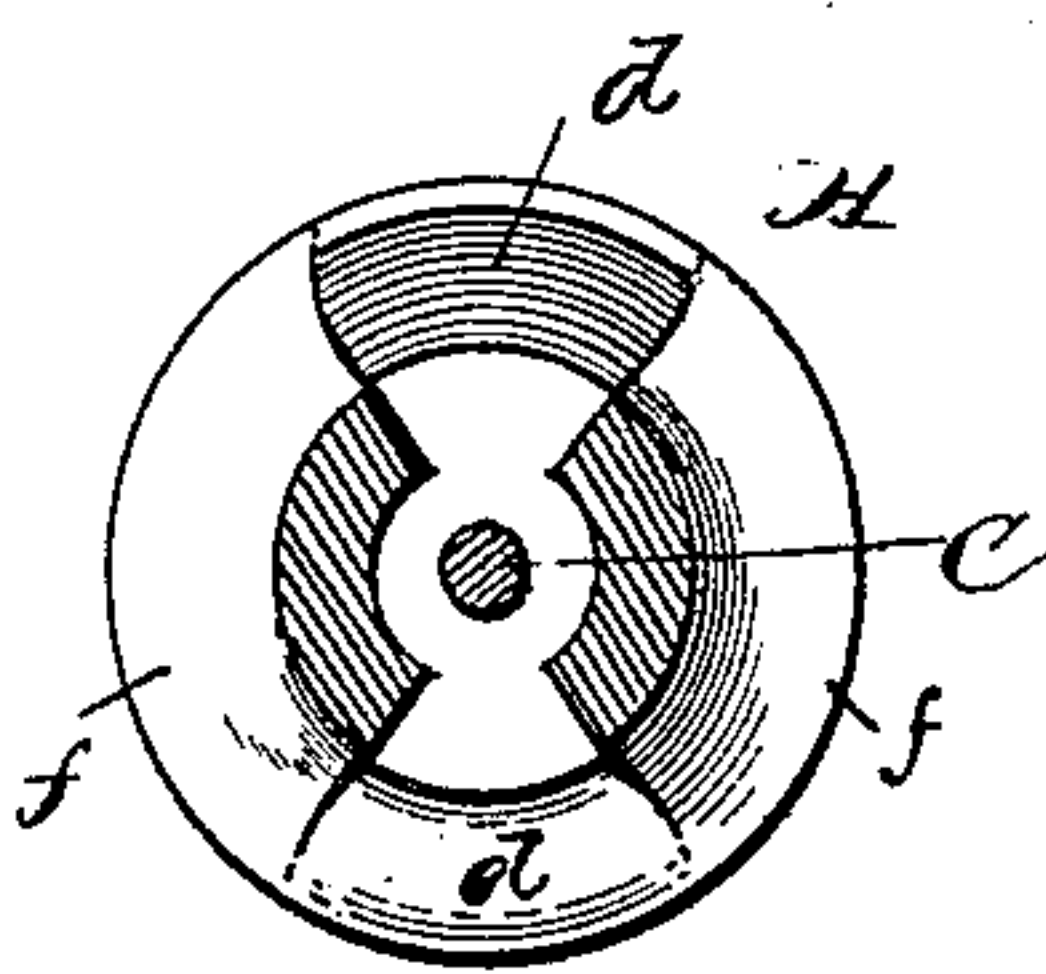


Fig. 3.



Witnesses,

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# UNITED STATES PATENT OFFICE.

CHARLES ROBIN, OF CHESTER, CONNECTICUT.

## BORING AND REAMING TOOL.

SPECIFICATION forming part of Letters Patent No. 395,920, dated January 8, 1889.

Application filed January 11, 1888. Serial No. 260,389. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES ROBIN, a citizen of the United States, residing at Chester, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Boring and Reaming Tools; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is an elevation of my improved boring and reaming tool; Fig. 2, a similar view, partly in section; Fig. 3, a horizontal section taken on line *xx* of Fig. 2.

The present invention has relation to that class of boring and reaming tools which is particularly adapted to boring the holes in barrels, casks, and other vessels where a bush or bung is used; also, for other purposes where it is desired to form a hole for any purpose, which is usually made by the ordinary auger or similar tool.

The object of the invention is to improve the construction of this class of tools, whereby they are rendered more effective, simple in their parts, easily operated, and rendered less expensive in their manufacture, which objects I attain by the construction substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents the head of the tool, cast or otherwise provided with the usual sleeve, *a*, to receive a handle or lever, and also with a shank, *b*, thereby enabling the tool to be used either by a handle or lever, as above described, or with the common bit-stock, as preferred.

The head A is formed hollow or with a chamber, *c*, open at the top, as shown at *d*, to let the chips pass out during the process of boring, and is formed tapering, with a circumferential seat, *e*, and a flange, *f*, for attaching thereto the upper edge of the knives B.

In securing the knives to the head, I pre-

fer to use screws *g*, in order to enable their removal when required for sharpening or replaced with new ones; but the knives may be attached by rivets or in any other well-known manner, as found most desirable.

The shank C of the bit extends up a sufficient distance to form a brace for the tool, and is cast or otherwise provided with a seat, D, for attaching thereto the lower end of the knives B, said seat having a taper to correspond with the taper on the head A.

The bit E is of the usual construction, having the screw-point *h*, cutting-lip, and spur, as is common in boring-tools, and therefore needs no further explanation, as any well-known form of bit may be used. The bit has preferably connected to it an expansion-cutter, E, of the usual form, and this also being common further description of it in detail is not considered necessary.

The employment of the head A and seat D as a support for the knives B enables me to use my invention with any form of auger-bit, with or without the expansion-cutter above described, and any number of knives may be used, as circumstances require.

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

1. In a boring and reaming tool, the combination, with a suitable bit and cutting-knives, of the head A, having chamber *c* and openings *d*, to form outlets for the chips to pass out at the top of the tool, substantially as and for the purpose set forth.

2. In a boring and reaming tool, the head A, having chamber *c* and openings *d* at the top, and cast with the sleeve *a* and shank *b*, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES ROBIN.

Witnesses:

E. C. HUNGERFORD,  
WM. T. O'SULLIVAN.