

(No Model.)

M. L. COATS.

TOOL HANDLE.

No. 329,815.

Patented Nov. 3, 1885.

Fig. 1.

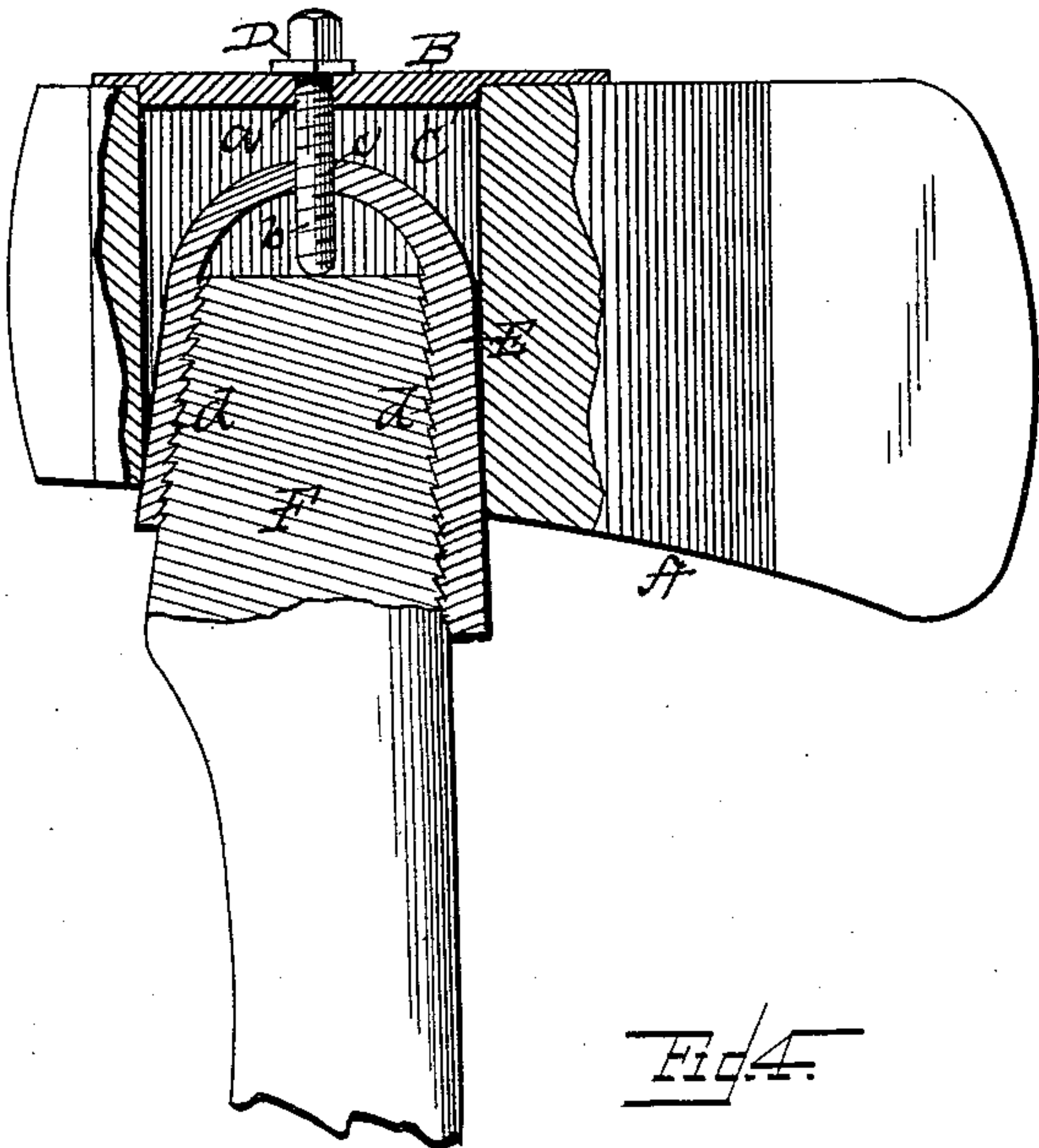


Fig. 4.

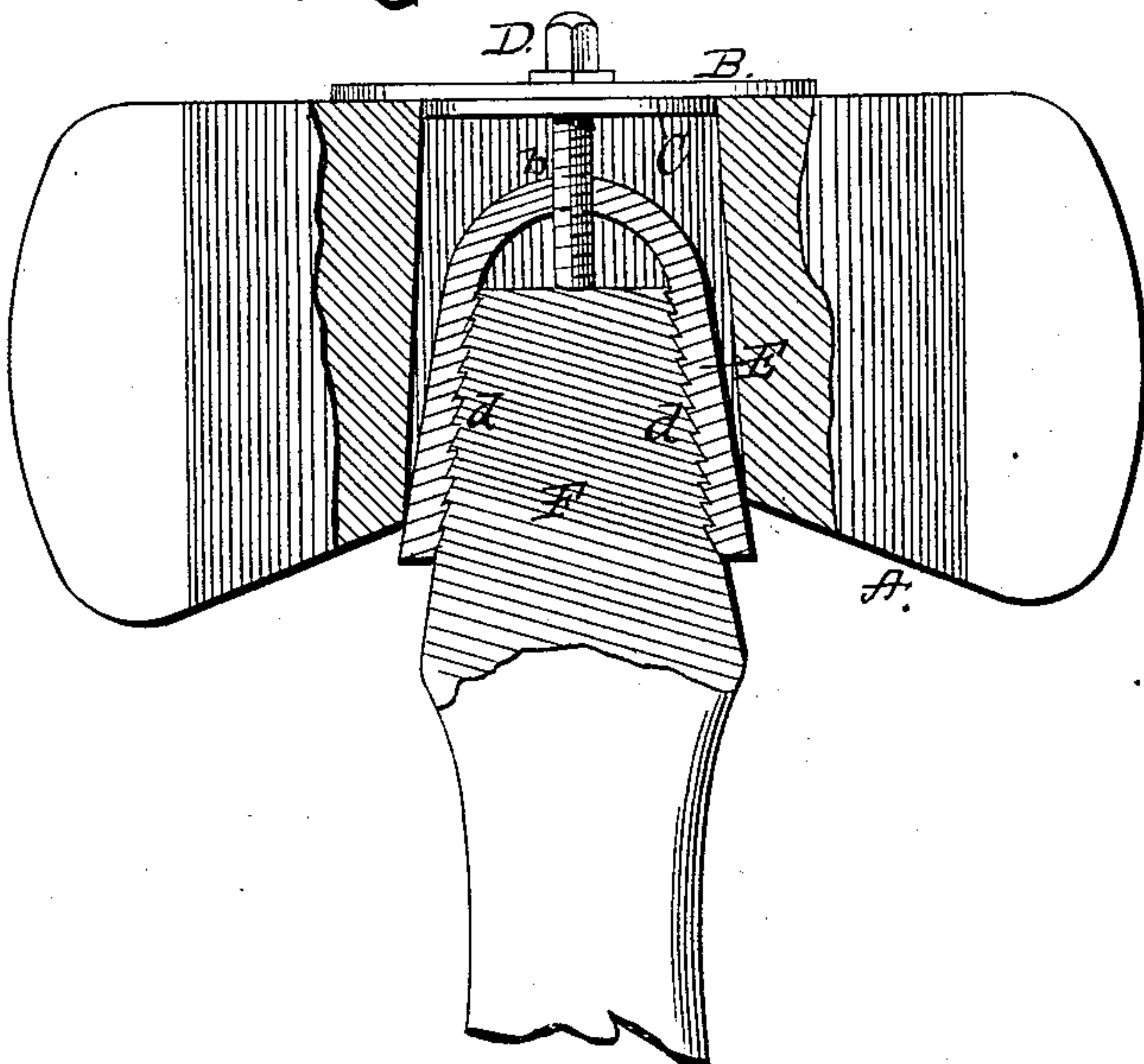


Fig. 2.

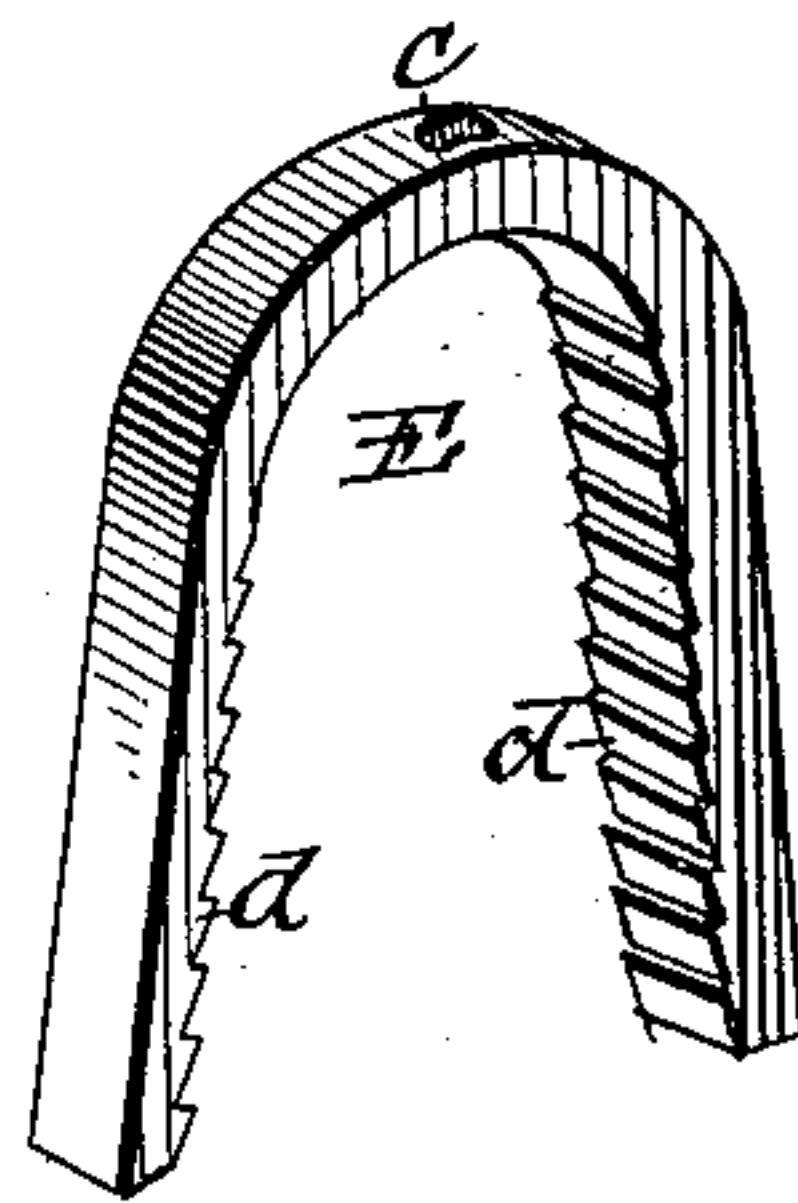
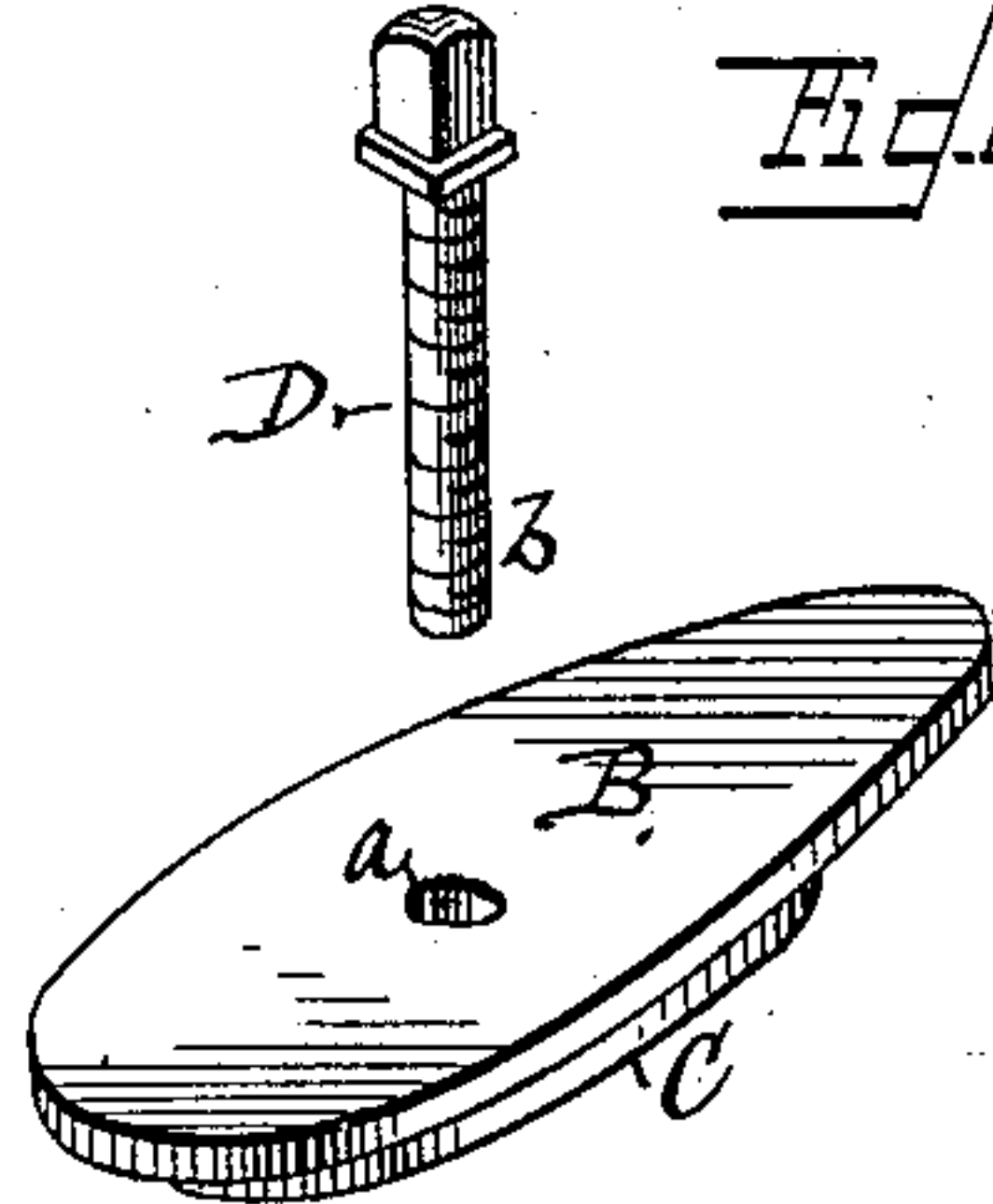
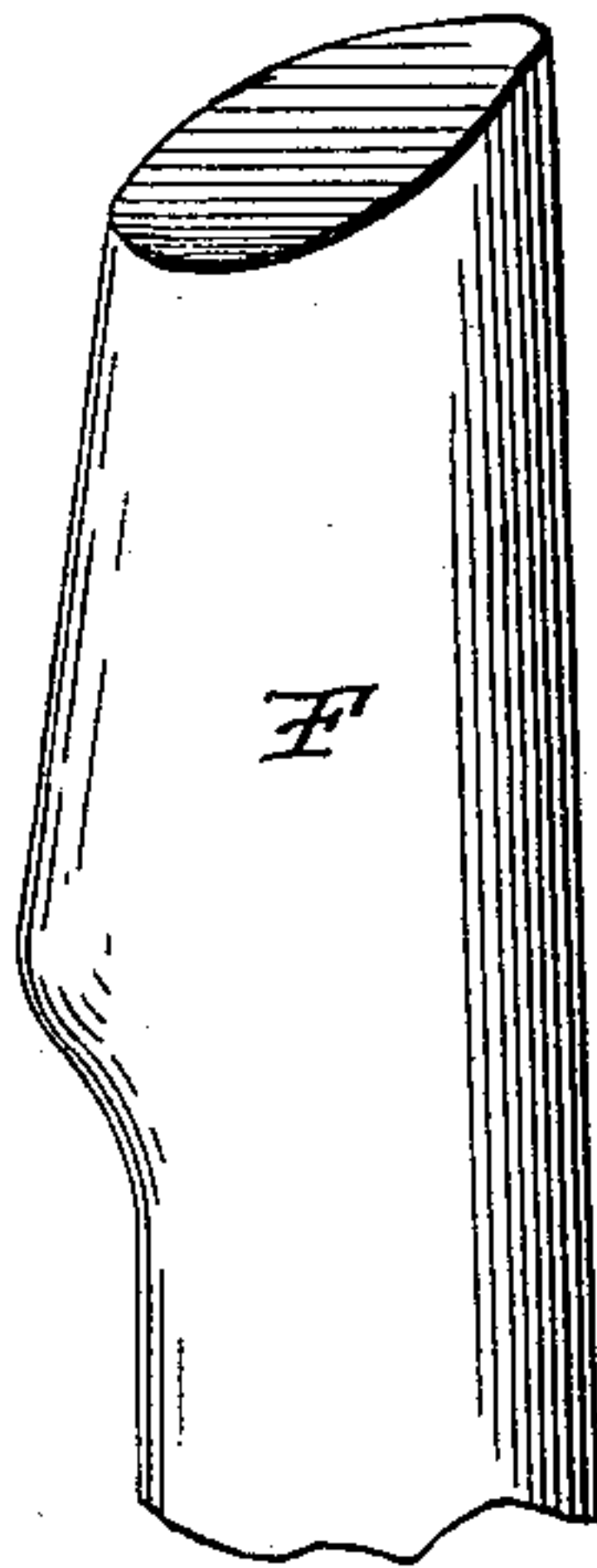


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

MILO LOVEJOY COATS, OF STARKSBOROUGH, VERMONT, ASSIGNOR OF ONE-HALF TO EUGENE W. J. HAWKINS, OF SAME PLACE.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 329,815, dated November 3, 1885.

Application filed April 27, 1885. Serial No. 163,566. (No model.)

To all whom it may concern:

Be it known that I, MILO LOVEJOY COATS, a citizen of the United States of America, residing at Starksborough, in the county of Addison and State of Vermont, have invented a new and useful Tool-Handle, of which the following is a specification.

My invention has relation to improvements in means for fastening the handle of tools in the eye of the tool, and has especial relation to means for securing the handles of axes to the axes. Heretofore means for the purpose named have been constructed wherein the fastening devices have been applied to tools having eyes of a special construction to receive a fastening device or fitted to conform to such specially-constructed tool.

It is the object of my invention to provide means for the purpose which can be applied to axes and similar implements with eyes formed to receive handles of common construction.

I attain the purpose of my invention by the devices illustrated in the accompanying drawings, forming a part of this specification, and wherein—

Figure 1 is a side view of an ax with the part about the eye broken away, and showing the handle inserted and secured by my improved holding means. Fig. 2 is a view of the holding device. Fig. 3 is a view of the handle and clamp, and Fig. 4 is a view showing the device applied to a double-bitted ax.

In the drawings like parts are identified by the same letter-reference.

The letter A designates the ax, formed with an eye of the usual shape.

The letter B designates the head-plate, which consists of a substantial metallic plate of a width to cover the edge of the ax, and conforming to the lines thereof, and of such length as to reach beyond the eye of the ax, that section of the plate in the direction of the head being made shorter than the other section, to avoid breaking when that part of the ax is used for purpose of driving or striking an object. The head-plate is also formed with a short tenon or shouldered piece, C, formed to fit within the eye of the

ax to keep the plate in position, and in about the center of the tenon through the plate is a hole, *a*, through which is projected a bolt, D, provided with screw-threads *b* on its lower portion. This bolt D fits within a screw-threaded hole, *c*, formed in the handle-clamp E. This handle-clamp E consists of a steel plate or other suitable metal struck into a U form, with the bridge somewhat depressed and the legs made of such length that they will project from the eye and down the sides of the handle to form braces and shields thereto. The legs of the clamps are plain and smooth on the outside, and on the inside are formed with a series of serrations, teeth, or points, *d*, the purpose being to admit of the clamps being drawn up within the eye, and to provide means for securely grasping the handle between the limbs. For the ordinary attachment to a single-bit ax, that limb of the clamp next the blade is made straight on its outer face to set on a line with the edge of the eye of the ax, substantially as shown.

The letter F designates the handle, made of the common form, the end being fitted to the width of the eye and between the edges of the serrated limbs of the clamps.

In Fig. 4 I have shown a double-bitted ax with the handle secured therein by my improved device.

The device may be applied and the handle secured as follows: The head-plate, with its screw-bolt, being adjusted to the eye of the ax, the clamp is inserted in the eye and the connection with screw-bolt effected. The end of the handle is then inserted between the limbs of the clamps, and then by turning the bolt the clamp is drawn upward in the eye and carries the handle with it, the movement effecting so firm a hold on the handle as to retain it firmly in place, at the same time the serrations or points set within the handle, and thus make a connection that cannot be separated, except by a reversal of the operation which effected it.

What I claim as my invention, and desire to secure by Letters Patent, is—

In combination with an ax and the handle thereof, the head-plate B, formed with a

short tenon fitted to the eye of the ax, and a
central hole, *a*, provided with a screw-threaded
bolt, D, and the U-shaped clamp E, having a
screw-threaded connection with the drawing-
5 bolt, and the limbs thereof being formed or
provided with serrations on the inner faces
and extended below the eye of the tool, sub-
stantially as and for the purpose stated.

In testimony whereof I have hereunto set
my hand in the presence of two attesting wit-
nesses.

MILO LOVEJOY COATS.

Attest:

J. WESLY SAYLES,
GEORGE L. WELLS.