H. S. Bartholomew,

Bit Stock.

No. 32,347. Patented May 21, 1861.

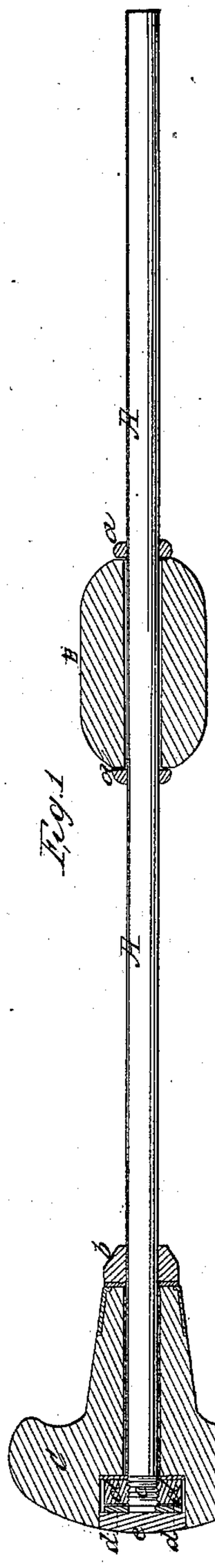

Fig. 1

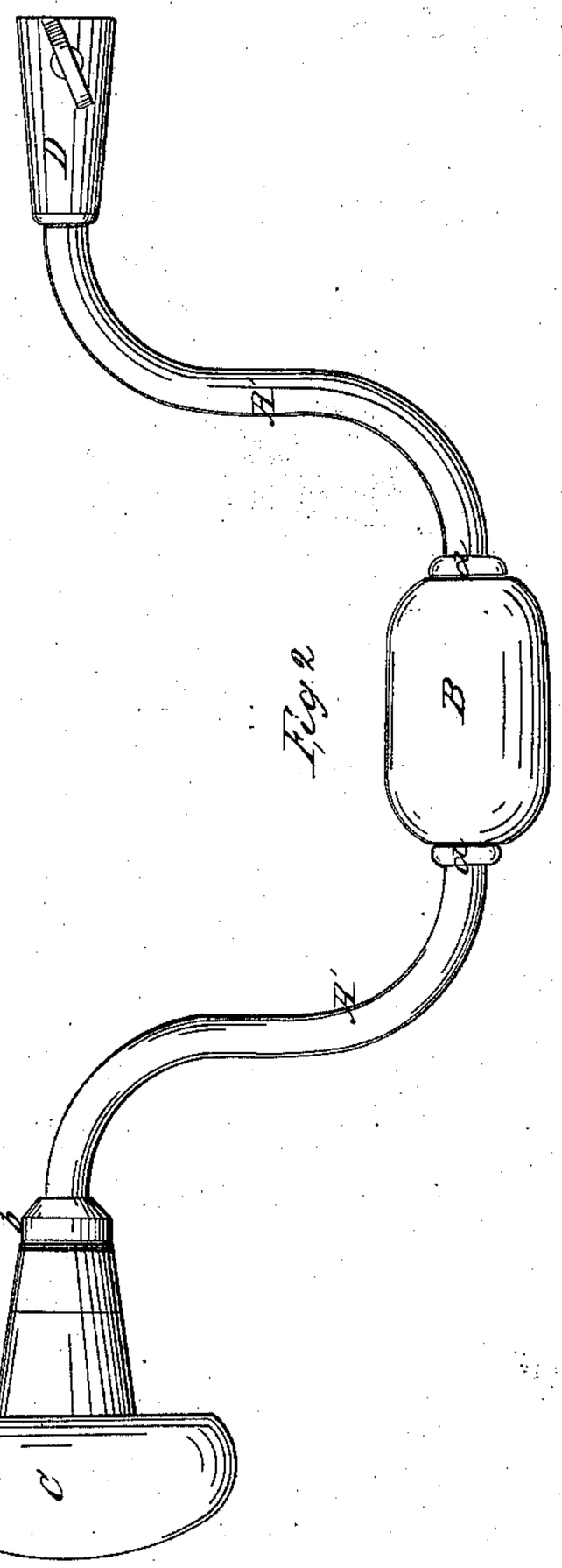

Fig. 2

Witnesses
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UNITED STATES PATENT OFFICE.

HARRY S. BARTHOLOMEW, OF BRISTOL, CONNECTICUT.

BALL-BRACE.

Specification forming part of Letters Patent No. 32,347, dated May 21, 1861; Reissued November 4, 1862, No. 1,351.

To all whom it may concern:

Be it known that I, HARRY S. BARTHOLOMEW, of Bristol, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Ball-Braces; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, is a section showing my invention in the first stage of its manufacture. Fig. 2, is a section of the same as it appears when completed.

Similar letters of reference in each of the two figures indicate corresponding parts.

The nature of my invention consists in applying and holding in place the tubular oval or ball shaped hand block of curved brace bit stocks without cutting the block in two and then pinning it together, substantially as hereinafter described.

A, in Fig. 1, of the drawings, represents a straight round wire rod, which when bent forms the bow of the brace; B, a tubular oval or ball shaped revolving block, confined on the rod, for the operator to lay hold of in operating the brace; C, the head or breast block and D, the bit holder.

To apply the tubular block to a curved brace stock without cutting it in two, it must be slipped over the metal rod A, before said rod is bent to the form shown at A′, in Fig. 2, and be confined near the center of the rod by means of two ring collars *a*, *a*, which are shrunk or otherwise fastened on the rod at each end of the ball. This being done one end of the rod has a screw thread *c*, cut upon it and also a shoulder or collar *b*, shrunk or otherwise formed upon it. Against the inner end of the collar, the head or breast block C, bears and on the screw threaded end of the rod a nut *d*, for confining the head or breast block, is screwed. This nut is covered by a plug *e*, which is driven into the center of the head after the same has been confined by the nut. The opposite end of the rod has a bit holder D, of any approved construction secured upon it.

After or before the head or breast block C, and the bit holder D, are applied to the rod A, the rod A, is bent to the proper bow form by any of the well known mechanical devices used for bending metal to different shapes.

My invention is exceedingly simple, neat and durable, and differs from the well known German ball brace in the following particular, viz: The German ball brace consists of a forged bow which is reduced in its diameter near its middle portion so as to form two shoulders for the ends of the oval or ball shaped hand block to bear against and be confined by. The tubular block is then, in order to get it on the bow and between the shoulders, cut in two and the two halves placed around the reduced portion of the bow and then pinned together. In my brace, the ball is not divided, nor is it necessary, as I slip it over a straight rod, confine it by collars made separate from the rod, and then bend the rod to the proper bow form.

What I claim as my invention and desire to secure by Letters Patent as a new article of manufacture, is—

A ball brace A^1 made of a single straight rod A, and with an undivided ball B, fitted upon its bow shaped portion, substantially as and for the purposes described.

HARRY S. BARTHOLOMEW.

Witnesses:

BENJ. F. HAWLEY,

HENRY A. MITCHELL.