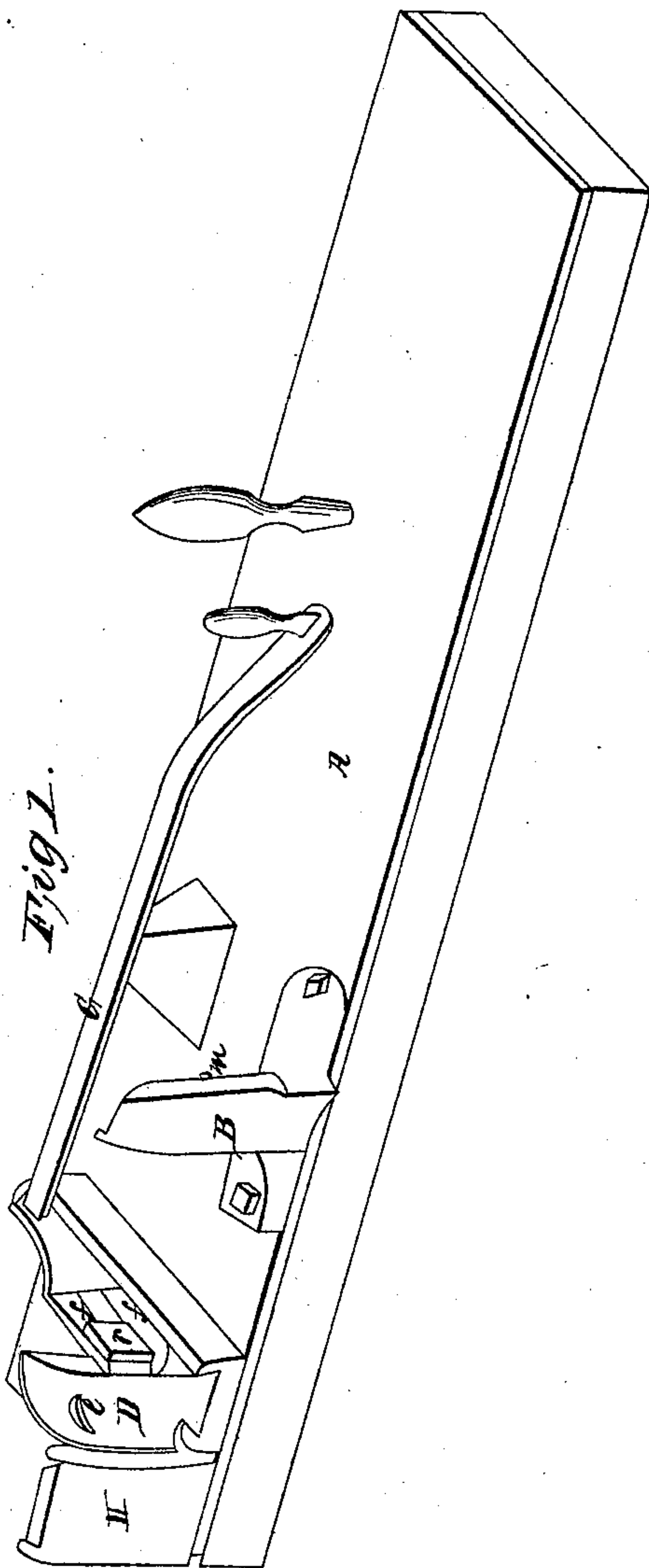
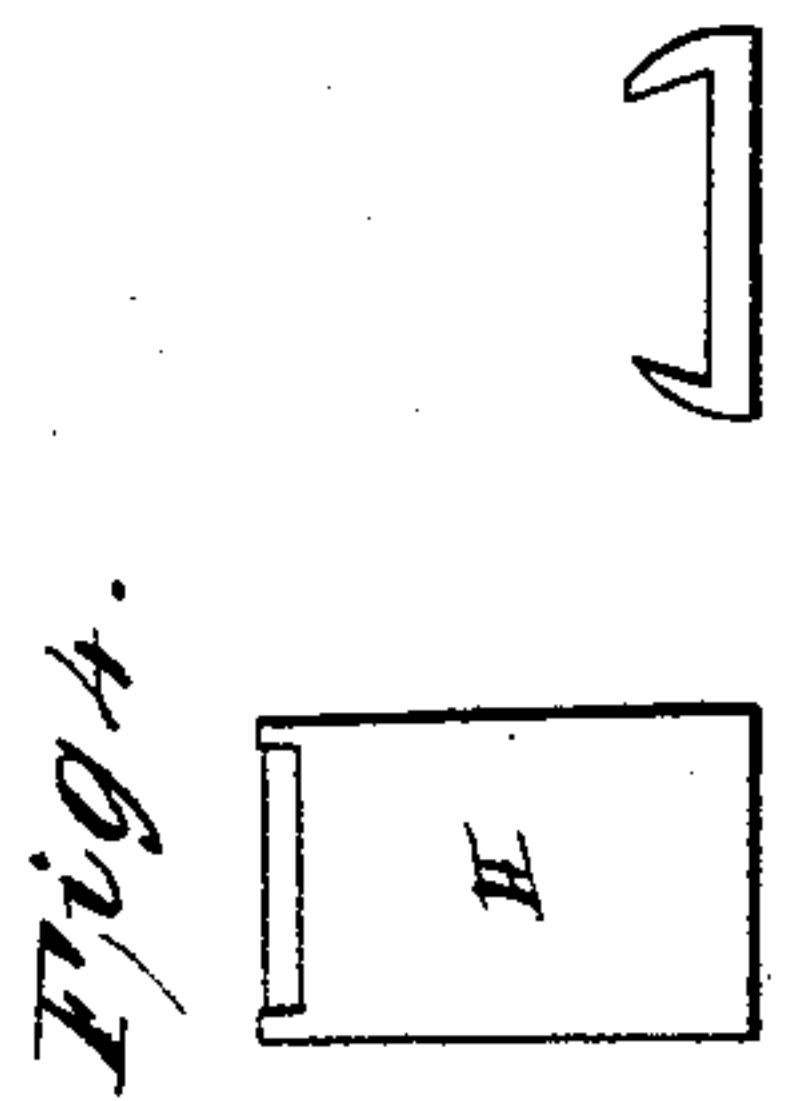
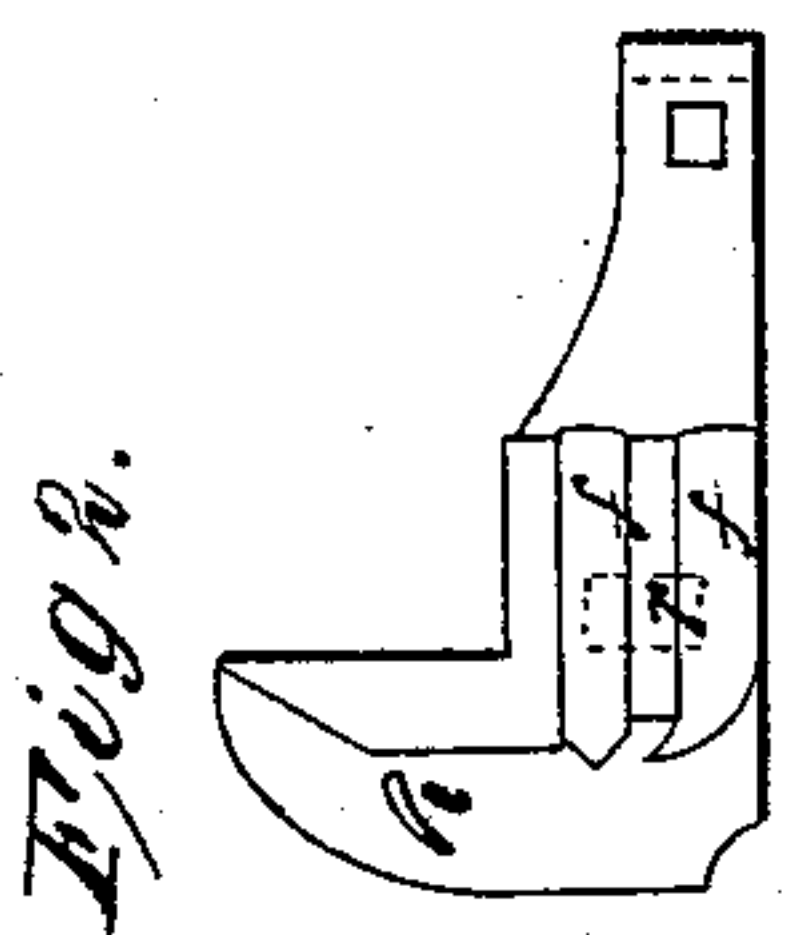
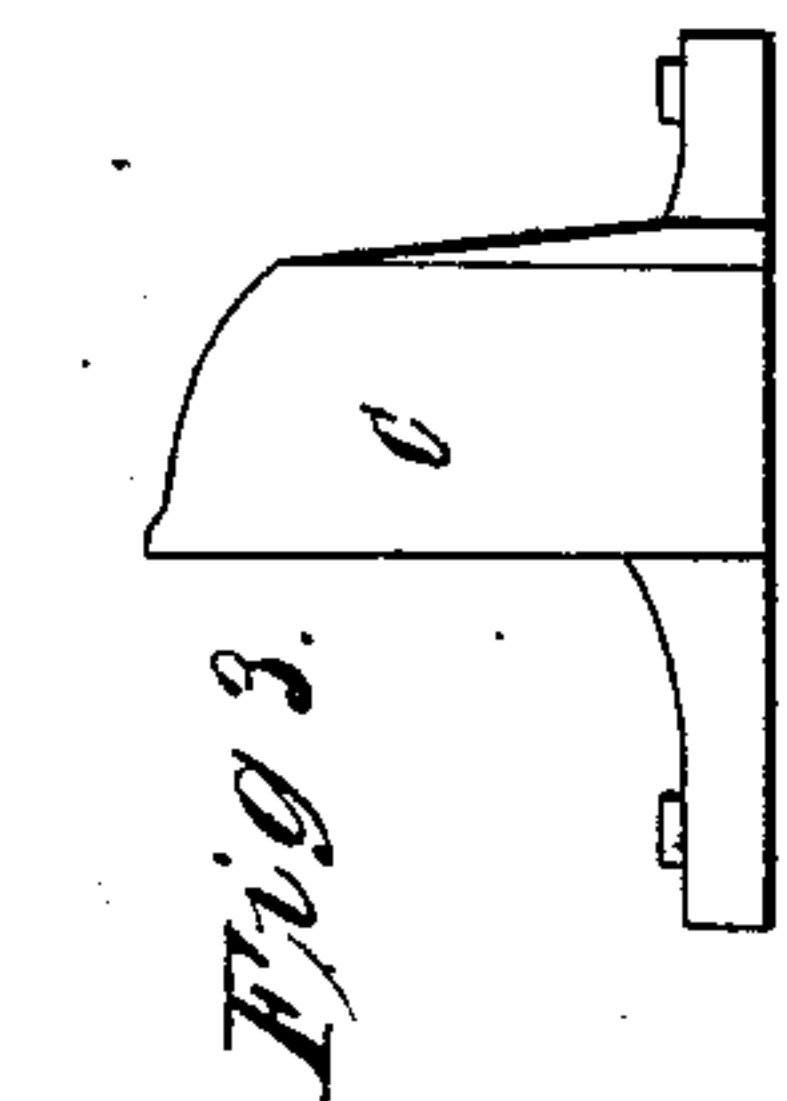


Bartlett & Morris,

Crozing Staves.

N^o 39,334.

Patented July 28, 1863.



Witnesses.
J. D. Parker
S. A. Fuller

Inventors.
J. W. Bartlett
A. Morris

UNITED STATES PATENT OFFICE.

J. W. BARTLETT, OF HARMAR, AND A. MORRIS, OF MARIETTA, OHIO.

IMPROVED TOOL FOR FINISHING BUCKETS AND TUBS.

Specification forming part of Letters Patent No. 39,334, dated July 28, 1863.

To all whom it may concern:

Be it known that we, J. W. BARTLETT, of the town of Harmar, and A. MORRIS, of the city of Marietta, in the county of Washington and State of Ohio, have invented new and useful improvements in bits and stocks for finishing the ends of buckets, tubs, &c., in the manufacture of the same of wood; and we do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view of our bit-stock and bits attached to the chisel slide. Fig. 2 is a view of our stock and bits, in combination with the crozing-bits attached to the crozing-lever, for finishing and crozing the bottoms of buckets, &c. Fig. 3 is a view of our stock and bits for finishing the upper end of buckets, &c. Fig. 4 is a face view of the turning stock and bit H.

Our machine for finishing the ends of buckets, tubs, &c.—in fact, all turned cooperage—is so simple that only a few words will be necessary to explain it sufficiently for any person acquainted with the manufacture of such work to clearly understand and appreciate it.

To enable those skilled in the art to make our finishing and crozing tools, we will describe them as follows:

A in Fig. 1 represents the ordinary chisel-slide for turning the inside of buckets, &c.

B, Fig. 1, is a view of the bit-stock and bit placed upon the slide A in the position of the common stop thereon. The bit C, being made in any desirable shape the end of the vessel is wanted to be made, is screwed to the stock B by a temper-screw, *m*, and allowed to project over the round or bevel of said stock, so as to cut freely the end of the vessel being made, and bring it to the shape of the bit C, when the slide A is pushed into its proper stopping-place.

D represents the stock for finishing and crozing the bottom end of the vessel, it being made in similar shape to the before-mentioned stock B, but is placed upon and moved by the crozing-lever in the same man-

ner as the ordinary crozing-bit. The stock D is made on the under edge, the same as the ordinary crozing-slide, but has a flange on the stock formed on the forward end, made circular to correspond with the diameter of the vessel being made, in like manner as the forward or upper end.

E is the bit, fastened to the stock D by a temper-screw, so as to adjust it in like manner to the first-mentioned bit, C.

ff is the crozing-bit, fastened to said stock D by a small bolt, *r*, with a washer nearly in the ordinary manner.

The operator runs the slide A into the vessel in the usual way, and turns the inside, then pushes it to its proper stopping-place for cutting the croze. The bit C on the stock B is brought against the forward or upper end of the vessel, and when the slide A reaches its proper place the end is finished. The operator presses the lever G, with the bit E and crozing-bits thereon, thus performing both crozing and finishing at the same time. The forward end being already completed in the most perfect manner, the vessel is ready to be removed without the use of the spoke-shave, as in the ordinary operation, thus enabling a boy to perform the work requiring an experienced turner to do, and in less time. In a word, when the crozing is done the finishing is performed, and the vessel is ready for the sand paper, being done in three-fourths the usual time.

After having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The bit-stocks D B and the bits E C, or their equivalent, in combination with the crozing-bits *ff*, in the manner and for the purpose we have herein set forth.

The above specification signed and witnessed this 24th day of March, 1863.

J. W. BARTLETT.
A. MORRIS.

Witnesses:

J. J. PARKER,
GEO. M. WOODBRIDGE.