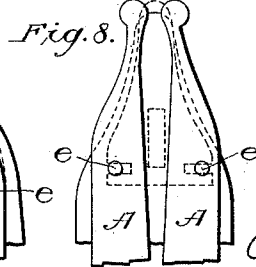
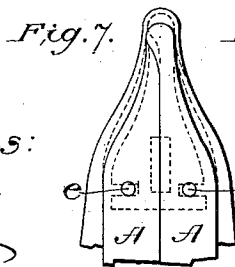
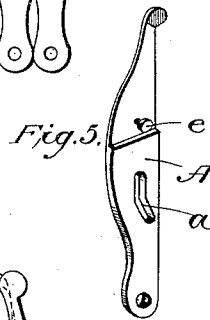
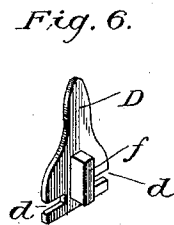
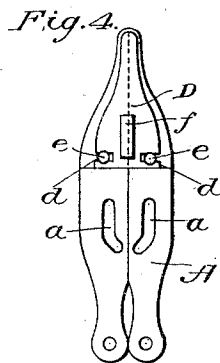
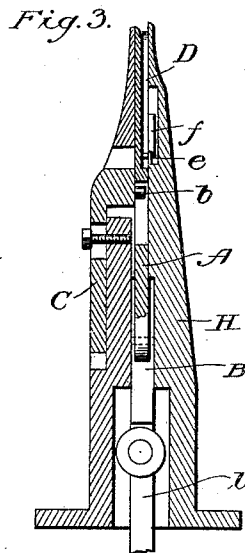
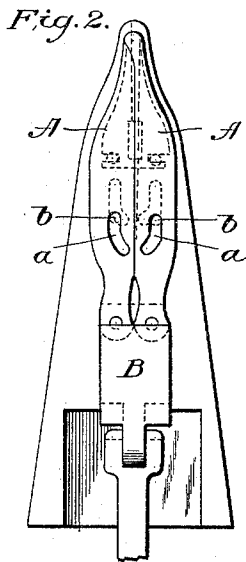
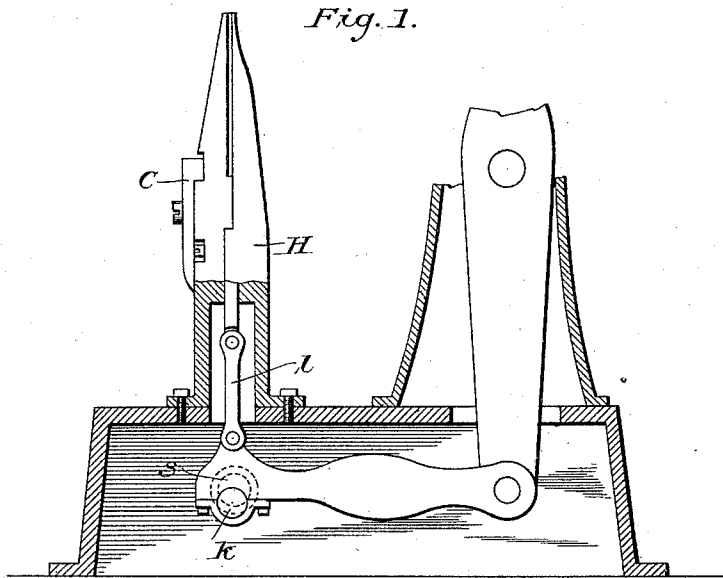


(No Model.)

J. E. BROWN.
BEADING AND TURNING MACHINE.

No. 476,869.

Patented June 14, 1892.



Witnesses:
O. Olive,
A. Scott

Inventor:
John E. Brown,
by Lincoln & Lincoln,
Attorneys

UNITED STATES PATENT OFFICE.

JOHN E. BROWN, OF WASHINGTON COURT-HOUSE, OHIO.

BEADING AND TURNING MACHINE.

SPECIFICATION forming part of Letters Patent No. 476,869, dated June 14, 1892.

Application filed February 4, 1892. Serial No. 420,315. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. BROWN, a citizen of the United States, residing at Washington Court-House, in the county of Fayette and State of Ohio, have invented certain new and useful Improvements in Beading and Turning Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide an improved machine for turning and forming scallops on shoe-uppers and other articles.

Generally my invention consists of a turning or beading device that will operate principally upon the outside material and spread it instead of the lining, thereby turning the seam inward and hiding (so to speak) the same from view, thus giving a smoother and neater finish to the work. My invention is embodied in a machine having a non-laterally vibrating supplemental or back finger used conjointly with laterally-vibrating spreader fingers or irons, as will be now particularly set forth.

In the accompanying drawings, which illustrate one embodiment of my improvements, Figure 1 is a side view showing mechanism for operating the spreading irons or fingers. Fig. 2 is a front elevation of the spreading and turning devices. Fig. 3 represents a vertical section of the same. Fig. 4 is a rear view of the spreading-fingers, having a supplemental or back finger attached. Fig. 5 is a perspective view of a spreading finger or iron, as constructed in this particular instance, to receive the supplemental or back finger. Fig. 6 is a perspective view of the supplemental or back finger, and Figs. 7 and 8 illustrate the different positions of the spreading devices when operated.

Like letters in the several figures of the drawings indicate corresponding parts.

A A designate a pair of spreading irons or fingers, which are adapted at their upper ends to act upon a seam and are pivoted at their lower ends in a block B, which slides vertically in a horn or standard H. Pins *b b* on a vertically-adjustable block C project into slots *a a* of the fingers A A and by their engagement with said slots impart the proper

vibratory movements to the fingers. By adjusting the block C the action of the spreading-fingers may be varied to suit the nature of the work.

D represents the supplemental finger, which is preferably attached to the spreading-fingers at their rear side, and hence may also be called a "back" finger. At its upper end the back finger conforms generally in shape to that of the closed spreading-fingers, while its lower end or base is widened and provided on its opposite sides with slits *d d* to receive pins *e e* on the spreader-fingers, which sustain (or assist in sustaining) it in position. The rear side of the back finger is furnished with a projection or spline *f*, which engages and works vertically in a groove or slot *f'* in the rear section of the horn H, so as to prevent lateral movement of the back finger when such movement is imparted to the spreader-fingers.

In the operation of turning a bead or scallop the mechanism is usually adjusted so as to cause the fingers to vibrate beyond the edges of the back finger, and the tendency of this is to turn the outer side of the scallop inward toward its lining side, thus securing a smooth and finished appearance of the face of the beaded or scalloped edge. In order that the beading-tool may not be greatly bulkier than usual, those portions of the spreader-fingers to which the back finger is attached may be of reduced thickness, as shown in Fig. 5.

Figs. 7 and 8 illustrate the closed and open positions of the spreader-fingers.

The block B may be reciprocated by any desirable means. That shown consists of a rod or link *l*, connected with a crank *k* on a shaft *s*, suitably journaled in the frame.

It will be understood, of course, that I do not intend to limit my claim to the precise details of construction shown, but hold myself entitled to any changes that may be made within the spirit and scope of the invention.

The spreading-fingers A A and the means for effecting and adjusting their movements are claimed in another application filed by me.

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

1. In a beading and turning machine, the combination, with a horn or standard, of a

pair of laterally-vibrating turning or spreading fingers and a supplemental or back finger adapted to act upon the scallop, substantially as described.

- 5 2. In a beading and turning machine, the combination, with a horn or standard, of a pair of vertically-reciprocating and laterally-vibrating turning or spreading fingers and a non-laterally vibrating supplemental finger
10 adapted to act upon the scallop, substantially as described.

- 15 3. In a beading and turning machine, the combination, with a horn or standard, of a pair of turning or spreading fingers capable of being vibrated laterally and provided with supports for a supplemental finger, a supplemental finger supported upon said turning or spreading fingers, and means, substantially

as described, for preventing its movement laterally.

4. In a beading and turning machine, a pair of vertically-reciprocating and laterally-vibrating turning or spreading fingers, pins *ee* on said fingers, a supplemental or back finger *D*, provided with slots *dd* to engage pins *ee*, a spline *f* on the supplemental finger, and the horn or standard *H*, having a groove *f'* to receive said spline, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN E. BROWN.

Witnesses:

GEO. M. FINCKEL,
JAS. S. RICKETTS.