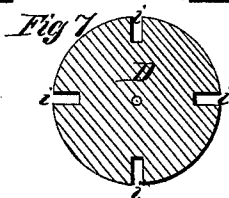
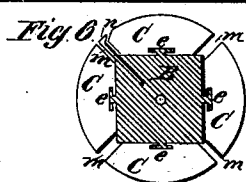
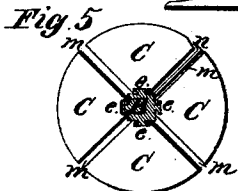
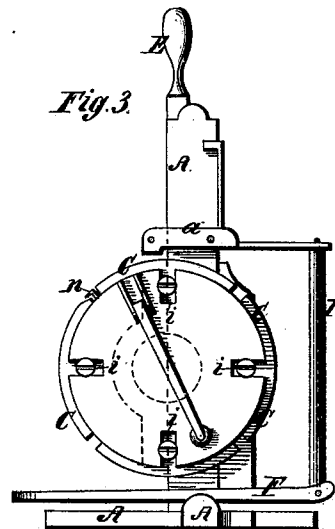
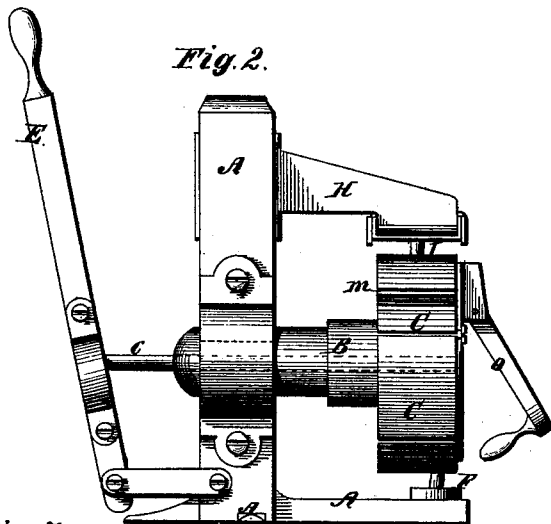
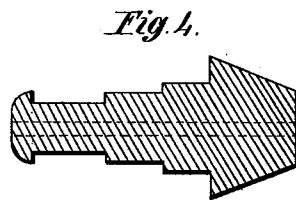
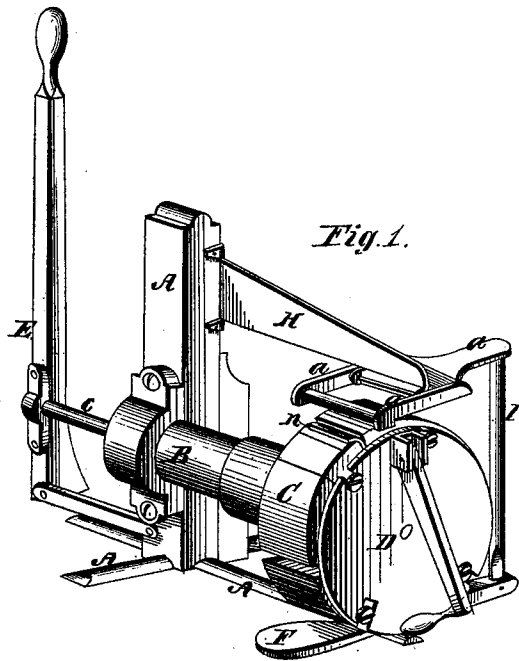


MACHINES FOR BENDING HOOPS.

Patented April 25, 1876.



Witnesses.

James Newton
M. C. Newton

Inventor.

Edwin A Palmer

UNITED STATES PATENT OFFICE.

EDWIN A. PALMER, OF CLAYVILLE, NEW YORK.

IMPROVEMENT IN MACHINES FOR BENDING HOOPS.

Specification forming part of Letters Patent No. **176,442**, dated April 25, 1876; application filed August 14, 1875.

To all whom it may concern:

Be it known that I, EDWIN A. PALMER, of Clayville, Oneida county, New York, have invented an Improvement in Machines for Bending Hoops, of which the following is a specification:

The object of my invention is to bend hoops for boxes, and hold them tight to the drum or cylinder until they are nailed together, as shown in the perspective view, Figure 1, of the accompanying drawings.

The hoop-bending machine is illustrated more in detail in the two vertical sections, Figures 2 and 3. Fig. 2 is a side view. Fig. 3 is an end view. Fig. 4 is the hub of the drum, tapered down at the end *e e*, and made to fit the quarters, Figs. 8 and 10, at *e*, with a corresponding taper; the quarters are made open at the corners of the drum *m m*, Figs. 5 and 6, to allow the quarters *C C* to close in, which is done by the lever *E*, attached to the rod *c* by a collar on the end, and the other end of the rod is fastened to the plate *D*, which has four slits, *i i*, in it to receive the screws in the end of quarters to hold them in their place. The screws in the quarters are made to work freely in the slits of the plate *D*. *n*, Fig. 9, is a hook to hold the end of the hoop. It is fastened to the plate *D* at one end, and the other end is held in its place by a staple in the hub *B*, which is made to work

freely in the corner of the hub, as well as the rod *c* through the center. The lever *a a a*, which is hung in the arm *H*, has a roll in one end and rod *I* in the other, which is attached to the treadle *F*. *o* is a crank, fastened to the plate *D*, with a joint in it to let it turn down out of the way when the hoop is taken off the drum.

To operate the machine, put the end of the hoop under the hook *n*; then raise the handle, put one foot on the treadle, and bring the roll down on to the hoop; then turn the drum around; then drive the tacks in over the plate to clinch them. To remove the hoop, take hold of the lever and bring it up to the post *a*, and the quarters will close in, the handle will drop down, and the hoop may be taken from the drum with perfect ease. After this is done, throw the lever back and it is ready for use again.

I claim as my invention—

The combination of the hook *n* with the jointed crank *o*, drum *m m*, hub *B*, and plate *D*, all constructed and arranged to operate as shown and described, and for the purpose specified.

EDWIN A. PALMER.

Witnesses:

JAMES NEWTON,
M. C. NEWTON.