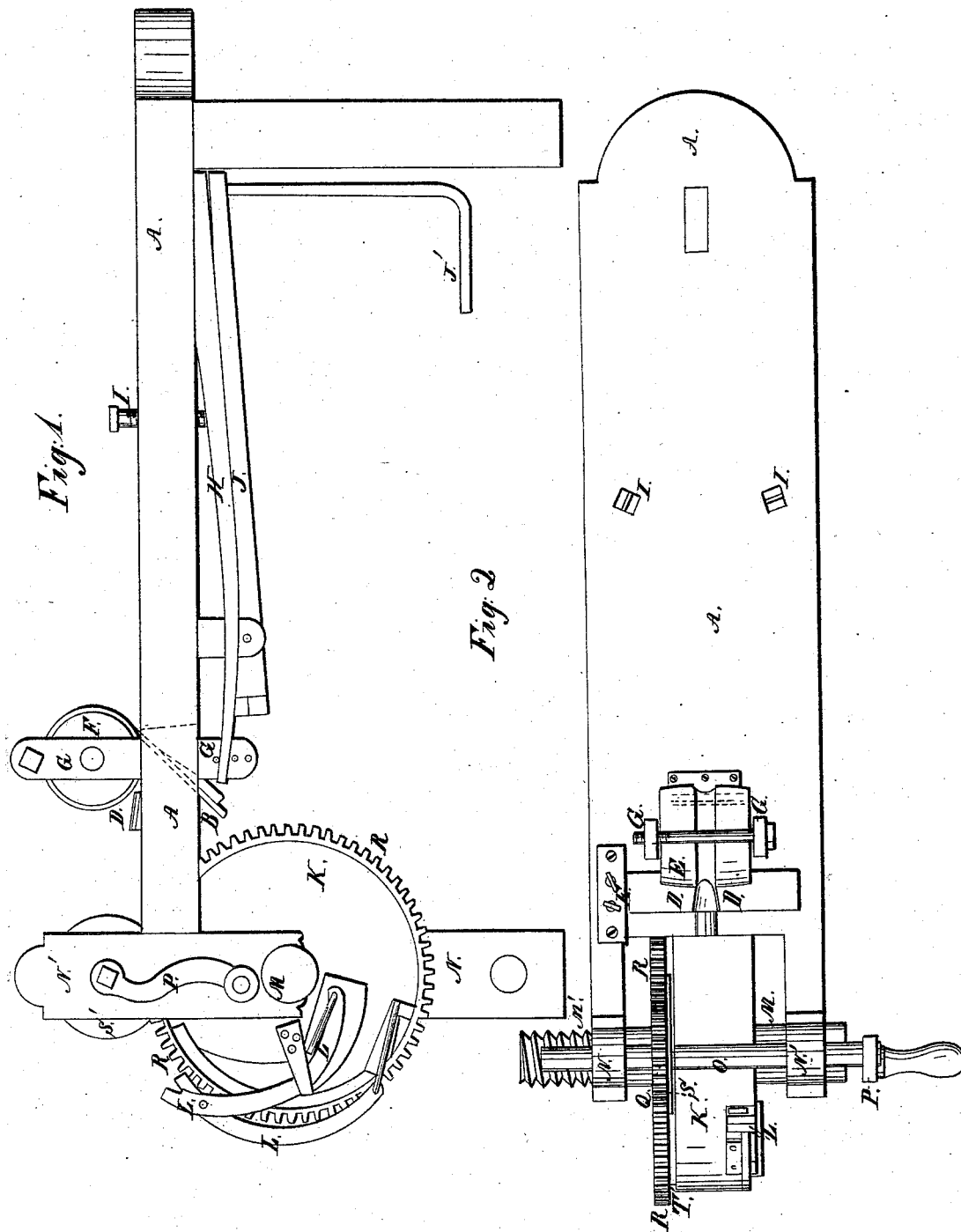


J. Mc Whorter,
Making Hoops,
No. 3,328, *Patented Nov. 6, 1843.*



UNITED STATES PATENT OFFICE.

JAMES McWHORTER, OF BLOOMING GROVE, INDIANA.

MACHINE FOR MAKING COOPERS' HOOPS OUT OF SPLIT TIMBER.

Specification of Letters Patent No. 3,328, dated November 6, 1843.

To all whom it may concern:

Be it known that I, JAMES McWHORTER, of Blooming Grove, in the county of Franklin and State of Indiana, have invented a new and useful Manner of Constructing a Machine for Making Cooper's Hoops Out of Split Timber; and I do hereby declare that the following is a full and exact description thereof.

This machine consists in part, of a bench which may be four feet long, and one foot wide, more or less, and has suitable legs, or standards, to sustain it at a proper height. Upon the bench is placed two knives, or cutters, one of which is to shave, or cut, the lower, and the other the upper side of the split stuff; the knife which is to cut the upper side of the hoop is to be so formed as to finish it either flat or rounding as may be desired. Between these knives there is a pressing and guide roller, which is to be borne down by springs, or weights, upon the split, from which the hoop is to be formed. In front of the bench there is a wheel, or drum, around which the hoop is to coil as it escapes from the cutting knives. This drum is furnished with pincers which are made to grip one end of this split, when by turning a winch it is drawn along and dressed by the knives; the shaft of the drum has a screw formed on one of its ends, which screw is tapped into one of the legs of the machine, and as the drum revolves, it is thereby made to move laterally so as to wind the dressed hoop spirally on its periphery.

In the accompanying drawings, Figure 1, is a side elevation, and Fig. 2, a top view of the machine.

A, A, is the bench which has the knives attached to it; one of these knives is shown at B, Fig. 1, affixed in place by a wedge in the manner of a plane iron.

C, is a plate of metal making a part of the throat through which the shaving is to pass. This knife is to cut the underside of the split flat.

D, is the knife which is to cut the upper side of the hoop, and the cutting edge of this may be either flat, or curved, so as to make a rounding hoop.

E, are set screws by which the knife D, may be regulated.

F, is the pressing and guide roller, which revolves in sliding standards G, G, that pass through mortises in the bench A. This roller is shown as drawn down by springs

H. The sliding standards G, may be raised by means of the lever J; for this purpose the foot may be placed on the iron rod, or treadle J, attached to it.

I, I, are screws for regulating the tension of the springs H. The wheel F, instead of being borne down by springs, as represented, may be made to raise and lower in slots in the standards G, G, and be borne down by weighted levers.

K, is the wheel, or drum, around which the hoop is to be coiled as it is dressed by the knives.

L, L, are pinions which are to hold one end of the split, said split being first passed under the pressing roller F, and under the knife D, its end being reduced for that purpose.

M, M', is the shaft of the drum K, its screw end M', passing through a female screw in the leg N, of the bench.

O, is a shaft which runs, and slides laterally, in bearings in the upper ends of the legs, or standards N, N'. This shaft is turned by a winch P, and carries a toothed wheel, or pinion Q, that meshes into a toothed wheel R, R, affixed to one side of the drum. A circular plate of metal, S is made fast on one side of the pinion Q, and projects beyond its teeth. This plate enters a groove T, between the drum and the wheel R, and in consequence of this arrangement, as the shaft O, is turned to give motion to the drum K, the shaft O, slides in its bearings, and follows the lateral motion of the drum, produced by the action of the screw M', and the dressed hoop consequently is coiled upon the drum.

Having thus fully described the nature and action of my machine, for making coopers' hoops out of split timber, what I claim therein as new, and desire to secure by Letters Patent, is—

The manner of arranging and combining the drum K, with its screw shaft and pincers with the sliding shaft O, with its pinion, and plate, S, so as by their joint action to draw the split forward, and cause the dressed hoop to wind around the drum; said drum and its appendages being also combined with the cutting, or dressing apparatus, so as to constitute a machine substantially the same with that herein described.

JAMES McWHORTER.

Witnesses:

ISAAC CLEMENTS,
RICHARD WILSON.