

P. Hurm,
Bending Wood.
N^o 49,109. Patented Aug. 1, 1862

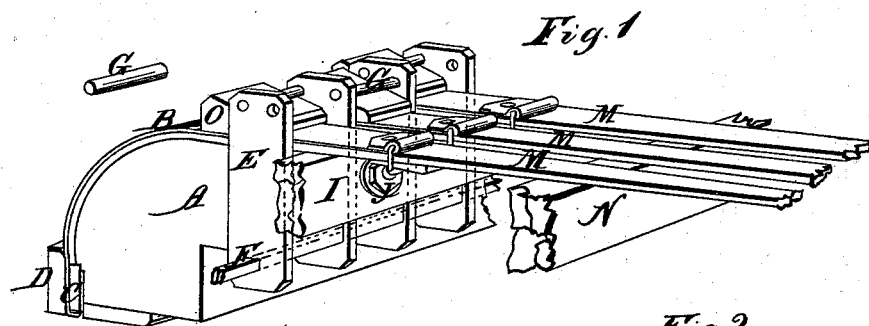


Fig. 2

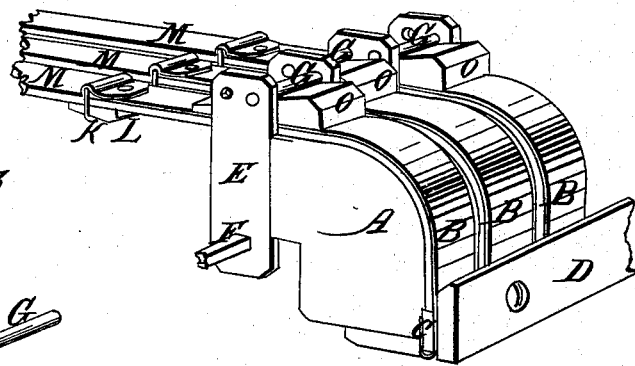
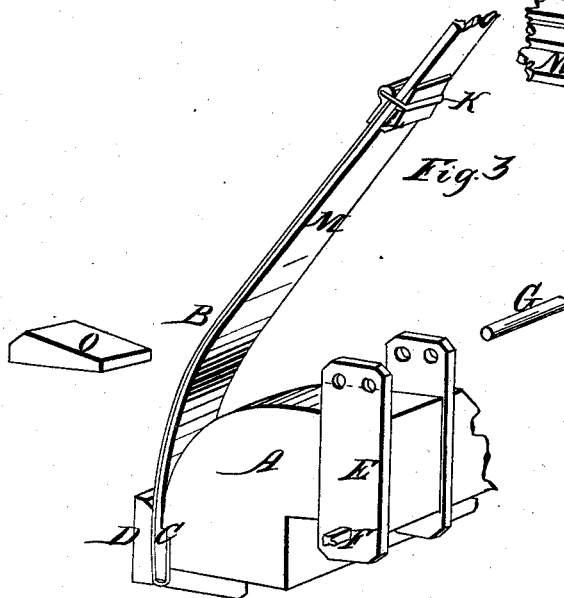


Fig. 3



Witnesses
E. L. Fisher
James H. Layman,

Inventor
P. Hurm
By Hugh H. Bros
attys

UNITED STATES PATENT OFFICE.

PHILIPP HURM, OF HAMILTON, OHIO.

IMPROVEMENT IN WOOD-BENDING MACHINES.

Specification forming part of Letters Patent No. **49,109**, dated August 1, 1865.

To all whom it may concern:

Be it known that I, PHILIPP HURM, of Hamilton, Butler county, Ohio, have invented a new and useful Wood-Bending Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to the class of wood bending machines which are employed in the manufacture of plow-handles, carriage-shafts, and the like; and my invention consists in an arrangement of wedges, stirrups, and their accessories, for the more ready and effectual clamping or locking of the back-strap.

Figures 1 and 2 are respectively a front and a rear view of apparatus embodying my improvements. Fig. 3 shows a portion of the operative parts detached.

A is a block or form.

B is a back-strap, its hooked rearend engaging around a bar, C.

D is the back shear-bar, for holding the rear end of the strap and corresponding portion of the stuff in position.

The form A is notched in front to receive a series of stirrups, E, perforated at their lower portions to receive a key, F, and at the upper portions to receive pins G. The stirrups E are held against vertical displacement by means of the said key F, and against lateral displacement by means of the notched form A and of a shear-bar, I, secured to the front of the form by means of screw-bolts J.

The back-strap B terminates in front in a loop, K, to receive a wedge, L, by which the strap is secured to the strip M to be bent.

The strip having been bent down onto the frame N, one of the pins G, is inserted in the proper apertures of the stirrups and a wedge, O, is driven under said pin G and operates to press and hold the back-strap and the strip securely and flatly down upon the form.

The above-described provision of movable pins G, stirrups E, and wedges O is found to be more quickly operated and more easily and surely brought to a square bearing upon the back-strap, besides being more easily constructed and replaced, than the customary apparatus.

It will be seen that by the loosening of the shear-bar I and sliding out of the key F any one of the stirrups may be removed and replaced by a new one.

I claim herein as new and of my invention—

The former A, stirrups E, key F, shear-bars D I, bolt J, pins G, and wedges O, arranged and operating together substantially as described.

In testimony of which invention I hereunto set my hand.

PHILIPP HURM.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.