

UNITED STATES PATENT OFFICE.

MATTHEW F. CONNETT, OF EVANSVILLE, INDIANA.

IMPROVEMENT IN WOOD-BENDING MACHINES.

Specification forming part of Letters Patent No. 48,661, dated July 11, 1865.

To all whom it may concern:

Be it known that I, MATTHEW F. CONNETT, of the city of Evansville, in the county of Vanderburg and State of Indiana, have invented certain Improvements in Machines for Bending Wood; and I do hereby declare the following to be a full and exact description of the same, reference being herein had to the drawings that accompany this specification, making part of the same.

The nature of my invention consists in bending wood by passing it over rollers to give it the desired form on one side and pressing upon the opposite side by a moving form operated by levers, said form also affording a ready means of releasing the bent piece of wood from the machine.

In the drawings, Figure 1 represents a side view of the machine, showing a piece of wood bent; Fig. 2, a front end view of the machine.

A represents the legs of the machine; B, the frame or sides. C is a moving or sliding top, carrying the wood D, and having a small projection, *c*, at its rear end, against which the wood abuts. By means of the cog-wheels E and F, crank G, and cord H, passing over pulley I, it will be seen how the sliding top, with the wood, is carried forward between the rolls *a* and formers J. The rolls are held between four uprights, *b*, giving two sets of rolls. There are also two formers, so that two pieces of wood can be bent at once. The upright pieces *b* or curved inclines can be changed, or the rolls in them, so that the curvature of the wood may be varied at pleasure by changing the position of the rolls. The forming-blocks J can also be changed, being screwed to the rotating center *d*, on or with which they oscillate, and this center, with the blocks, are carried by two oblique pieces, *e* and *f*, and they slide along another stationary piece, *g*, held by uprights *h h'*. A pin, *i*, passes through *e* and *f*, works in a slot in *g* as a guide, having a head, *j*, to control the movement. These forming-blocks are raised and lowered by means of the levers L L' and their connections *l l'*, these latter, *l'*,

being connected with an intermediate piece, *x*, pivoted to *e* by pin *m*. The inclined bearing *g* is also movable or adjustable, and can be regulated by the standards *h h'*, which have slots *j'* in their lower ends and guide-screws *s*, so that these several parts are capable of varied adjustments.

The operation is as follows: The table being run back, the piece of wood to be bent is laid thereon after being steamed, the rear end abutting against *c*, the front being laid on the first roller. The forming-block J above is put in position over the wood, serving as a controlling guide, and the required pressure brought to bear by means of lever L, which is held down by a ratchet or pins, *s*. The continued turning of the crank carries the wood forward over the rollers and under the formers, giving it the bent shape desired. But before the wood is put on the sliding table a strap of metal, *t*, is laid under its forward end, having a pin, *p*, at its front end, and a double clevis, *q*, at the other. A link, *r*, connects the two after the bending is completed, and a wedge, *r'*, is driven under the clevis to secure the shape of the bent piece. After this the formers are raised, and oscillated if necessary, the wood removed, the machine being ready for another operation. The small wheel F can be easily slid out of gear, so that the table G may be run back more rapidly.

The construction of the shaping-blocks or formers is such (as will be seen) that the link *r* can be over the middle of the wood and on one side of the former J.

What, therefore, I claim as new, and desire to secure by Letters Patent of the United States, is—

The combination of the uprights *b*, carrying rollers *a*, the curved formers J, and the sliding blocks *e f*, arranged and operated substantially as described, for the purpose set forth.

MATTHEW F. CONNETT.

Witnesses:

W. M. GOODING,
CHARLES WRIGHT.