

O. W. GRIFFITHS.

Improvement in Machines for Bending Wood.

No. 125,130.

Patented April 2, 1872.

Fig. 1.

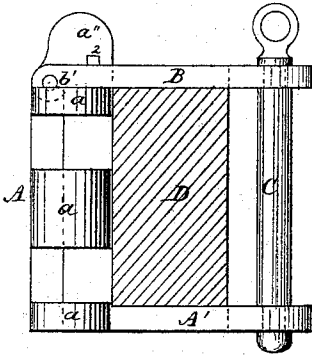


Fig. 2.

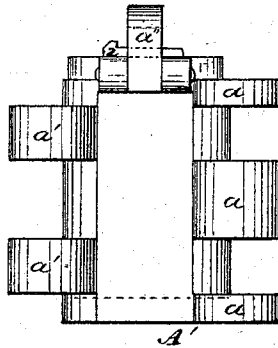


Fig. 3.

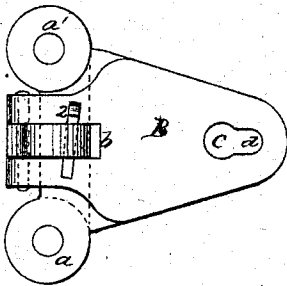


Fig. 4.

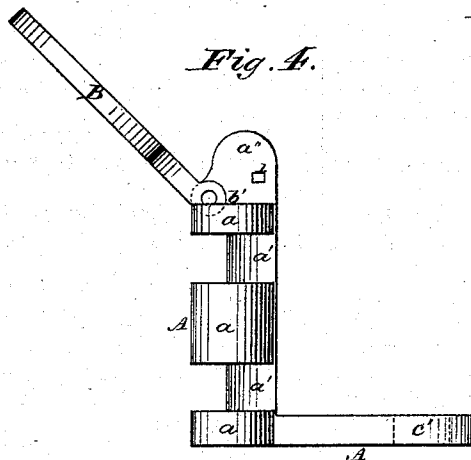
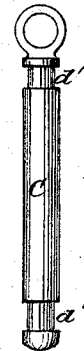


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

OLIVER W. GRIFFITHS, OF CHARLESTOWN, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR BENDING WOOD.

Specification forming part of Letters Patent No. 125,130, dated April 2, 1872.

I, OLIVER W. GRIFFITHS, of Charlestown, in the county of Middlesex, in the State of Massachusetts, have made certain Improvements in Machines for Bending Wood, of which the following is a specification:

In the bending of large timbers into curved forms, such as is used in ship-building and other purposes, a sectional joint-mold or chain has been used to receive the timber while being bent, and hold it after it is bent until it sets and becomes rigid in the shape that it is bent.

The object of this invention is to improve the construction of the clamp so that the timber can be taken from the mold without straining or springing it out of the shape in which it is purposely bent; and it consists in the hinging of one of the projecting flanges which embrace one of the sides of the timber to the jointed sectional mold, and the manner of securing such flange in its position while the timber is in the process of being bent into form.

In the drawing, Figure 1 represents a side view of one of the jointed sections of the mold with a section of the timber in place; Fig. 2, an inside vertical view of the same section; Fig. 3, a top view; Fig. 4, a side view, with the hinged flange turned back; and Fig. 5, a view of the gib-bolt.

A represents the solid body of the link or section of the joint-mold; A', the bottom projecting flange, fast to the body A. *a a* and *a'* are the two projecting wings that form the hinged joint in the mold. *a''* is a part of the body A that projects upward, and to which the hinged flange is secured so that it can be turned upward and over, and has a mortise, 1, through it, as seen in Fig. 4. B is the hinged flange, having a slot, *b*, at its inner end to receive the upwardly-projecting part *a''* of the body A of the link or section of the mold, and to which it is hinged at *b'*, as seen in Figs. 1

and 4. 2 is a key that is inserted into mortise 1, through the projection *a''*, and above the hinged flange B. C is a gib-pin, which goes through slot *c* in the hinged flange B, downward, and through the rigid flange A', and holds the flanges at parallel positions. *c* and *c'* are slots to receive the gib-pin. The larger part will receive the size of the body of the pin, while the smaller receives the neck of the pin *d'*.

By this construction it is obvious that after the timber D is bent and held in the rectangular grooves formed by the upright body A and projecting flanges A' and B, and is ready to be removed therefrom, the gib-pin C and key 2 are removed, when the hinged flange B can be turned up and into the position seen in Fig. 4, when the timber, in the form it is bent, is removed by simply lifting it from the jointed mold, which facilitates the removal of the timber, and is a great improvement upon the method heretofore in use of springing the timber to remove it from the groove.

This invention is an improvement upon the jointed sectional mold as seen in the patent granted to John W. Griffiths for improvement in machines for bending ship-timber, dated January 2, 1866.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The hinged flange B, when constructed and operating substantially in the manner described and shown.

2. The combination of the hinged flange B, gib-pin C, key 2 with the body A and rigid flange A' of a jointed mold of a wood-bending machine, substantially as shown and described.

OLIVER W. GRIFFITHS.

Witnesses:

NEWTON CRAWFORD,
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