

J. ATKINS.

Machines for Planing Clapboards.

No. 136,201.

Patented Feb. 25, 1873.

Fig. 2.

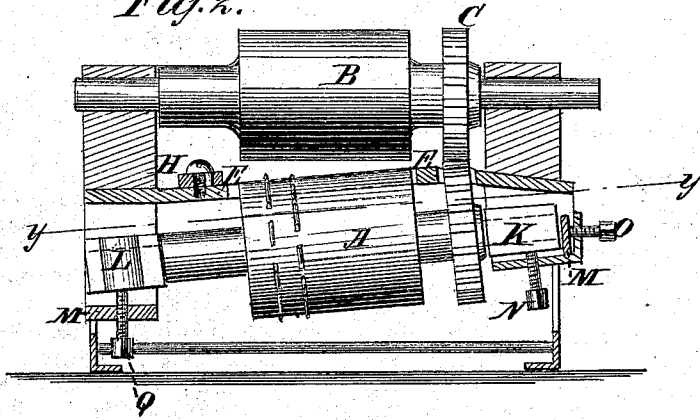


Fig. 4.

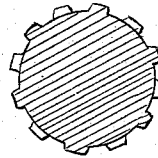


Fig. 3.

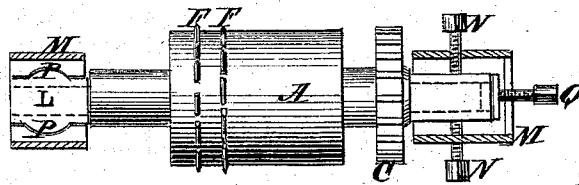
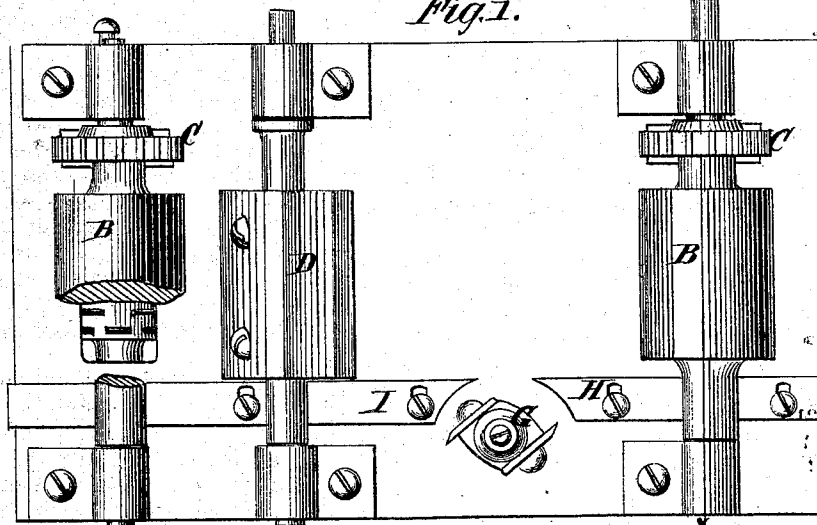


Fig. 1.



Witnesses:

John Becker
W. A. Graham.

Inventor:

J. Atkins.

PER

Munnell
Attorneys

UNITED STATES PATENT OFFICE.

JAMES ATKINS, OF AUGUSTA, MAINE.

IMPROVEMENT IN MACHINES FOR PLANING CLAPBOARDS.

Specification forming part of Letters Patent No. **136,201**, dated February 25, 1873.

To all whom it may concern:

Be it known that I, JAMES ATKINS, of Augusta, in the county of Kennebec and State of Maine, have invented a new Improvement in Machines for Planing Clapboards, of which the following is a specification:

My improvement relates to that class of machines which plane the side of the clapboard and joint the thick edge at the same time, and has for its object the feeding of the boards so that the jointing of the edge straight will be secured, and the feeding of the board and planing of the surface in the most perfect manner will be insured; and it consists in an arrangement of heavy feed-rolls geared together in pairs, as in ordinary surface-planers, but with a series of spurs on each lower roll of the pair, and an adjustable arrangement of the lower rolls for causing them to correspond exactly to the inclined surface of the bed of the machine, whereby the said objects are secured, as will be hereinafter fully described.

Figure 1 is a plan view of my improved machine with one of the top feed-rolls broken out. Fig. 2 is a transverse section taken on the line *xx* of Fig. 1. Fig. 3 is a partial horizontal section taken on the line *yy* of Fig. 2; and Fig. 4 is a transverse section of one of the lower feed-rolls.

Similar letters of reference indicate corresponding parts.

A represents the lower feed-rolls, and B the upper ones, of which there are two pairs in a machine, each pair being geared together by wheels C. These rolls are of the size of large feed-rolls. The upper ones are arranged in a horizontal plane with the planer D, but the lower ones are inclined so that they will correspond at the top exactly with the inclined bed E, and they are provided near the lower end with two parallel rows of spurs, F. G represents the edging-tool; H and I, guides. To allow of adjusting the lower rollers, as required, they are journaled in adjustable bearings K L in the hangers M. The bearing K is adjusted by the three screws N, and another screw, O, is arranged against the end to take up the end play, said screws being supported

in the hangers. The other bearing L has oval enlargements P on two sides, which fit in vertical grooves in the hanger so that it will line with the journal with only one adjusting-screw, Q, under it.

These heavy feed-rolls guide the clapboard by the spurs F, and at the same time carry it through straight, because the lower feed-rolls, as it will be observed, are perfectly parallel with the bed, whereby the spurs, when passing over the upper part of it, where they engage the board, revolve in lines perfectly parallel with the guides, and, as the spurs are sure to guide the board independently of the guides, secure the perfect jointing of it if the said rolls are properly set. It is for this reason that the journals of the lower rolls are made adjustable.

Mere guide-rolls will not accomplish what I seek to do—that is, to guide the boards straight by the spurs, for, if placed under the feed-rolls, the feed will not be strong enough, and if used with double-g geared feed-rolls they cannot be placed anywhere that the feed-rolls will not in a measure destroy their effect; therefore it is important that the guide spurs be used on the lower rolls of double feed-rolls; nor will conical rolls or any other similar contrivance, acting with the ordinary guides I H to keep the edge of the clapboard against the guide, work well, for, as they come to the planer with their uneven or irregular edges against the guides, the dressed edges will come out in the original shape. I only use the front guide I in adjusting the end of the board as I put it in the machine.

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

In machines having rolls for feeding the clapboards, the spur-roll A, made adjustable to different inclinations so as to crowd the clapboard against the edging-cutters, substantially in the manner described.

JAMES ATKINS.

Witnesses:

ELISHA ATKINS,
T. M. DILLINGHAM.