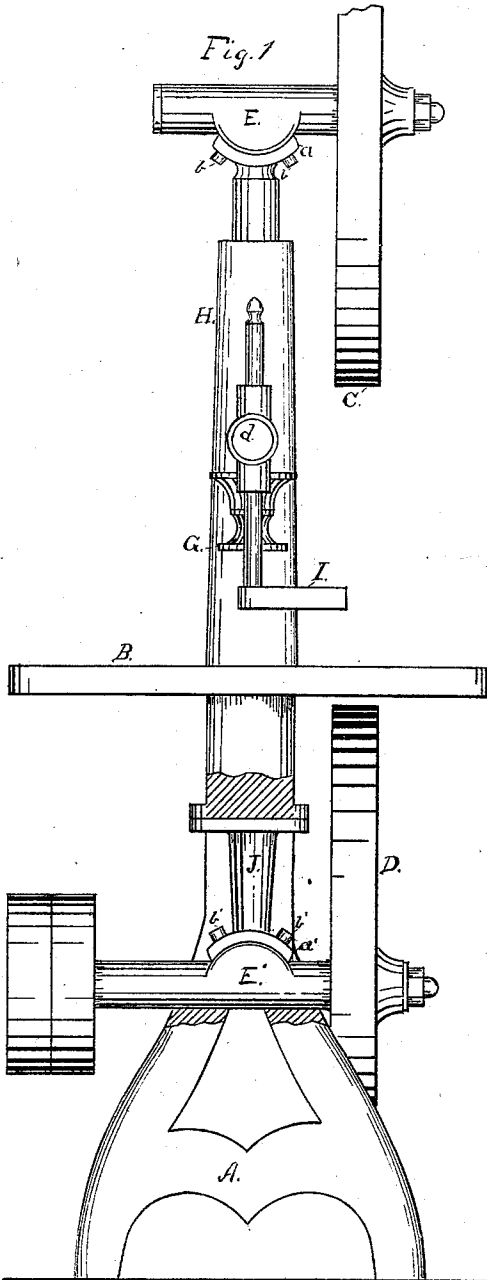


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Patented May 26, 1874.



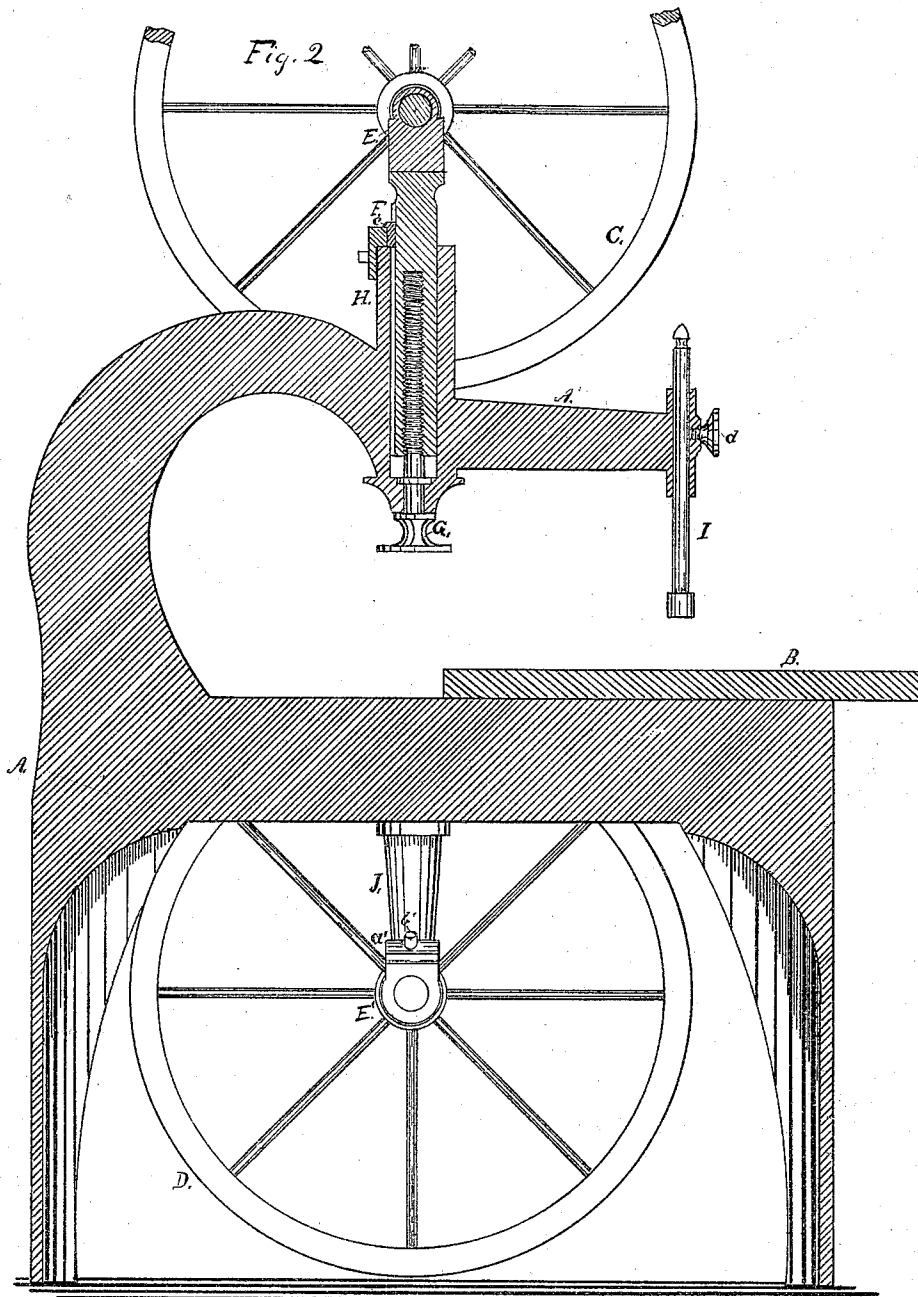
Witnesses.
M. F. Harwood.
L. D. Graham

Inventor.
Edward H. Gordon
Per D. J. Abbott
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UNITED STATES PATENT OFFICE

EDWARD F. GORDON, OF CONCORD, NEW HAMPSHIRE.

IMPROVEMENT IN BAND SAWING MACHINES.

Specification forming part of Letters Patent No. 151,217, dated May 26, 1874; application filed May 9, 1874.

To all whom it may concern:

Be it known that I, EDWARD F. GORDON, of the city of Concord, county of Merrimack and State of New Hampshire, have invented certain new and useful Improvements in Band Sawing Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, such as will enable others skilled in the art to which it appertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a front view of the machine. Fig. 2 is a sectional view.

Similar letters of reference indicate corresponding parts in the different figures.

This invention, as its name indicates, relates to that class of sawing-machines in which a band-saw is used; and consists in the means employed for the purpose of adjusting the upper pulley of the machine to adapt it for the reception of saws of different lengths; and in the method of adjusting the shafts upon which the pulleys are secured with relation to each other, as will be hereinafter fully described, and then pointed out in the claims.

It has been customary, heretofore, to carry the adjustable journal-box in which the shaft of the upper wheel or pulley runs upon a rectangular support moving in jibbed ways, which method of construction is open to the objection of furnishing but a small amount of bearing-surface for its support, therefore quickly wearing loose, which gives to the machine when in operation a tremor, detrimental not only to the machine itself, but to the building containing it, and rendering it difficult for the operator to guide the material upon the table in sawing scrolls or other similar work. In order to obviate this difficulty I furnish the journal-box of the upper shaft with a saddle having a broad circular bearing, which, while holding it firmly, still admits of adjustment, and which rests upon and is secured to a concave bed prepared for its reception upon the top of a cylindrical support which has a vertical movement within a sleeve formed in the upper part of the frame of the machine for its reception, thus giving broad and easily-fitted surfaces to sustain the wear.

In the accompanying drawings, A is the frame of the machine; B, the saw-table; C,

the upper pulley, and D the lower. E and E' are the journal-boxes, and F is the support for the upper box E. This support is provided with the concave bearing-piece *a*, through which are formed slots for the passage of the screws *b*, thus allowing the position of the box E to be adjusted in such a manner as to incline the shaft of the pulley, or to move it laterally, as may be found necessary, in order to give the saw its proper bearing. This support is also rendered vertically adjustable by means of the screw G, and is prevented from turning by a feather-key, *c*, secured in the sleeve H, and which slides in a keyway extending the whole length of the cylindrical portion of the support. An arm, A', projects from the frame, and carries at its end the adjustable saw-guide I, which has a vertical adjustment controlled by the set-screw *d*. A standard, J, is secured to the under side of the frame, and is provided at its lower end with a concave cap for the reception of the journal-box E', which has all the various adjustments of the box E, with the exception of the vertical, and is secured to the concave cap by set-screws passing through slots in the same manner.

The above-described arrangement of parts will be found to present a machine of compact form which is durable and easily adjusted by the operator to perform the different kinds of work which come within the scope of machines of this class.

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

1. The frame A, in combination with the standard J, having the concave cap *a*', journal-box E', and pulley D, substantially as and for the purpose specified.

2. The adjustable journal-box E, attached to the cylindrical support F, which is provided with the concave cap *a*, in combination with the sleeve H and guiding-key *c*, as and for the purpose set forth.

In testimony that I claim the foregoing, I have hereunto set my hand and seal this 6th day of May, 1874.

EDWARD F. GORDON. [L. s.]

In the presence of—

CHAS. P. SANBORN,
WARREN CLARK.