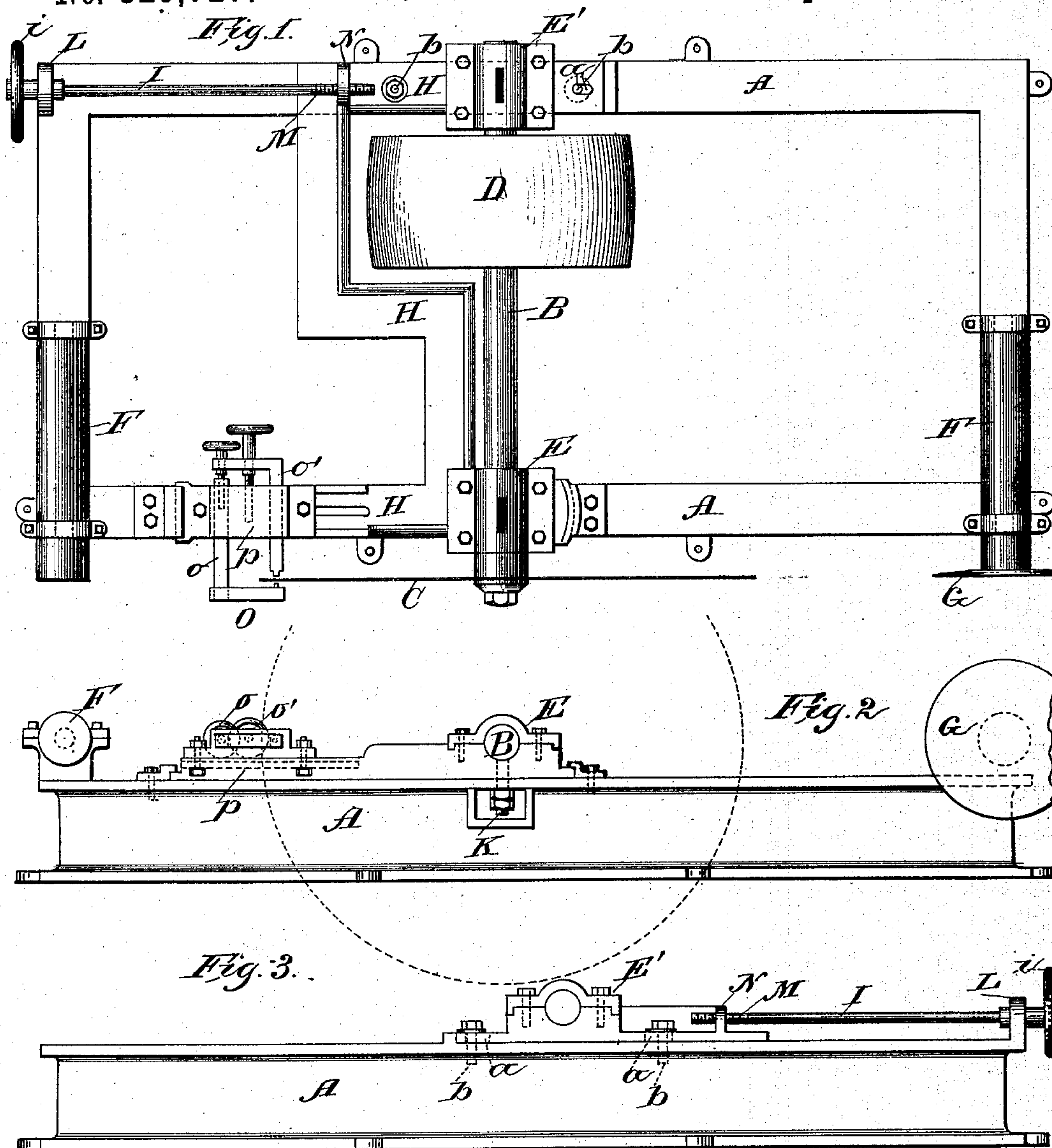


(No Model.)

A. BROGDEN.
CIRCULAR SAW MILL.

No. 325,727.

Patented Sept. 8, 1885.



Witnesses:
George Coll.
W. E. Benson.

Inventor
Aaron Brogden
By C. H. Bottom
Attorney

UNITED STATES PATENT OFFICE.

AARON BROGDEN, OF OSHKOSH, WISCONSIN.

CIRCULAR-SAW MILL.

SPECIFICATION forming part of Letters Patent No. 325,727, dated September 8, 1885.

Application filed February 24, 1885. (No model.)

To all whom it may concern:

Be it known that I, AARON BROGDEN, of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Saw-Guides; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to saw-mills employed in sawing lumber from the log; and the object of my invention is the construction of the saw-guide and mandrel so connected and adjusted as to permit the adjustment of the saw with reference to the movement of the carriage without impairing the relative adjustment of the mandrel and guide.

The construction and operation of my improved device is shown in the accompanying drawings, in which—

Figure 1 is a plan view of the saw-frame, saw, and my improved device adjusted to the same. Fig. 2 is a front side elevation of the same. Fig. 3 is a rear side elevation of the same.

Similar letters are used to denote like parts throughout the several views.

A is the saw hurst frame.

B is the saw-mandrel, provided with a pulley, D, mounted in bearings E E'.

F F are the rollers ordinarily used on the end of the saw-frame for the support of the detached lumber, to one of which is attached spreader or wedge wheel G.

C is the saw, represented attached to the mandrel B.

H is a yoke, shaped as shown in Fig. 1, with ends resting upon the opposite sides of the hurst-frame A, and forming a continuous structure with the journals in which the saw-mandrel B rests. It is pivoted at K to the hurst-frame A, and slides lengthwise upon the rear portion of the hurst-frame A for a limited distance by means of slots *a a* in the yoke H, which slots have bolts *b b* inserted through them into the hurst-frame A in such manner as to allow a slight swinging motion of the yoke H upon the pivot K. The caps of the journals E E' are secured merely to the yoke H.

I is a rod provided with a hand-wheel, *i*, and swiveled in an ear projecting from hurst-frame A, and threaded at its other extremity, M, in an ear, N, projecting upward from the yoke H in such a manner that by the revolution of the hand-wheel *i* the yoke H can be swung upon the pivot K as a center, the ends of the yoke resting at all times upon the hurst-frame A.

O is the saw-guide proper formed of the two members *o o'*, which are inserted through the end of the bed-plate *p*, which is mounted by means of bolts entering slots in the end of yoke H, which is extended forward from the bearing of the saw-mandrel E.

The construction and operation of the saw-guide proper, O, is similar to that of those which are in general use.

My invention relates solely to the method described of connecting the bearings of the saw-mandrel with the saw-guide proper by means of the rigid yoke H, in such manner that both are moved or adjusted simultaneously.

The operation of my improved device is as follows: Whenever it is desired to change the alignment of the saw with the path of the carriage or the cut made in the log, so as to make the saw lead "in" or "out," the hand-wheel *i* is turned, and thereby, by means of its threaded extremity M and the threaded ear N upon the end of the yoke H, moving the yoke H upon its pivot K, changing the angle of the mandrel and with it the angle of the saw with reference to the carriage-track. Because the saw-guide O is mounted upon the yoke H its movement will correspond to the movement of the saw, and no readjustment of the saw-guide is necessary when the angle or position of the saw with reference to the movement of the carriage is changed.

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

1. The combination of the saw C, having mandrel B, saw-frame A, yoke H, furnishing connected bearings E E' for said mandrel B and pivoted to said frame A on the side thereof adjacent to said saw C and adjusting-rod I, having a fixed or swiveled bearing in frame A and threaded to engage with said yoke H, substantially as and for the purposes set forth.

2. The combination of the saw-frame A,

yoke H, resting therein and pivoted thereto and provided with connected bearings for the reception of the saw-mandrel B, the saw-guide O, and mandrel B, substantially as and for the
5 purposes herein set forth.

3. The combination of the saw C, having a mandrel, B, the saw-frame A, yoke H, forming connected bearings E E' for said mandrel B and pivotally mounted upon said frame A,
10 and the saw-guide O, adjustably attached to

said yoke H and adjustable therewith, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

AARON BROGDEN.

Witnesses:

AUGUST HANEY,
CHARLES HATCH.