

BAND SAW MILL.

No. 306,826.

Patented Oct. 21, 1884.

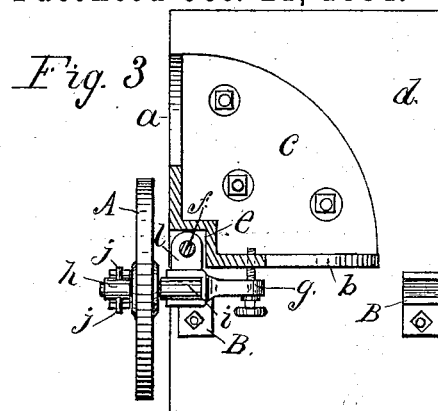


Fig. 1.

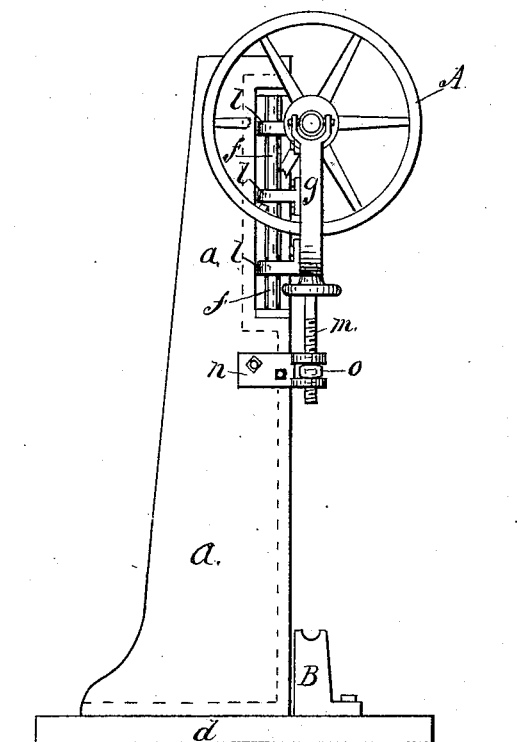
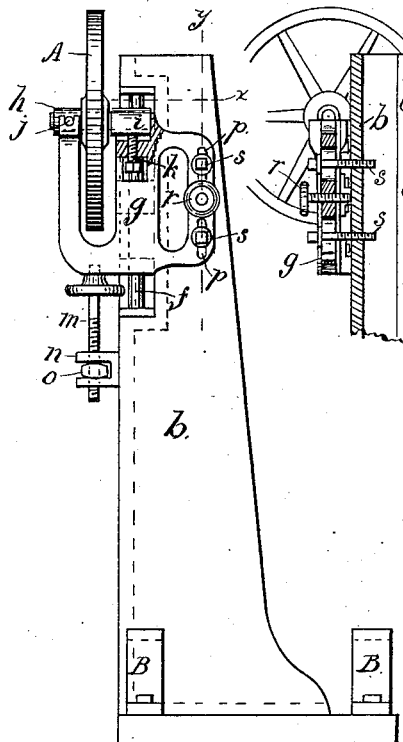


Fig. 2. *Fig. 4.*



WITNESSES:

M. Carsten
A. M. Hood.

INVENTOR:

Dempsey B. Hanson
By H. P. Hood
Atty.

UNITED STATES PATENT OFFICE.

DEMPSY B. HANSON, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO SINKER,
DAVIS & CO., OF SAME PLACE.

BAND-SAW MILL.

SPECIFICATION forming part of Letters Patent No. 306,826, dated October 21, 1884.

Application filed August 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, DEMPSY B. HANSON, a citizen of the United States, residing at Indianapolis, in the county of Marion, State of Indiana, have invented a new and useful Improvement in Band-Saw Mills, of which the following is a specification.

My invention relates to an improvement in the supporting-pillar and the bracket for the upper or tension wheel in band-saw mills.

The objects of my improvement are, first, to adapt the supporting-pillar and the upper wheel-bracket in a band-saw mill to be used for a right-hand or a left-hand mill without change of patterns; and, second, to provide improved means for the backward and forward adjustment of said upper wheel for the purpose of guiding or aligning the saw, all as hereinafter fully described.

The accompanying drawings illustrate my invention. Figure 1 is a front elevation. Fig. 2 is a side elevation. Fig. 3 is a plan, the upper end of the pillar being shown in section on the line *x*, Fig. 2. Fig. 4 is a partial section on the line *y*, Fig. 2, showing the arrangement of the adjusting-screws.

The pillar supporting the upper wheel, A, is a right-angled webbed casting having two like faces, *a* and *b*, joined at the lower end by a quadrant web, *c*, which forms a foot through which bolts are passed, securing the pillar in a vertical position to the bed-plate *d*. The upper portion of the corner formed by the faces *a* and *b* is cut away, forming a recess, *e*, in which is secured a cylindrical rod, *f*, of wrought iron or steel. Said rod is parallel with and equidistant from both of the sides *a* and *b*.

g is a bracket adapted to sustain movable bearings *h* and *i*, in which the shaft of the wheel A is mounted. Bearing *h* rests on trunnions *j j*, and bearing *i* is adjustable vertically by means of a set-screw, *k*. Bracket *g* is connected with rod *f*, so as to swing in a horizontal plane, and to slide vertically thereon by means of lugs *l l l*, which are preferably bolted to the side of the bracket; or they may be cast therewith.

For the purpose of adjusting bracket *g* and the wheel which it carries vertically, said bracket rests on the upper end of a screw, *m*, supported in a bracket, *n*, by a nut, *o*. The upper and under surfaces of said nut are rounded, so as to allow a slight swinging movement of the screw.

For the purpose of adjusting wheel A backward and forward in a horizontal plane, so as to cause the saw to run centrally on the wheels, (the lower one not shown, but designed to be mounted on a shaft resting in the bearings B B, or in any other well-known manner,) bracket *g* is extended backward over the face *b* of the supporting-pillar, and is slotted at *p p*.

r is a set-screw, having its nut formed in the bracket and its end resting against the face of the pillar, while the cap-screws *s s* pass freely through the slots *p*, and are screwed into the pillar, the effect of screw *r* being to push the bracket from the pillar, and of screws *s s* to draw the bracket toward the pillar, thus providing a quick and sufficiently delicate adjustment, and clamping the bracket strongly and firmly to the pillar at any desired point of adjustment.

The mill shown being understood to be a right-hand mill, it will be observed that the only change necessary in the pillar and bracket *g* to make a left-hand mill is to transfer the lugs *l* to the opposite side of the bracket and turn the pillar on its outer corner as an axis a quarter-turn. Face *a* would then become the front, and face *b* the side, of the pillar.

I claim as my invention—

1. In a band-saw mill, the combination of a vertical pillar having two like faces forming a right angle, a single vertical rod secured to said pillar near the intersection of said faces and equidistant therefrom, a bracket adapted to slide on said rod and to be secured to either of the faces of said pillar, and a wheel supported by said bracket and adapted to carry a band-saw, all substantially as specified.

2. In a band-saw mill, the combination of a vertical pillar, a single vertical rod secured to said pillar, a wheel adapted to carry a band-saw, a bracket supporting said wheel, and connected with said rod so as to slide vertically and to swing horizontally thereon, an adjusting-screw adapted to raise and lower said bracket, and adjusting and clamping screws passing through said bracket and engaging said pillar, all substantially as specified.

DEMPSY B. HANSON.

Witnesses:

JOHN W. RUSSELL,
H. P. HOOD.