

(No Model.)

G. M. HINKLEY.  
SUPPORTING WHEEL FOR BAND SAWS.

No. 348,283.

Patented Aug. 31, 1886.

Fig. 1.

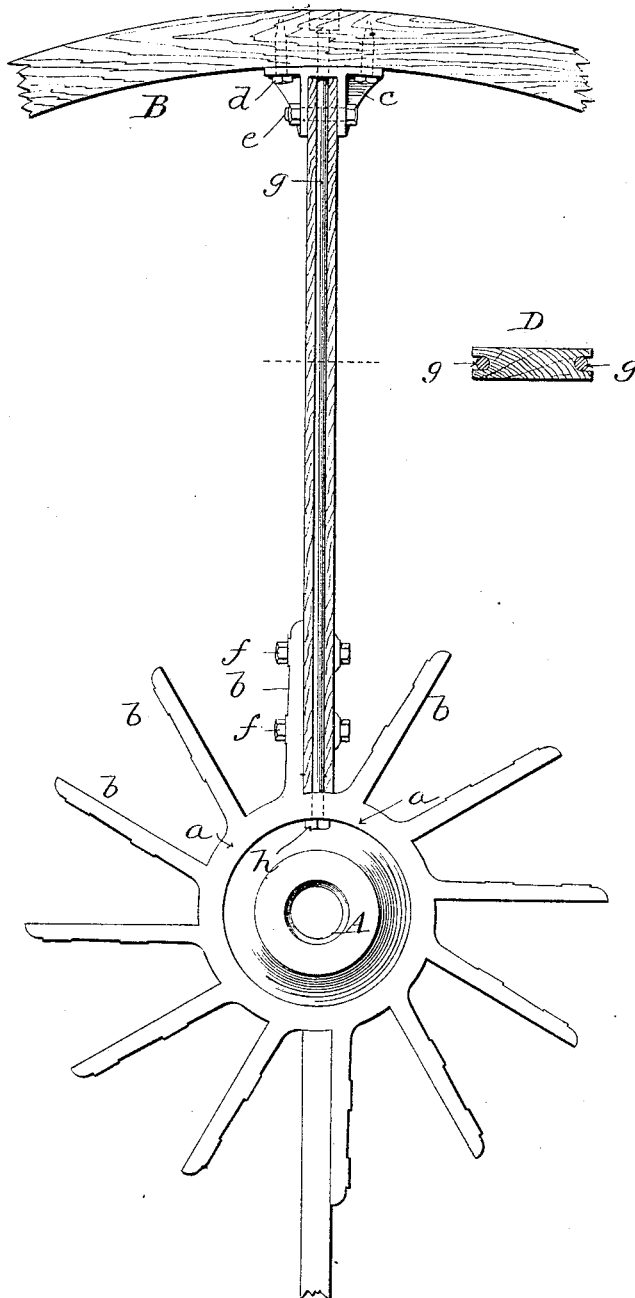
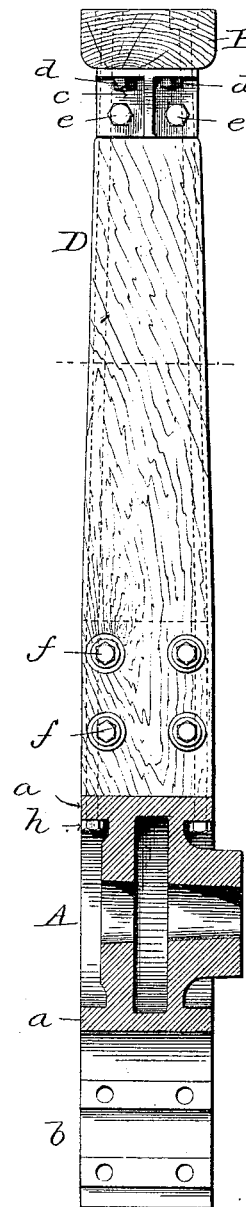


Fig. 2.



Witnesses:  
James S. Duffhamel  
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George M. Hinkley  
Inventor,  
by Rodgerson,  
his Attys.

# UNITED STATES PATENT OFFICE.

GEORGE M. HINKLEY, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF  
TO EDWARD P. ALLIS, OF SAME PLACE.

## SUPPORTING-WHEEL FOR BAND-SAWS.

SPECIFICATION forming part of Letters Patent No. 348,283, dated August 31, 1886.

Original application No. 196,450, filed March 25, 1886. Divided and this application filed July 20, 1886. Serial No. 208,557. (No model.)

### *To all whom it may concern:*

Be it known that I, GEORGE M. HINKLEY, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Band-Saw Mills, of which the following is a specification.

My invention relates to band-saw mills, and has reference to the construction of the upper saw-supporting wheel.

In the drawings, Figure 1 is a face view of a portion of my improved wheel, and Fig. 2 a sectional view of the same in a plane parallel with the axis.

This application is a division of one filed by me on the 25th day of March, 1886, Serial No. 196,450. The object of this is to make a wheel which shall be light and strong, and which will incur considerable resistance from the air in its rotation.

To this end the invention consists, principally, in providing the wheel with broad flat spokes and inserting metallic tie-rods in the edges thereof.

The invention also consists in various features and details hereinafter set forth.

In mills of this character it is necessary that the upper wheel be light and strong, and to construct a wheel possessing these requisites I adopt the form shown in Figs. 1 and 2, in which A indicates a metallic hub, provided with two circumferential laterally-extending flanges, *a*, and with a series of flat plates, *b*, which are tangential to a small circle described about the axis or center of the hub, as clearly shown in Figs. 1 and 2. The flanges *a* and the plates *b* are preferably cast integral with the hub A.

B indicates the felly, which is constructed of wood, so as to cause the saw to bite and prevent undue wear of the saw. The felly B is provided at intervals with metallic sockets *c*, which correspond in number and position with the plates *b*. The sockets *c* are secured to the felly B by screws *d*, which pass through the sockets from the under side.

D indicates the spokes, which are made of wood, and secured at their outer ends in the sockets *c* by means of bolts *e*, and at their in-

ner ends to the plates *b* by bolts *f*, as shown in Figs. 1 and 2. The spokes are preferably made of hard maple and the felly of soft maple, though, of course, these materials may be varied. Each of the spokes D is grooved longitudinally on both edges to receive a rod, *g*, which at its lower end passes through the flange *a*, and at its upper end is countersunk in the felly, the rod *g* being provided on the under side of the flange with a nut, *h*. The rods *g* hold the felly at the proper distance from the hub and firmly support and greatly strengthen the wheel. Under the plan shown it will be noticed that the spokes D are radial to the center of the hub, being placed on that side of the plates *b* nearest the center of the hub. The broad flat wooden spokes offer considerable resistance to the rotation of the wheel by striking against the air, and thus the rotation of the wheel is retarded. In thus retarding the upper wheel I prevent the saw from becoming slack immediately above the log.

Having thus described my invention, what I claim is—

1. The herein-described carrying-wheel for a band-saw, comprising hub A, circumferential flange *a*, projecting laterally therefrom, plates *b*, radiating from said hub, felly B, sockets *c* on the inner face of the felly, spokes D, secured at opposite ends to the sockets *c*, and plates *b* and rods *g*, connecting the hub and felly, substantially as shown and described.

2. In a carrying-wheel for a band-saw, the combination, with a hub, a felly, flat wooden spokes secured to the hub and the felly, and the metallic tie-rods inserted in the edges of the spokes.

3. In a band-saw mill, the upper saw-carrying wheel herein described, comprising a hub, a rim, and a series of broad flat spokes connected at opposite ends to the hub and rim, and arranged with their flat faces substantially in line with the axis of the wheel.

GEORGE M. HINKLEY.

Witnesses:

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