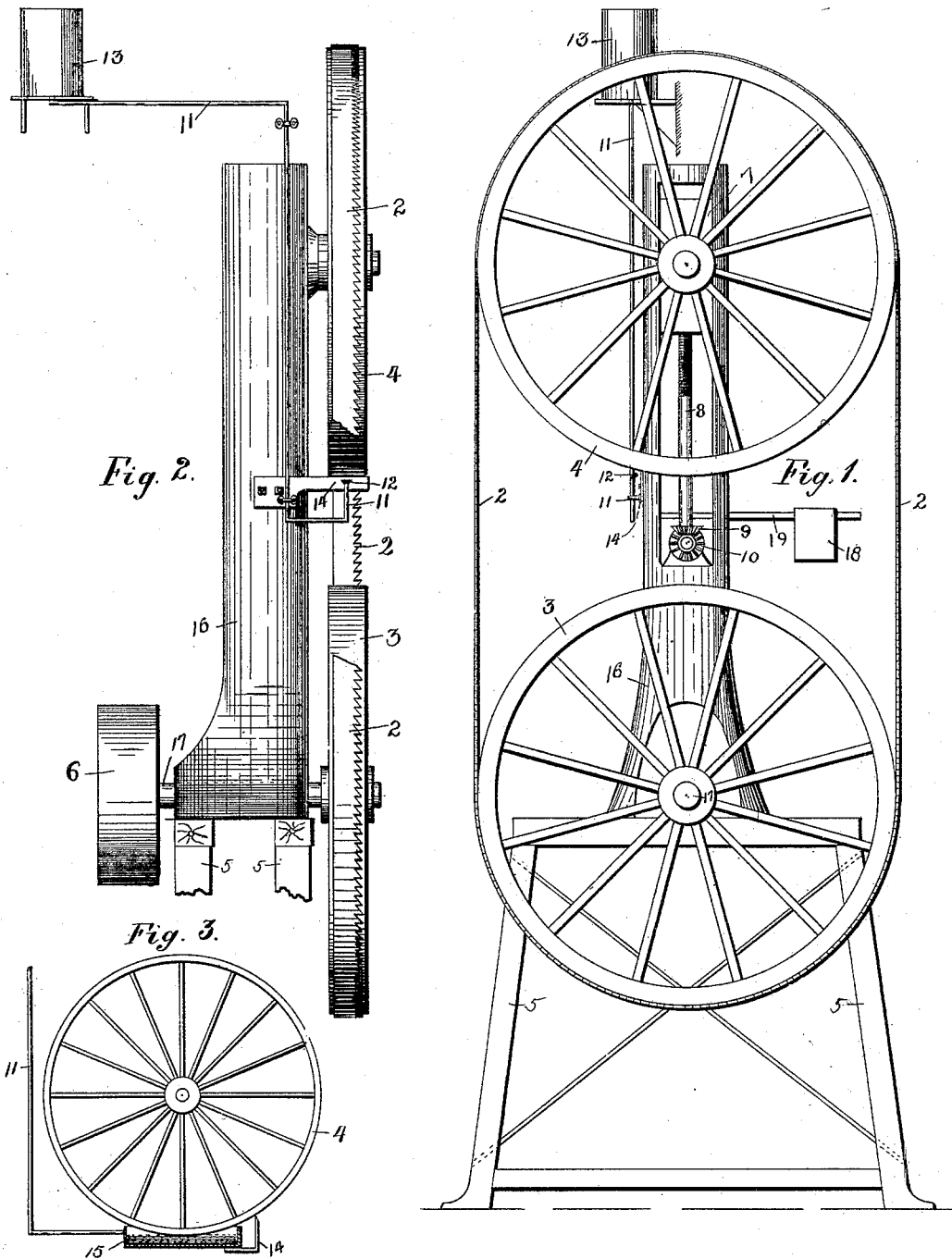


(No Model.)

H. C. LINDSAY.
MEANS FOR CLEANING BAND SAW WHEELS.

No. 423,063.

Patented Mar. 11, 1890.



Witnesses
S. M. Roberts
C. M. Gooden

Inventor.
Harry C. Lindsay
By Paul W. Allen, Atty.

UNITED STATES PATENT OFFICE.

HARRY C. LINDSAY, OF STILLWATER, MINNESOTA.

MEANS FOR CLEANING BAND-SAW WHEELS.

SPECIFICATION forming part of Letters Patent No. 423,063, dated March 11, 1890.

Application filed November 5, 1889. Serial No. 329,262. (No model.)

To all whom it may concern:

Be it known that I, HARRY C. LINDSAY, of Stillwater, in the county of Washington and State of Minnesota, have invented certain Improved Means for Cleaning Band-Saw Wheels, of which the following is a specification.

My invention relates to saw-mills or machines in which an endless band-saw is carried upon and driven by wheels or drums; and its object is to provide improved means for cleansing such wheels or drums from the accumulation of sawdust and other foreign substances which cling or adhere to them while the saw is in use, and which, when allowed to remain and harden upon said wheels, form obstructions which seriously interfere with the operation of the saw.

My invention consists in means for subjecting said wheels to a light spray or bath, preferably of water or light oil—such as kerosene—upon so much of their surface as may be necessary, which thus dislodges and carries away the foreign substances which are clinging to them before they have firmly adhered or have the opportunity to become fixed upon the wheels.

My invention further consists in the construction and combination hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a front elevation of a band-saw mill fitted with my improved device. Fig. 2 is a side elevation and partial section of the same. Fig. 3 is a detail.

In the drawings, 2 represents a band-saw mounted upon the driving-wheel 3 of the mill, which is journaled in suitable bearings upon the supporting-frame 5 in the usual manner.

4 is an idler journaled in the slide-block 7, arranged in the hollow cast-iron pillar 16. The wheel 3 is driven in any suitable manner, as by means of the belt-drum 6, secured to the shaft 17 of the drive-wheel.

8 represents the adjusting-screw or tightener of the mill, by means of which the proper adjustment of the block 7 is made to secure any required tension of the saw being operated by means of any suitable power connected therewith through the bevel-gears 9 and 10.

18 is a tension-weight arranged upon a suitable lever 19 in the ordinary manner.

Arranged preferably adjacent to the under side of the idler 4 is the pipe 11, having a jet or spray nozzle 12 turned in the direction of the rotation of the wheel when in operation and adapted to deliver a thin jet or spray of water or oil upon the periphery of the wheel as it passes, the liquid being carried through the pipe to the jet from any suitable source, as from the reservoir 13. The dust and particles of sawdust, as well as other foreign substances, particularly the pitch or gum from the wood being sawed, which are carried upon and cling to the wheel, are brought in contact almost instantly and at the first revolution of the wheel, after being deposited upon it, with the stream of liquid issuing from the pipe 11, and are by it dislodged and carried off, or so loosened from the wheel that they are easily removed by the scraper 14, arranged to bear upon the wheel immediately in front of the jet. By this means the peripheral surface of the wheel is kept thoroughly cleansed from foreign substances, so as not to interfere with the running of the saw upon it, whereas if the substances are allowed to remain upon the wheel they gradually accumulate and harden upon the face of the wheel, rendering the saw liable to displacement while in operation.

In detail, Fig. 3, I have shown a modification of my device in which the face of the wheel is caused to rotate in the bath or trough 15, holding the cleansing-liquid, which serves the same purpose, though less efficiently, as the jet or spray. In this case the pipe 11 may be used to supply the liquid to the bath and keep it always in contact with the face of the wheel.

While I have shown and described two means for carrying out my invention, I do not limit myself to them, but claim as within the scope of my invention any means whatever by which the band-saw wheel is washed or bathed with a cleansing-liquid in its rotation, as above described.

I claim—

1. In a band-saw mill or machine, the combination, with a band-saw wheel, of means for supplying a cleansing-liquid to the face of the wheel, whereby the wheel in its rotation is

cleansed from foreign substances adhering to it, as and for the purpose set forth.

2. In a band-saw mill or machine, the combination, with a band-saw wheel, of the pipe
5 11, connected to a suitable source of supply and adapted to continuously deliver upon the periphery of said wheel in its rotation a jet or spray of water or other cleansing-liquid, substantially as and for the purpose set forth.

10 3. In a band-saw mill, the combination, with the band-saw wheel 4, of the scraper 14, adapted to bear upon its periphery, and the

pipe 11, connected to a suitable source of supply and adapted to deliver a continuous stream of a cleansing-liquid upon said wheel 15 in front of said scraper, substantially as and for the purposes set forth.

In testimony whereof I have hereunto set my hand this 26th day of October, 1889.

HARRY C. LINDSAY.

In presence of—

T. D. MERWIN,
BESSIE BOOTH.