(No Model.)

D. K. ALLINGTON.

BAND SAW WHEEL.

No. 365,037. Patented June 21, 1887.

Fig. 1.

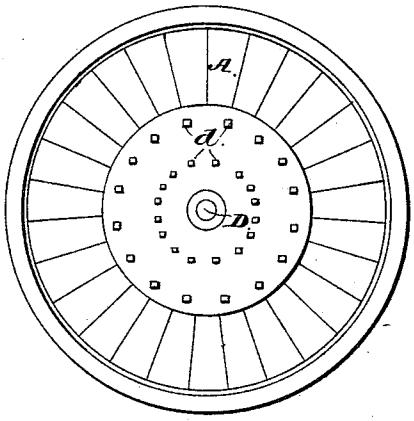


Fig. 2.

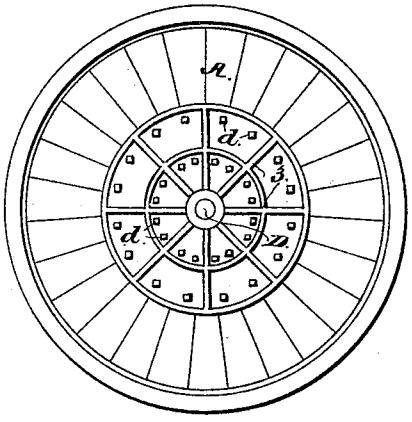


Fig. 3.

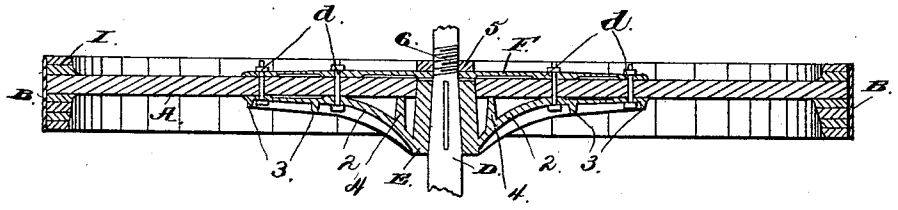
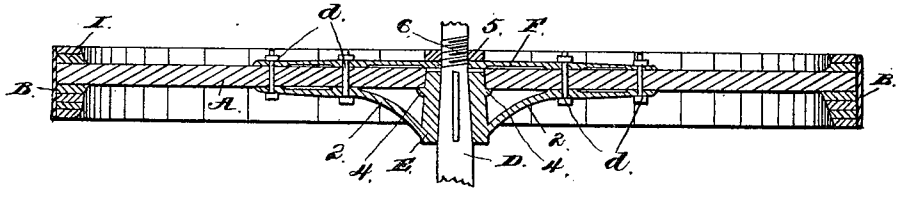


Fig. 4.



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UNITED STATES PATENT OFFICE.

DAVID K. ALLINGTON, OF EAST SAGINAW, MICHIGAN.

BAND-SAW WHEEL.

SPECIFICATION forming part of Letters Patent No. 365,037, dated June 21, 1887.

Application filed February 15, 1886. Serial No. 191,958. (No model.)

To all whom it may concern:

Be it known that I, DAVID K. ALLINGTON, a citizen of the United States, residing at East Saginaw, in the county of Saginaw, State of Michigan, have invented certain new and useful Improvements in Band-Saw Wheels, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to pulleys which are mounted in the standard or column of a band sawing-machine, and over which the endless saw runs when the machine is in operation.

The invention consists in an improved construction of the pulley by which it is strengthened at the points where the greatest strain occurs in operation, and is made of greater weight near the shaft, so that it will run light at the periphery, over which the saw travels.

The general features of the machine include a wooden disk, made of any desired number of radial sections and having a suitably-formed periphery, the ends of these sections abutting against a metallic sleeve keyed to the axle and having a curved flange which is secured to the wooden disk and to an iron strengthening-disk on the opposite side, the wooden disk being thus inclosed between the flange and the metallic disk, and all being bolted together.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a band-pulley constructed in accordance with my invention. Fig. 2 is a side elevation showing a slightly modified form. Fig. 3 is a horizontal section transversely to the axle of the wheel shown in Fig. 2. Fig. 4 is a similar section of the pulley shown in Fig. 1.

The main portion of the wheel is composed of wooden sections A A, placed radially edge to edge. The periphery is formed by a number of annular wooden disks, I, of the number required to give the proper width to the bearing-surface; and a covering, B, of rubber, leather, or analogous material, is secured to them to hold them in place.

D represents the axle of the pulley, to which is secured a metallic taper sleeve, E, by means of a groove and feather. The inner edge of the wooden disk A abuts against this sleeve. Formed with the taper sleeve is a flaring curved flange, 2, which may have external strengthening-ribs, 3 3, Fig. 2, or a smooth face, as in Fig. 1; or the strengthening-ribs may be formed on the inside face of the flange. A stiffening-ring, 4, may be formed integral either with the flange 2, as shown in Fig. 3, or with the taper sleeve E, as in Fig. 4, such ring bearing on the wooden disk A. The flange 2 has a plain circular bearing-surface, which fits closely to one side of the wooden disk, Figs. 3 and 4.

F represents an annular disk slipped over the axle and clamped against the end of the sleeve E by a screw-nut, 5, on a threaded portion, 6, of such axle. The disks A and F and flange 2 are secured solidly together by a number of bolts, *d*. This construction of the wheel not only strengthens and braces the wooden disk at the points where the greatest strain is brought in band-sawing, but also increases the weight near the axle, causing the wheel to run light at the periphery, the desirability of which is well known to those skilled in the art.

Various modifications in the construction of the device may be made without departing from the spirit of my invention.

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

In a band-pulley, the combination of the axle, the sleeve E keyed thereon and having an integral flange, 2, and a stiffening-ring, 4, bearing on the wooden disk A, a flat disk, F, surrounding the axle on the opposite side of the wooden disk and secured to the flange 2 and to the said wooden disk by means of suitable bolts, and a screw clamping-nut for holding the pulley upon the axle, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID K. ALLINGTON.

Witnesses:
L. T. DURAND,
SAMUEL WINSTON.