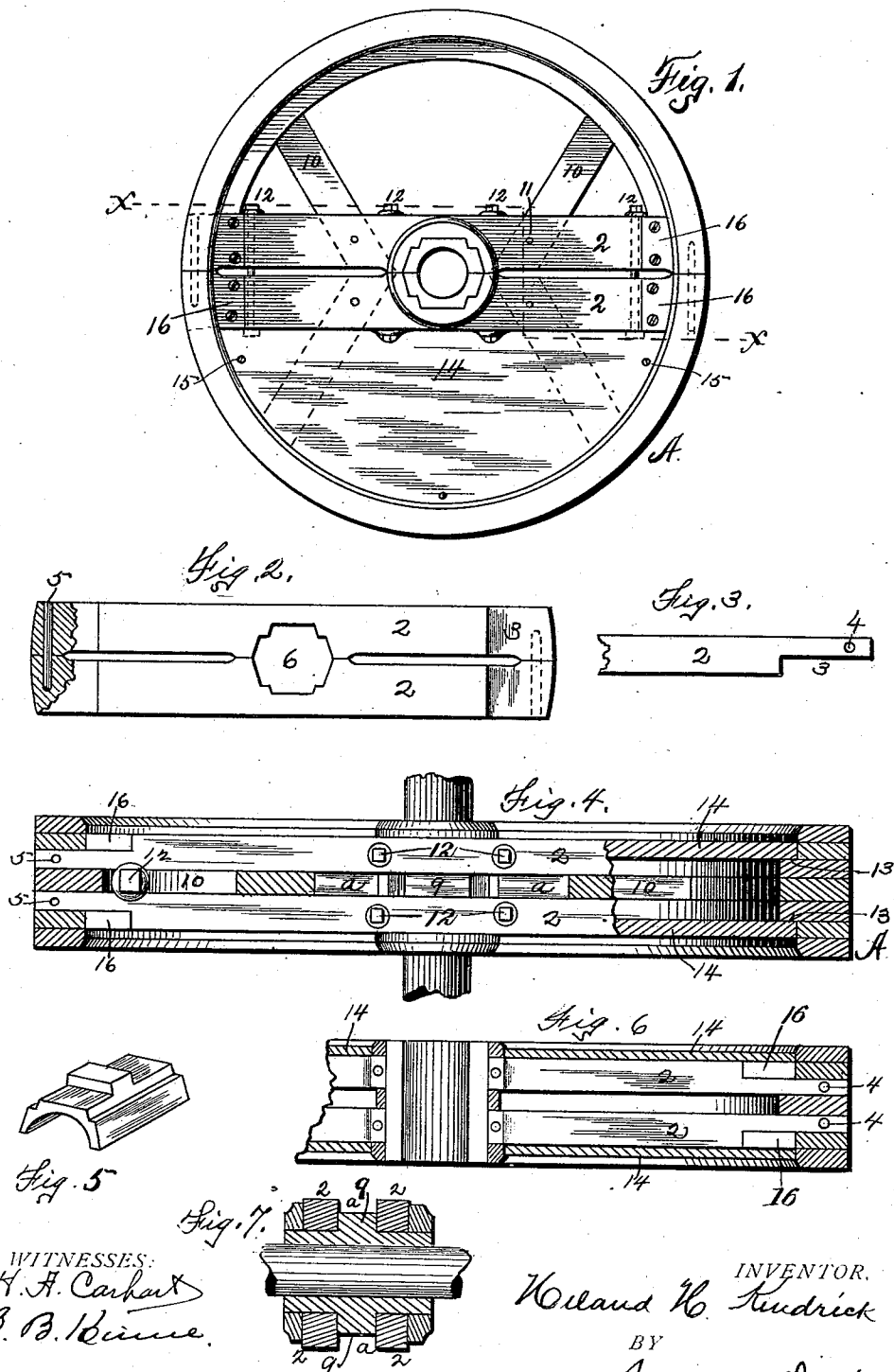


(No Model.)

H. H. KENDRICK.
PULLEY.

No. 473,119.

Patented Apr. 19, 1892.



WITNESSES:
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UNITED STATES PATENT OFFICE.

HILAND H. KENDRICK, OF FULTON, NEW YORK.

PULLEY.

SPECIFICATION forming part of Letters Patent No. 473,119, dated April 19, 1892.

Application filed June 20, 1891. Serial No. 396,939. (No model.)

To all whom it may concern:

Be it known that I, HILAND H. KENDRICK, of Fulton, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Pulleys, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to split pulleys, and my object is to improve the construction thereof in the details hereinafter specifically described; and to that end it consists in the several novel features of construction and operation hereinafter described. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the pulley complete, except that one part of the housing is removed. Fig. 2 is a plan view of the arms of the ends, broken away at one end to show the connecting dowel-pin. Fig. 3 is a side elevation of part of one of the arms, showing how it is rabbeted transversely and the holes to receive the dowel-pin. Fig. 4 is a section taken on line X X, Fig. 1. Fig. 5 is a plan elevation of one of the bushing-sections. Fig. 6 is a diametrical section showing the housing-disks covering the cross-beams and all of the space between the hub and the rim. Fig. 7 is a vertical sectional elevation transverse to the cross-beams and longitudinal to the bushing to show more clearly the space between the cross-beams and the lug upon the bushing-sections fitting into said space on each side.

A is the rim of the pulley, consisting of two equal sections, each section being built up from layers 1 of wood, cut to shape and secured together in the ordinary manner in general, and 2 2 are the cross-beams connecting the ends of the rim-sections, each beam having its outer end rabbeted, as at 3, and a hole 4 bored transversely through the rabbeted portion of said beam, and such rabbeting reduces the end of each beam, so that it is of equal thickness with that of the layers composing the rim, and these beam ends are laid up with their layers and secured between them, their outer extremities being flush with the outer face of the rim and also leaving part of the rabbeted portion within the rim, as will be seen in Figs. 4 or 6. A dowel-pin 5 is secured in each of the holes in each beam in

one section, leaving a projecting point which enters the hole in the beam in the opposite rim-section, and thus these pins operate as guides to bring the rim-sections together properly and also aid in holding them together and prevent lateral displacement of the ends thereof. The cross-beams 2 are arranged parallel to each other, as shown in Fig. 4, leaving a space between them. A bushing-seat 6 is cut in the beams transversely thereto and one-half in the beams of each rim-section, and 7 is a sectional bushing mounted in said seat. Each section of the bushing is rabbeted longitudinally, as at 8, and is further provided with a lug 9, which fits in the transverse recess *a* between the cross-beams and prevents any longitudinal movement of said section in its seat. Braces 10 are provided for each rim-section, having their outer ends laid up and secured in the layers and having their inner ends secured between the cross-beams by pins or bolts 11. These braces are non-radial to the rim-sections and also are not tangential to the shaft or hub of the pulley and also do not bear against the bushing, but do serve the purpose of stiffening and supporting the rim of the pulley and preventing it from being forced out of a true circular form under the strain upon it. The joint between the ends of the layers of the rim-sections may be of any form desired. The inner bolts 12, inserted through the cross-beams, secure the rim-sections together centrally and upon the shaft, and the outer ones hold the ends of the rim-sections together. When so secured together, I place the then incomplete pulley in a lathe, turn off the outer face of the rim, and also turn out upon the inside of the rim a part of the rim-layer next outside of the cross-beams, thus creating a flange 13 around the inner face of each rim-section. I cut such a flange on both sides of the pulley-sections, and in so doing the cutting-tool will pass through the rabbeted portions of the cross-beams, which are left open inside of the rim-layers for this precise purpose. These flanges support the curved edges of the housing-disks 14, which fill or inclose the open spaces between the cross-beams and rim in each section and are there secured removably by screws 15. The rabbets in the cross-beams so left as aforesaid inside of the rim are then

filled by blocks 16, which come up flush with the unrabbeted portions of said beams and abut at one end against the rabbet-shoulder on said beams, and at the other end abut
 5 against the rim-layers. Such flanges are essential in order to support the curved edge of each of the housing-sections, and such flanges can only be made absolutely true by turning off the rim-layer after it is laid up, and it is
 10 essential that the cutting-tool should not strike the cross-beams alone, as they are much thicker than the layers of the rim and are rabbeted down to the same thickness, so that the flanges can be turned by a continuous cut
 15 of the tool. The blocks 16 restore the cross-beams to their full thickness and to substantially the same strength as though they were not rabbeted, at least as far as their ability to stand longitudinal strain is concerned, and
 20 to that end they form shoulders upon the cross-beams, bearing against the rim-layers, thus reinforcing the beams.

What I claim as my invention, and desire to secure by Letters Patent, is—

25 1. A split pulley comprising a sectional

rim, cross-beams rabbeted upon their ends and extending through the rim-sections, flanges upon the inner sides of the rim-sections, housing-disks inclosing the sides of the pulley, a sectional bushing seated in the cross-beams, 30 blocks filling the cross-beam rabbets inside of the rim, and means to secure the sections together, in combination, as set forth.

2. A split pulley comprising a sectional rim, cross-beams rabbeted upon their ends and 35 extending through the rim-sections, dowel-pin guides connecting the ends of the rim-sections, flanges upon the inner sides of said sections, housing-disks inclosing the sides of the pulley, a sectional bushing seated in the 40 cross-beams, blocks filling the cross-beam rabbets inside of the rim, and means to secure the sections together, in combination, as set forth.

In witness whereof I have hereunto set my 45 hand this 8th day of June, 1891.

HILAND H. KENDRICK.

In presence of—

HOWARD P. DENISON,
 C. B. KINNE.