

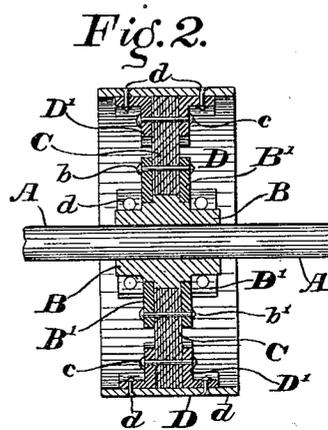
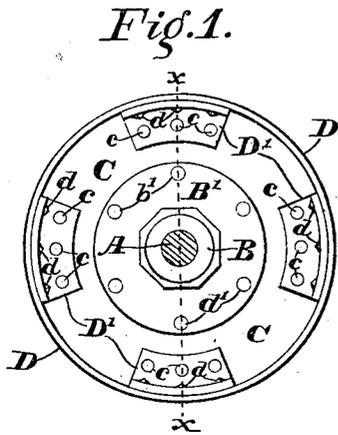
(No Model.)

E. B. MARTINDALE.

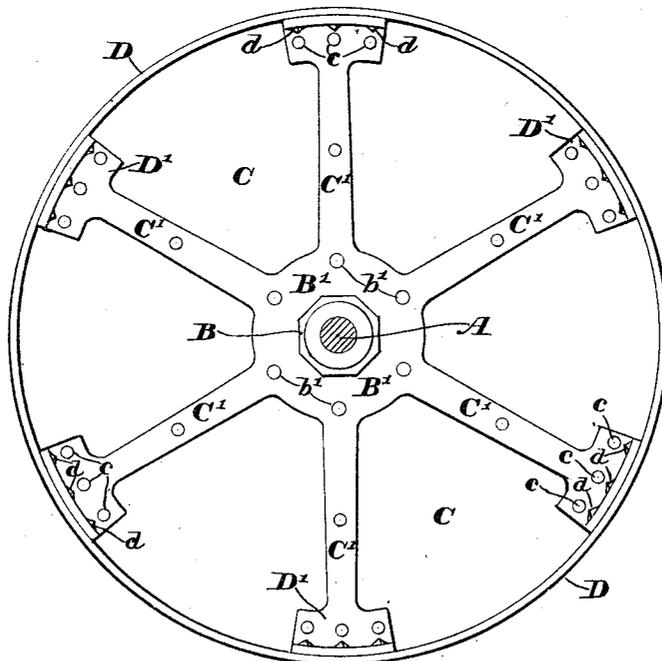
WHEEL OR PULLEY.

No. 266,707.

Patented Oct. 31, 1882.



*Fig. 3.*



WITNESSES.

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# UNITED STATES PATENT OFFICE.

ELIJAH B. MARTINDALE, OF INDIANAPOLIS, INDIANA.

## WHEEL OR PULLEY.

SPECIFICATION forming part of Letters Patent No. 266,707, dated October 31, 1882.

Application filed September 11, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ELIJAH B. MARTINDALE, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Wheels or Pulleys, of which the following is a specification.

My said invention consists in certain improvements in wheels or pulleys, whereby the advantages of both of two materials are combined in a single article, as will hereinafter be more particularly set forth.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of a pulley embodying my said invention; Fig. 2, a central vertical section thereof on the dotted line *xx*; and Fig. 3, a side elevation of a much larger pulley than that shown in Fig. 1, and wherein the construction is modified accordingly.

In said drawings, the portions marked A represent the shaft whereon the wheel or pulley is mounted; B, the hub to said pulley; C, the web thereof, and D the rim.

The web C is constructed of paper, pasteboard, or such like material, which is tough, strong, and light, and is secured upon the hub B by means of flanges B' and bolts or rivets b'.

The rim D is a plain metal hoop, either cast or wrought, and is placed upon the periphery of the web C, where it is secured by angle-pieces D', which are secured to said rim by the bolts or rivets *d* and to the web by the bolts or rivets *c*.

The flanges B' and angle-pieces D' may be connected by stiffening-bars C' in case of a large

wheel, and the whole cast in one piece, as shown in Fig. 3; or the stiffening-bars may be separate from the flanges or angle-pieces, or both, the object being simply to stiffen the web C when from the size of the wheel or pulley it is necessary to do so.

The whole wheel when made is simple and inexpensive in its construction, the cost of the material of which the web is formed being merely nominal, and, especially when the rim D is of wrought-iron, is exceedingly strong and durable. Another desirable feature of this pulley is that it can be made much lighter than an ordinary cast-iron pulley. The rim D may be of very light flat rolled iron. The hub need be only of ordinary weight, and the web, being of much lighter material than iron, contributes to the general result in a marked degree.

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

1. The combination, in a wheel or pulley, of the hub B, the web C, the rim D, and the flanges, angle-pieces, and rivets for securing the same together, substantially as set forth.

2. A combination wheel or pulley consisting of a cast-iron hub, a paper or pasteboard web, a wrought-iron rim, and means for securing said several parts together, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 9th day of September, A. D. 1882.

ELIJAH B. MARTINDALE. [L. S.]

In presence of—

C. BRADFORD,  
E. W. BRADFORD.