(No Model.)

P. MEDART.
Belt Pulley.

No. 238,702. Patented March 8, 1881.

FIG. 1.

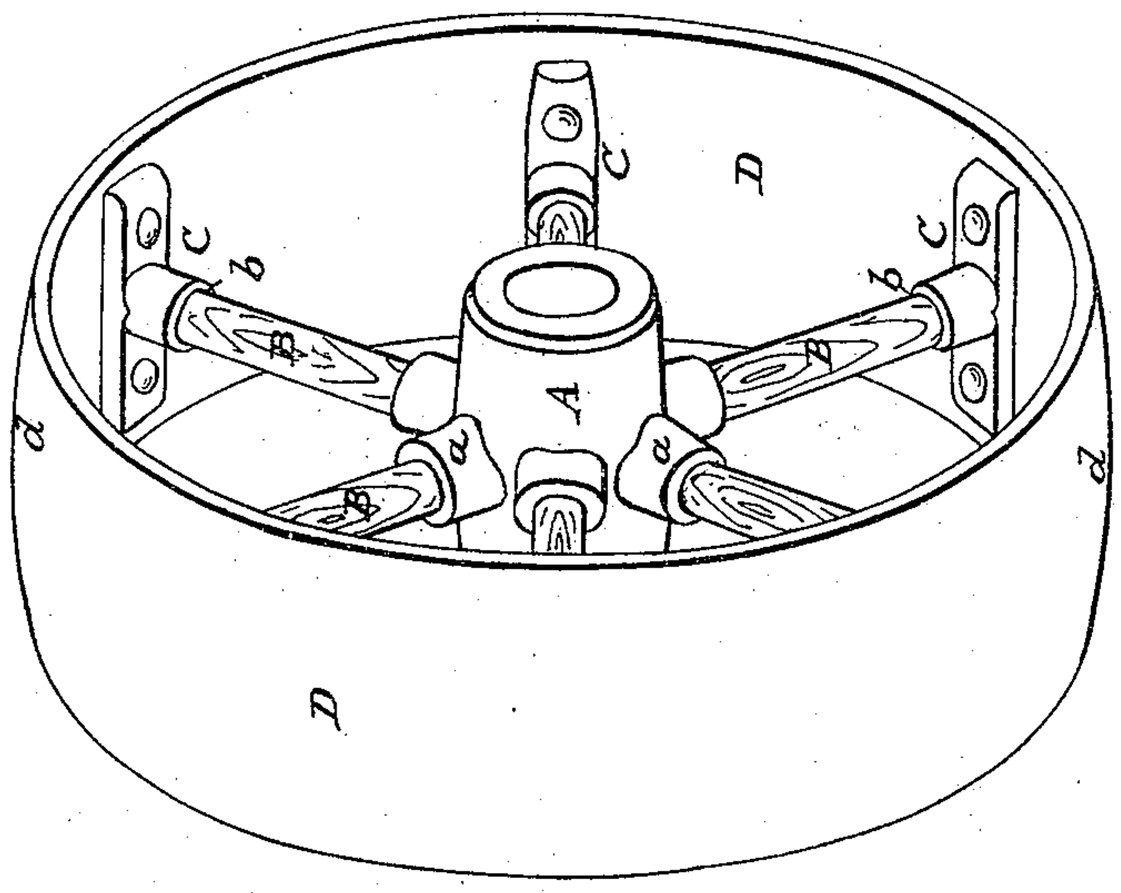
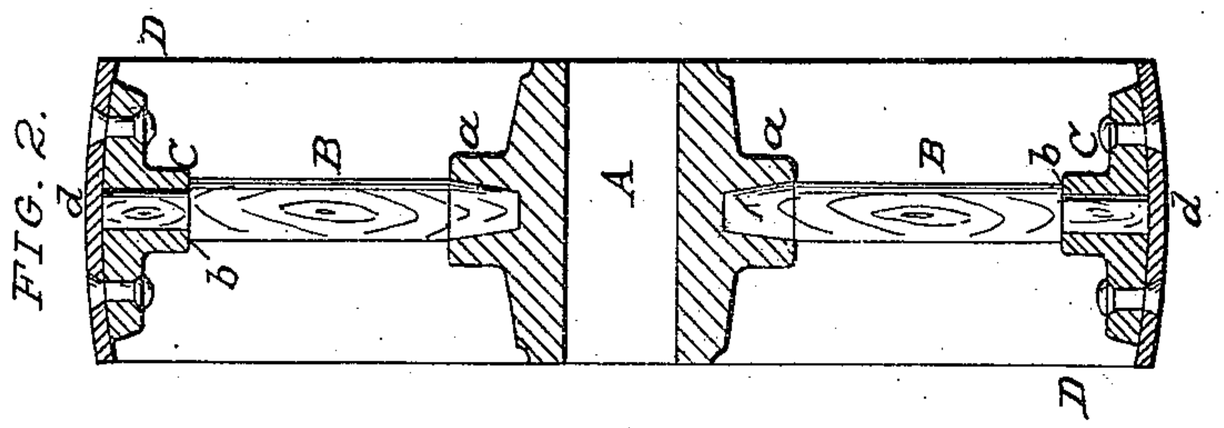


FIG. 2.



ATTEST:

Wm. Medart

Robert Burns

INVENTOR:

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UNITED STATES PATENT OFFICE.

PHILIP MEDART, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO WILLIAM MEDART, OF SAME PLACE.

BELT-PULLEY.

SPECIFICATION forming part of Letters Patent No. 238,702, dated March 8, 1881.

Application filed November 27, 1880. (No model.)

To all whom it may concern:

Be it known that I, PHILIP MEDART, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Belt-Pulleys; and I do hereby declare that the following is a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming a part of this specification, and in which—

Figure 1 is a perspective view, and Fig. 2 is a vertical section.

This invention relates to certain improvements in belt-pulleys, and has for its object, first, the production of a cheap, light, and durable pulley; and, secondly, the production of irregular sizes of pulleys without the necessity of a separate pattern for each size of pulley required; and this invention consists, first, in constructing the usual crown or dish on the rim of wrought-metal rimmed pulleys by bending said rim transversely during the process of manufacture; secondly, the belt-pulley having arms formed of wood, preferably of a cylindrical shape, which at their inner ends rest in sockets cast on the hub, and at their outer ends are provided with bracket-lugs, to which the pin is secured by rivets or other equivalent means.

To enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to more fully describe the same.

A is the hub of the pulley, cast with radial sockets *a* to receive the inner ends of the wooden arms B of the pulley. The recesses in these sockets are preferably of a cone shape, and the ends of the arms are correspondingly shaped so as to fit the same and have a firm and strong bearing.

C are bracket-lugs attached to the outer ends of the arms B, and provided with rivet-holes for the passage of rivets, by means of which the rim D of the pulley is secured in place. The part of the arms B that enters the bracket-lugs is preferably reduced in size, so as to form a shoulder, *b*, on which the lug rests, as clearly indicated in Fig. 2.

The rim D may be of any suitable material—either wrought-iron, steel, or wood—with the bracket-lugs C arranged transversely, as shown, in order to brace and support the edges of the rim and prevent the same from working loose from its attachment, which is liable to occur when the bracket-lugs are not arranged as above set forth.

The crown or dish *d* usual to belt-pulleys is formed on the rim D by bending or dishing the rim during the process of manufacture, preferably at the same time and by means of the same rolls that bend the rim into the required circular shape.

By the use of wood for forming the arms of the pulley, as above set forth, a much lighter and cheaper pulley can be produced than where iron is used for said arms, and yet possess as great strength.

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

1. A wrought-metal rimmed pulley having a crown, *d*, formed on its rim during the process of manufacture, as described, and for the purpose set forth.

2. A belt-pulley provided with wooden arms B, a cast-metal hub, A, having radial sockets *a* and bracket-lugs C, for the attachment of the rim D, as described, and for the purpose set forth.

PHILIP MEDART.

In presence of—
WM. MEDART,
ROBERT BURNS.