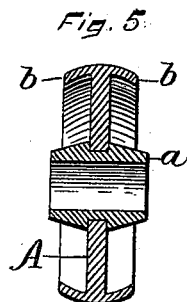
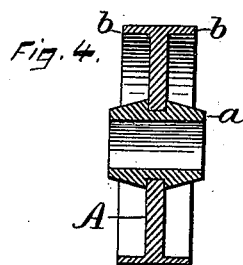
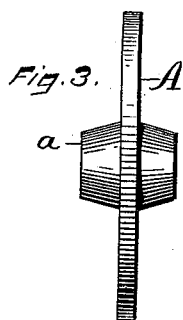
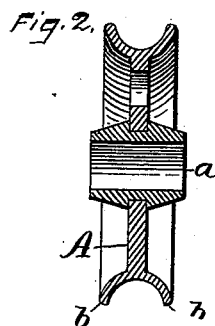
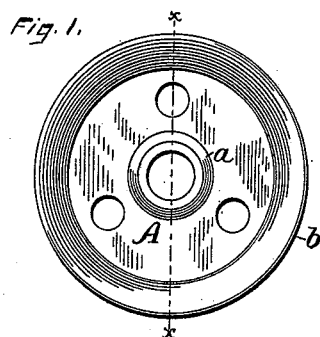


(No Model.)

C. O. CASE.  
WROUGHT METAL PULLEY.

No. 421,669.

Patented Feb. 18, 1890.



Witnesses.  
John Edwards Jr.  
W. H. Whiting

Inventor.  
Cromwell O. Case.  
By James Shepard  
Atty.

# UNITED STATES PATENT OFFICE.

CROMWELL O. CASE, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO P. & F. CORBIN, OF SAME PLACE.

## WROUGHT-METAL PULLEY.

SPECIFICATION forming part of Letters Patent No. 421,669, dated February 18, 1890.

Application filed September 20, 1889. Serial No. 324,480. (No model.)

*To all whom it may concern:*

Be it known that I, CROMWELL O. CASE, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Wrought-Metal Pulleys, of which the following is a specification.

My invention relates to improvements in wrought-metal pulleys and wheels; and the objects of my invention are simplicity of construction, economy in production, and the production of a superior article.

In the accompanying drawings, Figure 1 is a side elevation of my pulley. Fig. 2 is a section thereof on line *x x* of Fig. 1. Fig. 3 is an edge view of the blank from which said pulley is formed, and Figs. 4 and 5 are sections of my pulley or wheel with the periphery of different forms.

I form my pulley of two parts—namely, a central hub *a* and the body portion *A*, to which said hub is secured, and at the outer edge of which body portion the peripheral flanges *b* are formed. The method of making said pulley is the subject of another application, Serial No. 324,477, of even date herewith, and is herein briefly described for the purpose of showing one way by which the pulley may be produced.

The body portion *A* is first cut out in the form of a disk from a piece of sheet metal of uniform thickness. Preferably the central hole is of an angular form. The hub *a* is made with a shouldered portion on one side and a tenon on the other, which tenon is

passed through the central hole in the disk or body-blank and the two firmly united by heading or upsetting the projecting tenon, leaving the hub and body portion in the form shown in Fig. 3. The edge of the disk or body-blank, either before or after the hub is secured, is spread out to form the peripheral flanges *b b*, preferably by spinning, which form may be either a grooved periphery, one form of which is shown in Figs. 1 and 2, the flat form of periphery shown in Fig. 4, or the convex form shown in Fig. 5. In all cases the body portion consists of a single piece of ductile or malleable metal with the integral peripheral flanges wrought thereon. This produces a neat, substantial, and solid pulley or wheel at a small cost.

I claim as my invention—

1. The herein-described pulley or wheel, the body portion of which consists of a single piece of ductile or malleable metal with the integral peripheral flanges wrought thereon, substantially as described, and for the purpose specified.

2. The herein-described pulley or wheel having a body portion consisting of a single piece of ductile or malleable metal with integral peripheral flanges, and a separately-formed central hub secured to said body portion, substantially as described, and for the purpose specified.

CROMWELL O. CASE.

Witnesses:

ALBERT N. ABBE,  
G. E. ROOT.