

(No Model.)

2 Sheets—Sheet 1.

J. WALKER.
PULLEY FOR CABLE RAILWAYS.

No. 414,614.

Patented Nov. 5, 1889.

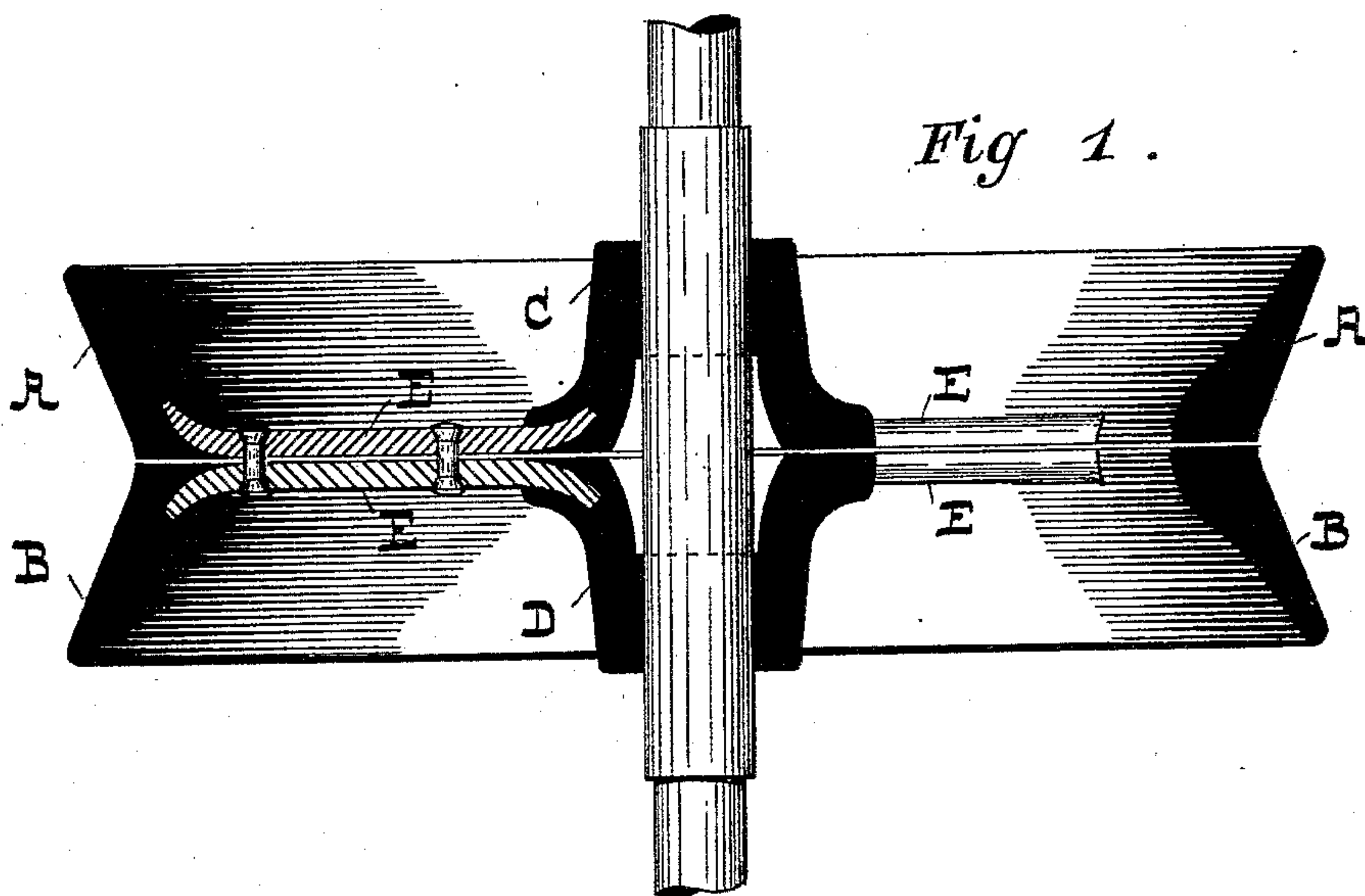
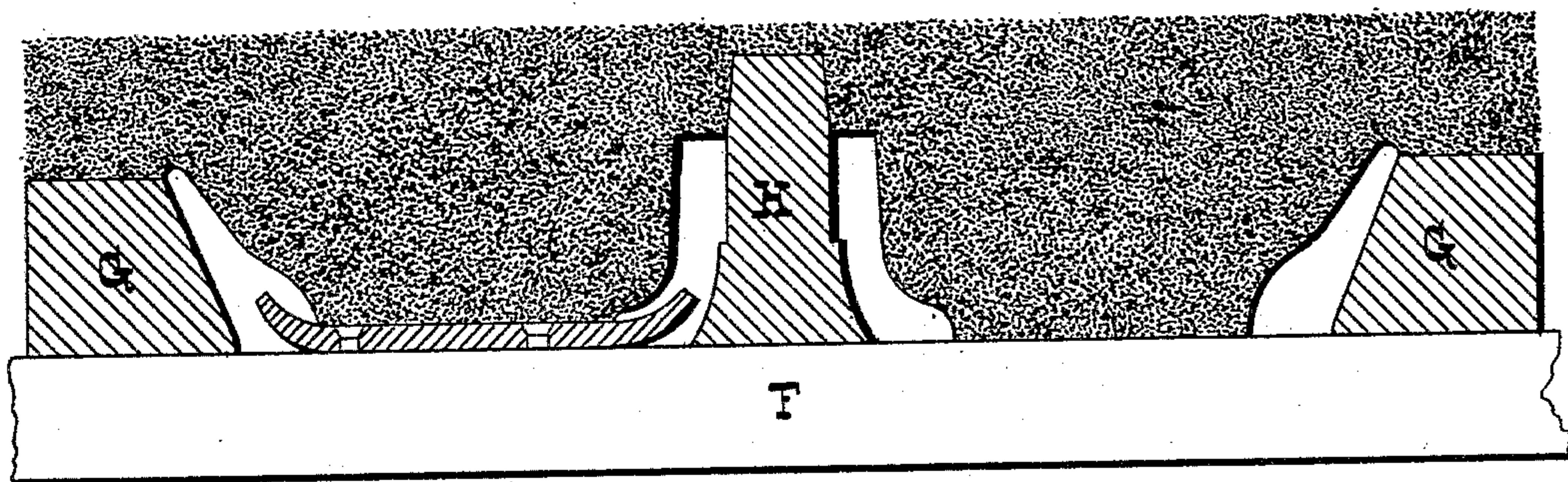


Fig 3.



- WITNESSES -

Dan'l Fisher
R. Hanson Smith

- INVENTOR -

John Walker,
by G. H. Howard,
Atty.

(No Model.)

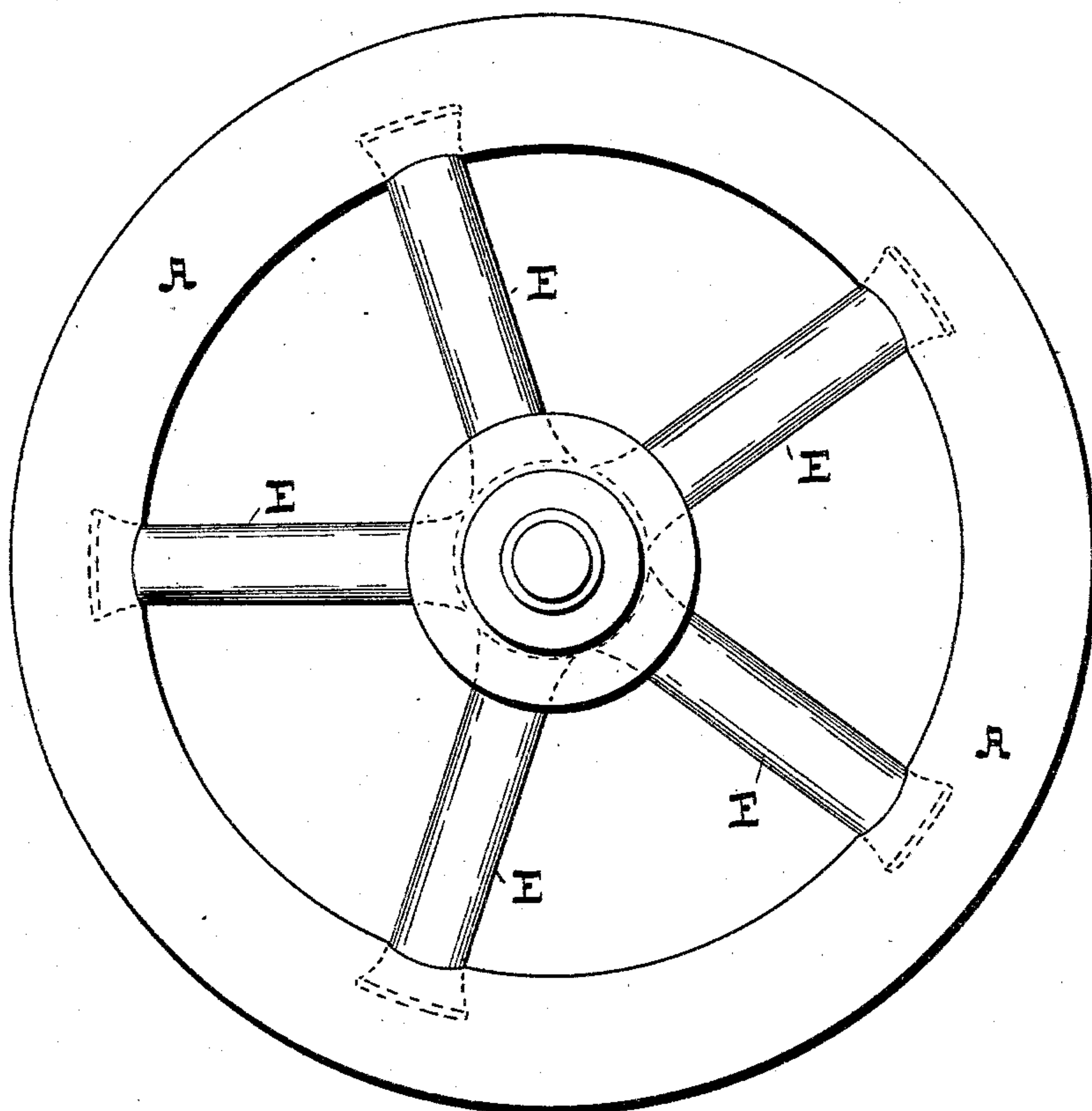
2 Sheets—Sheet 2.

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PULLEY FOR CABLE RAILWAYS.

No. 414,614.

Patented Nov. 5, 1889.

Fig 2.



-WITNESSES-

Dan'l Fisher
William Smith

-INVENTOR-

John Walker
by Wm H. Howard
attys -

UNITED STATES PATENT OFFICE.

JOHN WALKER, OF CLEVELAND, OHIO.

PULLEY FOR CABLE RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 414,614, dated November 5, 1889.

Application filed December 18, 1888. Serial No. 293,979. (No model.)

To all whom it may concern:

Be it known that I, JOHN WALKER, of the city of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain Improvements in Carrier-Pulleys for Cable Railways, of which the following is a specification.

My invention consists in a hollow-faced pulley in halves transversely of its axis and in providing the same with wrought-iron arms which are divided into two parts longitudinally, with their ends turned up, so as to allow the cast metal in the pouring operation to pass under the same, and thereby hold them in place, as will hereinafter fully appear.

In the further description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is a central cross-section of the improved pulley, and Fig. 2 a plan of the same. Fig. 3 is a transverse section of the mold as it would appear after the pattern is withdrawn and with the wrought-iron sections of the arms in place.

Referring to Figs. 1 and 2, A and B are respectively the upper and the lower half of the hollow-faced rim of the pulley, and C and D the upper and the lower half of the hub. The rim and hub of each half-pulley are connected by the wrought-iron sections of arms E, which are provided with rivet-holes for the reception of the rivets which hold the upper and lower sections together. The holes for the rivets need not, however, be in the arms when placed in the mold, but drilled after the two sections of the pulley are placed together. The pulley is shown as provided

with five arms; but I do not restrict myself to this number, or, in fact, to any number; but I generally prefer three arms, as with that number there is less liability of the castings being ruptured in cooling.

Referring to Fig. 3, F is the follow-board, on which the pattern is placed in the beginning of the molding operation. The wrought-iron half-arms are placed in depressions made by prints which form a part of the pattern, and it will be seen that the said arms are reduced in size at the ends and bent upward, so that the melted iron will pass under them and hold them to the rim. I do not, however, in all cases reduce the size of the ends of the arms, as if the thickness of the rim is sufficient there will be enough room under the ends without this expedient.

The flask in which the mold is made is not shown, as it forms no part of the invention.

The chill, which is represented by G, is of annular shape, and in view of the curvature of the face of the half-rim may be easily removed from the casting.

The core for forming the central hole is denoted by H.

I claim as my invention—

A cable-carrying pulley for a cable railway formed of two annular sections secured together, each section having wrought-iron half-arms the ends of which are turned up, so as to allow the cast-iron to pass under them, substantially as and for the purpose specified.

JOHN WALKER.

Witnesses:

JOSEPH W. SMITH,
Z. M. HUBBELL.