

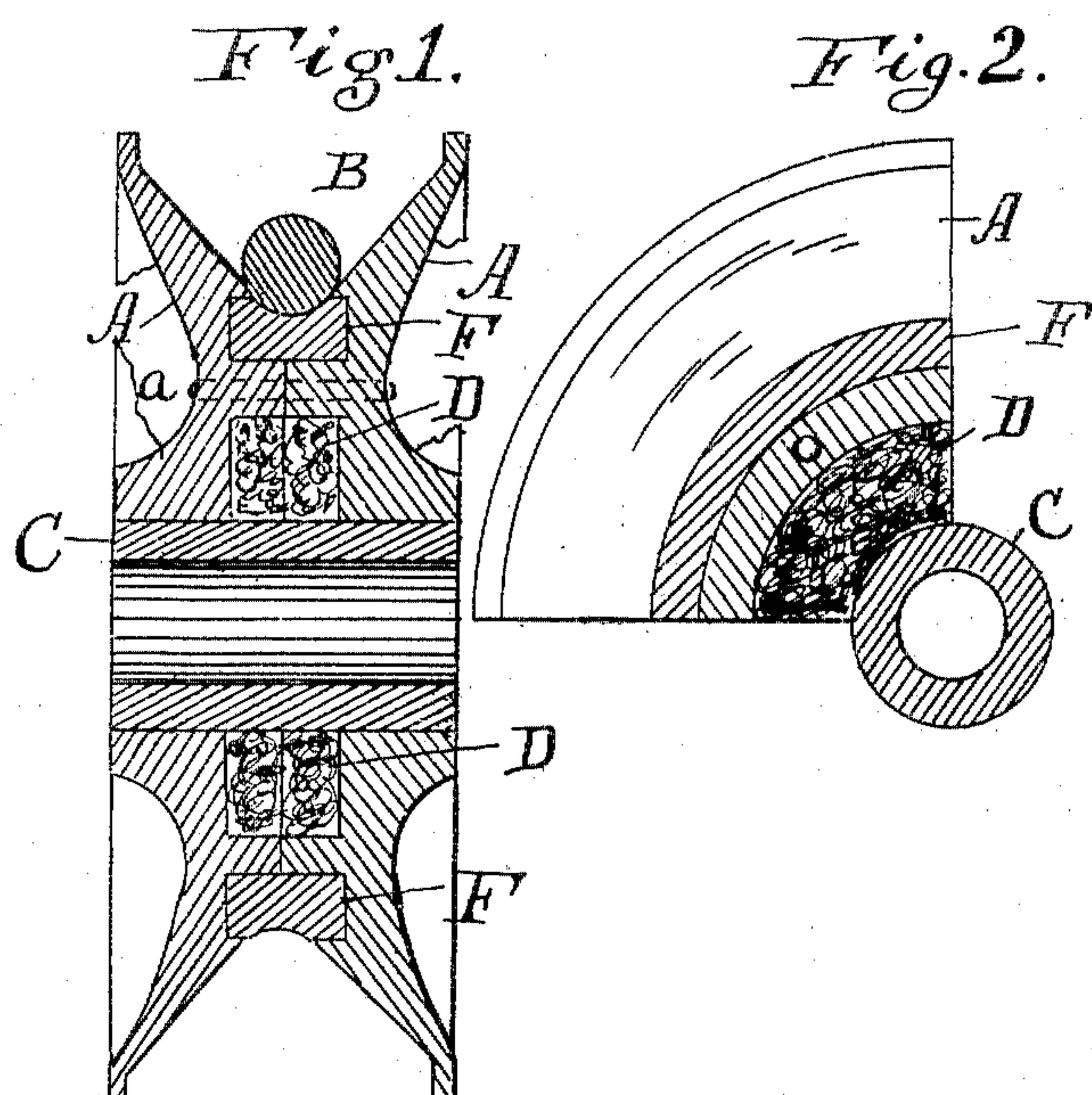
No. 775,847.

PATENTED NOV. 22, 1904.

M. L. MOWRY.  
TROLLEY WHEEL.

APPLICATION FILED MAR. 14, 1904.

NO MODEL.



Witnesses:

Francis H Welch

Alvin T Condon

Inventor:

Miles L Mowry

by S. M. Bates

Att.

## UNITED STATES PATENT OFFICE.

MILES L. MOWRY, OF GREENFIELD, MASSACHUSETTS.

## TROLLEY-WHEEL.

SPECIFICATION forming part of Letters Patent No. 775,847, dated November 22, 1904.

Application filed March 14, 1904. Serial No. 198,093. (No model.)

*To all whom it may concern:*

Be it known that I, MILES L. MOWRY, a citizen of the United States of America, and a resident of Greenfield, Massachusetts, have invented certain new and useful Improvements in Trolley-Wheels, of which the following is a specification.

My invention relates to a trolley-wheel; and the object of the invention is to construct a trolley-wheel which will wear longer than the brass wheels now in common use. These trolley-wheels are subject to rapid wear on account of the rapidity of their motion and the pressure with which they are forced against the trolley-wire, and the brass of which they are generally constructed, while necessary to conduct readily the current of electricity, is soft and easily worn away.

According to my invention I put into the wheel at the base of the groove an annular section of steel or other hard metal capable of resisting the wear, the exposed surface of this section being narrower than the diameter of the trolley-wire, so that the wire will at all times have a contact with the brass of the wheel, while the steel section will get the most of the wear, as it receives the direct thrust of the wire.

I illustrate my invention by means of the accompanying drawings, in which—

Figure 1 is a vertical cross-section through my trolley-wheel, and Fig. 2 is a portion of a central section at right angles to the axis of the wheel.

The wheel is made up of two halves A, fastened together by pins or rivets *a*.

C represents the bushing. D represents felt washers saturated with oil for lubricating, these features having nothing to do with my invention.

An annular section F, of steel or other hard metal, is held in grooves formed in the two halves A at the base of the groove or channel in which runs the wire B. The exposed surface of this steel ring forms the bottom of the groove, and it is less in width than the diameter of the wire, so that the latter has at all times contact with the brass of the wheel, and the current is readily conducted to the motor. As the steel section forms the bottom of the groove, it receives the greatest amount of wear, and as a consequence the wheel as a whole wears much longer than the solid brass or composition wheel, as the steel wears away much more slowly than the composition. It is obvious that the steel section may be inserted in a variety of ways other than that here shown.

I claim—

1. The herein-described trolley-wheel having an annular section of steel or other hard metal at the bottom of the groove with an exposed surface narrower than the diameter of the trolley-wire.

2. The herein-described trolley-wheel made in two halves fastened together and having an annular recess in each half at the base of the groove and an annular section of steel or other hard metal fitting said annular recess and having an exposed surface in the base of the groove narrower than the diameter of the trolley-wire.

Signed at Greenfield, Massachusetts, this 29th day of February, 1904.

MILES L. MOWRY.

Witnesses:

FRANCIS H. WELCH,  
ALVIN T. CONDON.