(No Model.)

W. E. & W. M. WINBY.

CABLE TRAMWAY PULLEY.

No. 425,282. Patented Apr. 8, 1890.

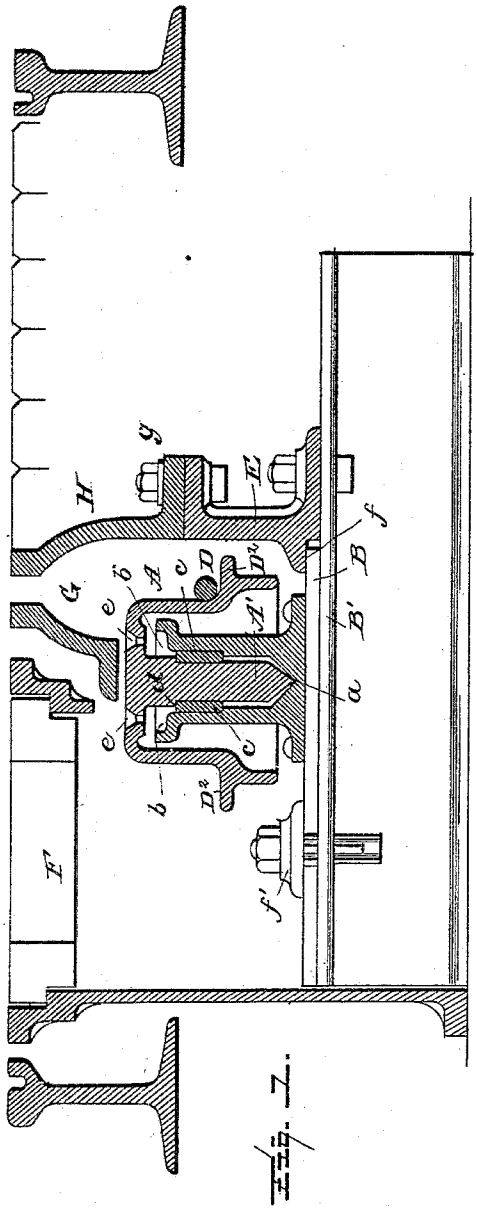


Fig. 1.

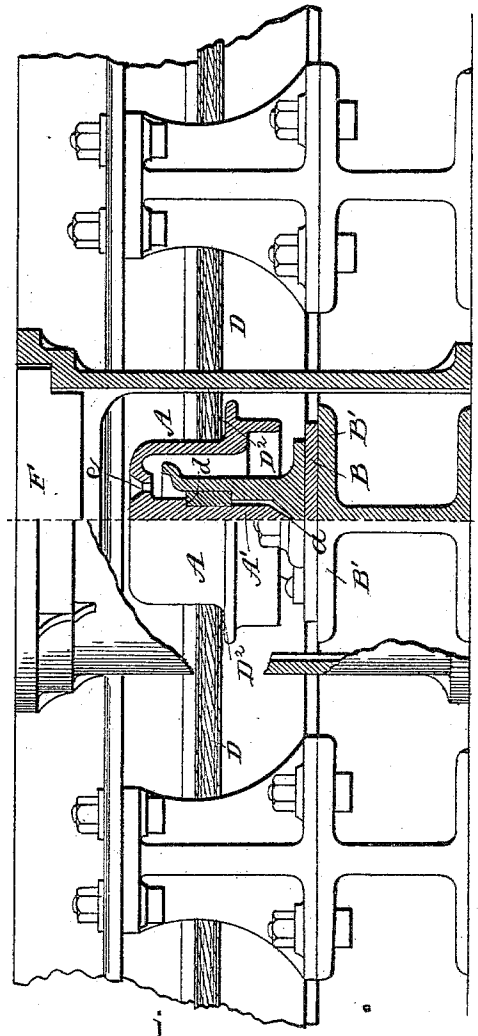


Fig. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM EDWARD WINBY AND WILLIAM MARSTON WINBY, OF BIRMINGHAM, COUNTY OF WARWICK, ENGLAND.

CABLE-TRAMWAY PULLEY.

SPECIFICATION forming part of Letters Patent No. 425,282, dated April 8, 1890.

Application filed November 25, 1889. Serial No. 331,532. (No model.) Patented in England August 18, 1887, No. 11,277.

To all whom it may concern:

Be it known that we, WILLIAM EDWARD WINBY and WILLIAM MARSTON WINBY, subjects of the Queen of Great Britain, and residents of Birmingham, in the county of Warwick, England, have invented certain new useful Improvements in Cable Tramways, (for which we have obtained a patent in Great Britain, No. 11,277, dated August 18, 1887,) of which the following is a full, clear, and exact specification thereof.

This invention relates to certain new and useful improvements in cable tramways; and it has for its object to provide an improved pulley for carrying the cable round the curved parts of cable-tramway lines.

The novelty resides in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical section illustrating our invention. Fig. 2 is a side view, partly in horizontal section.

Like letters of reference indicate like parts in both views.

Referring now to the details of the drawings by letter, A designates the bell-pulley, made of cast-steel and having the sectional figure represented. The said pulley is turned perfectly true on the outside or bearing part for the cable to work upon, and is provided with an internal stalk or spindle A′, with a central point or bearing at the bottom in the socket *a*, bolted or riveted to the iron base-plate B on the girder B′. The upper end of this socket *a* is shaped to form an oil cup or chamber *b*. Within this socket is a bearing or bushing *c* for the shoulder *d* of the stalk A′ of the capstan.

D is the cable, supported on the annular ledge D^2 of the bell-pulley. The top of the pulley is provided with oil-feeding holes *e*, through which oil is fed to the oil cup or chamber in the socket. One end of the base-plate B passes under a lug *f* on the girder E and the other end is secured to the girder B′ by means of a bolt and clamp, as at *f*′. F is a man-hole over the said bolt, and it has such a diameter as to admit of the bell-pulley passing through it for examination and repairs. To effect the removal, the bolt *f*′ is released, when the pulley can be drawn backward under the said man-hole, the end of the base-plate coming out from under the lug on the girder.

G is the tube, supported as shown, and a pillar is bolted to the girder at *g* to support the side piece H of the cable-tube.

The bell shape of the pulley, arranged as shown, keeps the dirt and water from the bearing and forms a very simple and efficient means for carrying the cable around the curved parts.

What we claim as new is—

1. The combination, with the socket, of the bell-shaped pulley having an internal stalk stepped in said socket, substantially as described.

2. The combination, with the socket formed with an oil-chamber at its upper end, of the bell-shaped pulley having an internal stalk stepped in said socket and provided at its top with oil-feeding holes, substantially as shown and described.

3. The combination, with the socket formed with an oil-chamber at its upper end, of a bushing in said socket and the bell-shaped pulley stepped in said socket, and provided at its upper end with oil-feeding holes, and with a shoulder bearing on the top of said bushing, substantially as described.

4. The combination, with the girder having a lug, as shown, of the base-plate held at one end beneath said lug, the pulley carried by said base-plate, and a removable fastening for the other end of said base-plate beneath the man-hole, substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands this 11th day of April, 1889.

WILLIAM EDWARD WINBY.
WILLIAM MARSTON WINBY.

Witnesses:
M. A. FITLER,
T. E. FORSYTH.