B. D. TURNER.

ROLLER.

APPLICATION FILED MAR. 6, 1909.

924,402.

Patented June 8, 1909.

Fig. 1.

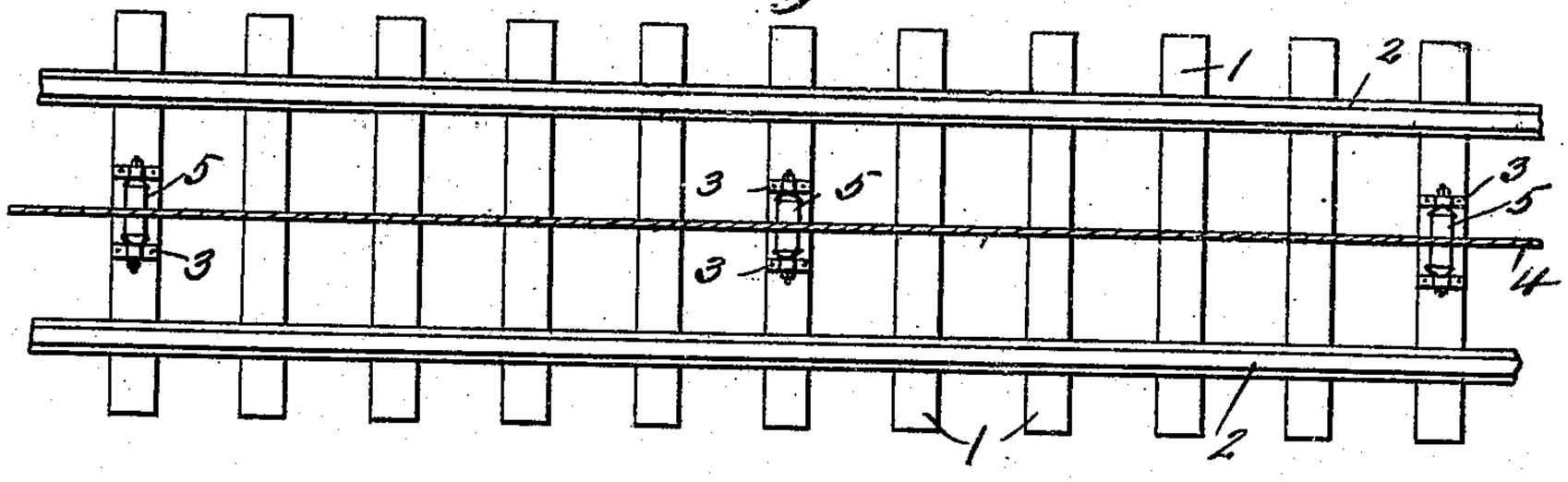


Fig. 2.

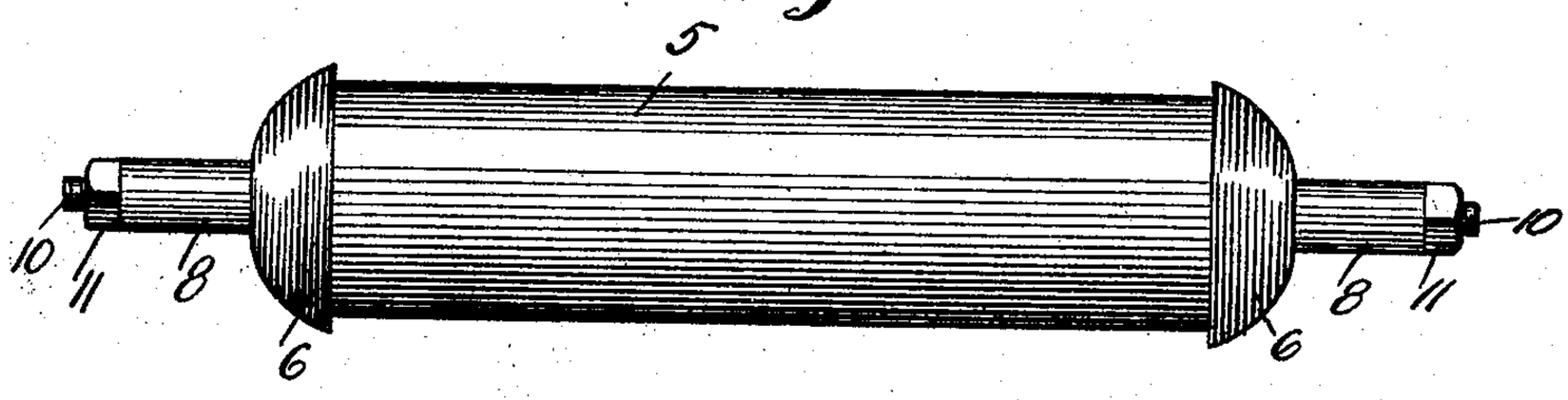


Fig. 3.

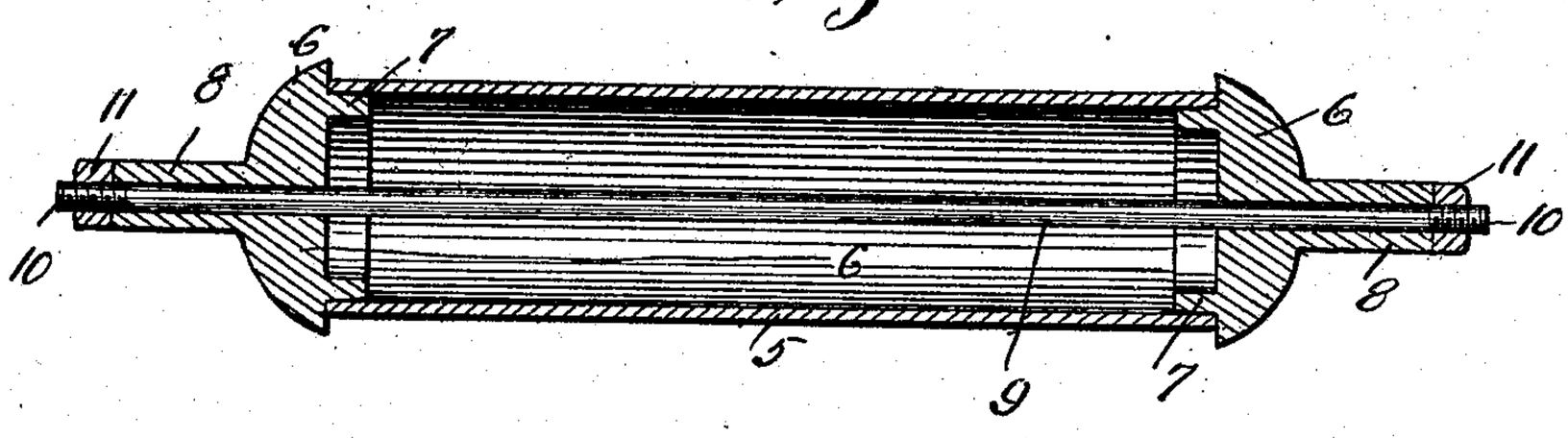
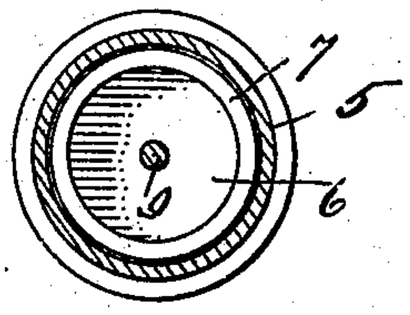


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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ROLLER.

No. 924,402. Specification of Letters Patent. Patented June 8, 1909.

Application filed March 6, 1909. Serial No. 481,659.

To all whom it may concern:

Be it known that I, BYRON D. TURNER, a citizen of the United States of America, residing at Elwood City, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in Rollers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rollers for cables, and more particularly to that type of roller commonly used in mines, quarries and similar underground compartments and entries, where cars are hauled by the cable system, it being necessary to provide a revoluble bearing for the cable to reduce friction and prevent obstructions from interfering with the movement of the cable.

The object of the invention is to provide a metallic roller which will withstand the wear and tear to which mine rollers are subjected by wire cables passing over the same.

Another object of this invention is to provide a metallic roller consisting of comparatively few parts easily and quickly assembled to provide a strong and durable structure.

The above objects are attained by a roller that will be hereinafter described in detail and then specifically claimed, and reference will now be had to the drawing forming a part of this application, wherein there is illustrated the preferred embodiments of the invention, but I would have it understood that the detail construction thereof can be varied or changed without departing from the spirit and scope of the invention.

Referring to the drawings:—Figure 1 is a plan of a portion of a track equipped with my rollers, Fig. 2 is an enlarged elevation of a detached roller, Fig. 3 is a longitudinal sectional view of the same, and Fig. 4 a cross sectional view.

The reference numeral 1 designates ties supporting rails 2, and between the rails 2 are arranged parallel bearings 3, said bearings being secured to the ties 1 and located at sufficient intervals for revoluble rollers adapted to support a cable 4.

5 designates a cylindrical metallic sleeve or cylinder having the ends thereof provided with semi-spherical heads 6, each head having a tapering annular flange 7 adapted to fit in the end of the sleeve 5. The outer ends of the semi-spherical heads 6 are provided with hubs 8 and extending through said hubs and longitudinally of the sleeve 5 is a tie bolt 9 having the ends thereof threaded, as at 10, for nuts 11. These nuts are employed in connection with a tie bolt 9 for locking heads 6 in engagement with the ends of the sleeve 5, thereby providing a cylindrical roller having semi-spherical or rounded ends, with hubs adapted to be revolubly supported in bearings 3.

The sleeves 5 can be easily and quickly renewed when worn by a wire cable and can be made of a different metal from the hubs 6, preferably of a more durable nature.

It is apparent that the rollers can be used upon inclines and as bearings for cables used in connection with various structures.

Having now described my invention what I claim as new, is:—

1. In a roller for cables, the combination with bearings, of a metallic sleeve, semi-spherical heads, annular tapering flanges carried by said heads and adapted to fit in the ends of said sleeve, hubs carried by said heads and adapted to be supported by said bearings, tie rods extending through said hubs and longitudinally of said sleeve, and nuts screwed upon the ends of said tie rods for retaining said heads in engagement with said sleeve.

2. A roller for cables, comprising a metallic sleeve, semi-spherical heads, annular tapering flanges carried by said heads and extending into the ends of said sleeve, hubs carried by said heads, and tie rods extending longitudinally of said sleeve for holding said heads in engagement with the ends thereof.

In testimony whereof I affix my signature in the presence of two witnesses.

BYRON D. TURNER.

Witnesses:
MAX H. SROLOVITZ,
A. J. TRIGG.