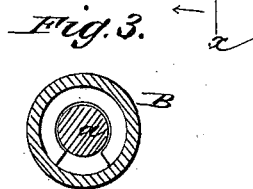
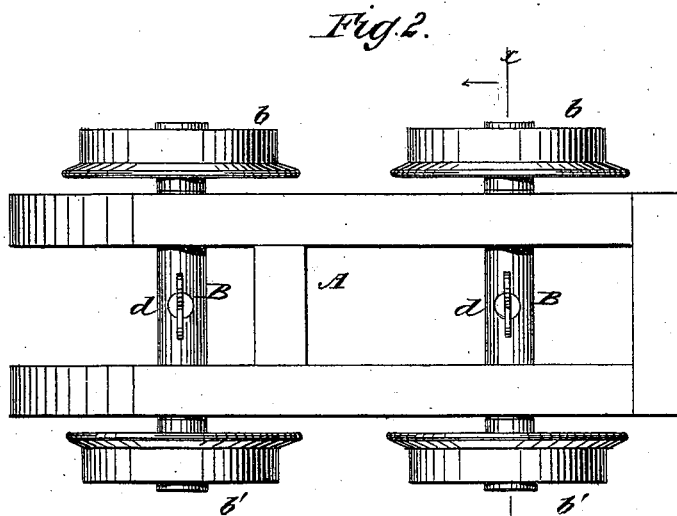
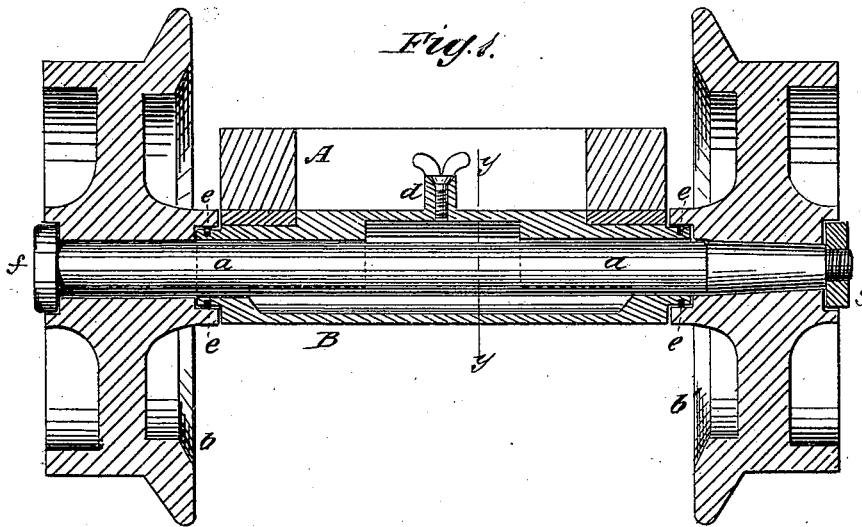


W. McCASKILL & A. J. MEINHARD.  
Mining Car Truck.

No. 211,758.

Patented Jan. 28, 1879.



WITNESSES:

*Francis McArdle.*  
*C. Sedgwick*

INVENTOR:

*W. McCaskill*  
*A. J. Meinhard*  
BY *Munn & Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WILLIAM McCASKILL AND ANDREW J. MEINHARD, OF VIRGINIA CITY, NEV.

## IMPROVEMENT IN MINING-CAR TRUCKS.

Specification forming part of Letters Patent No. **211,758**, dated January 28, 1879; application filed April 13, 1878.

*To all whom it may concern:*

Be it known that we, WILLIAM McCASKILL and ANDREW J. MEINHARD, of Virginia City, in the county of Storey and State of Nevada, have invented a new and Improved Mining-Car Truck, of which the following is a specification:

Figure 1 is a transverse section of our improved car-truck, taken on line *xx* in Fig. 2. Fig. 2 is a plan view. Fig. 3 is a detail transverse section of the axle and the box, taken on line *yy* in Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawings, and then pointed out in the claim.

Referring to the drawings, A is a truck-frame, to which two axle-boxes, B, are secured. These boxes are each of sufficient length to inclose all of the axle *a* between the two car-wheels *b b'*, and are chambered to form a receptacle, *c*, for oil.

In the top of the box there is a screw-plugged aperture, *d*, for filling purposes, and each end of the box is turned off concentric with the bore of the box and grooved circumferentially to receive a leather packing-ring, *e*. The axle

*a* has upon one end a collar, *f*, and is tapered and provided with a nut, *g*, at the other end.

Upon the collar end of the axle a car-wheel, *b*, is placed, and turns loosely thereon. Upon the tapered end of the axle is placed a car-wheel, *b'*, which turns only with the axle.

Both of the car-wheels are conterbored to receive the ends of the axle-box B, and the packing-ring *e* forms an oil-tight joint between the box and the wheel.

By means of our improvement the truck may be drawn around sharp curves without sliding the wheels, as they will turn independently, and the improved axle-box protects the journals from dust, and contains oil, which constantly lubricates the axle.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The car-axle *a*, having a tapered end and collar *f*, and the loose car-wheel *b* and fixed car-wheel *b'*, in combination, substantially as shown and described.

WILLIAM McCASKILL.

ANDREW JACKSON MEINHARD.

Witnesses:

L. T. COWIE,  
JOHN CRAMSY.