

(No Model.)

L. HEYNEMANN.
CABLE STREET RAILWAY.

No. 419,992.

Patented Jan. 21, 1890.

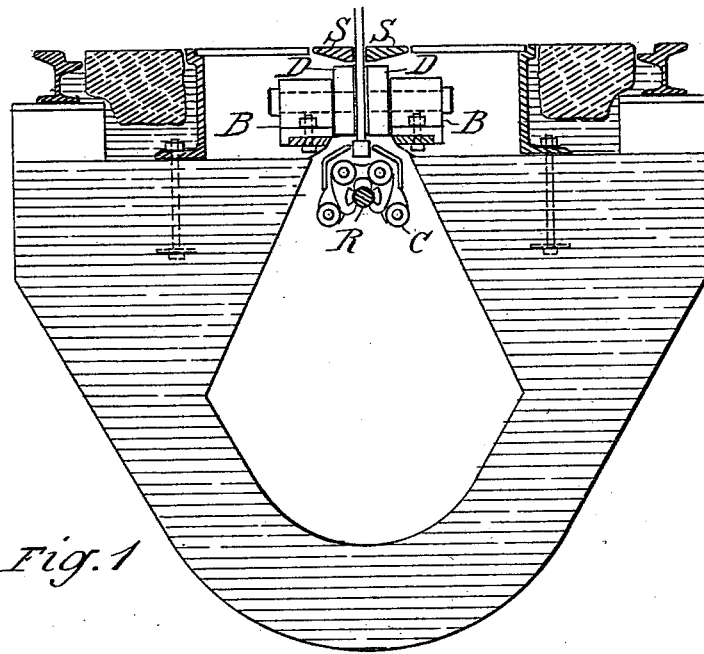


Fig. 1

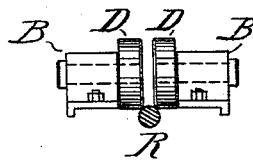


Fig. 2

Witnesses:
Geo. W. Smith
Dimo Lynch

Inventor:
Lionel Heynemann.

UNITED STATES PATENT OFFICE.

LIONEL HEYNEMANN, OF SAN FRANCISCO, CALIFORNIA.

CABLE STREET-RAILWAY.

SPECIFICATION forming part of Letters Patent No. 419,992, dated January 21, 1890.

Application filed November 4, 1889. Serial No. 329,153. (No model.)

To all whom it may concern:

Be it known that I, LIONEL HEYNEMANN, a citizen of the United States, residing in the city and county of San Francisco, and State of California, have invented a new and useful Improvement in Cable Street-Railways, of which the following is a specification.

My invention relates to improvements in the mechanism designed to hold the cable down at changes of grade and commonly known as "depression - pulleys." To pass these pulleys the cable was originally run on one side of the center line of the slot, and the grip designed L-shaped, so that the grip-shank could clear the depression-pulleys on one side. In later cable railways the cable was placed in the center line of the slot and a so-called "center grip" employed, the depression-pulleys also, of course, being placed in the center line. These pulleys were journaled on movable frames, which were automatically thrown to one side by the grip-shank and brought back into position by a weight or spring in time to receive the cable.

My invention is designed to do away with such movable frames, and to make the use of stationary depression-pulleys possible, in combination with the use of the center grip. This I accomplish by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a section through the road-bed, showing the grip; and Fig. 2, the pair of depression-pulleys by themselves.

The depression-pulleys D D are arranged one on each side of the slot-irons S S, and are journaled in stationary boxes B B. Preferably these boxes are bolted each to a cast-iron

trap with a cover, to afford easy access from the street. The space between the pulleys is wide enough for passage of the grip-shank, and restricted as much as possible to obtain sufficient bearing-surface for the cable R. It is not essential to place them opposite each other; but they must be spaced close enough to prevent the cable drawing up clear of the pulleys.

The method of operation is as usual. The cable is borne vertically downward by the grip C, and draws up into place again after the grip has passed; but in the meanwhile the pulleys have not moved laterally.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In cable railways using a center grip, the stationary depression-pulleys D D, in combination with the cable, for the purpose described.

2. In cable railways, a pair of stationary depression-pulleys D D, one on each side of the slot, in combination with the cable, for the purpose described.

3. In cable railways, the stationary depression-pulleys on alternate sides of the slot, for the purpose described.

4. In cable railways, the combination of depression-pulleys D D, with their stationary boxes B B on alternate sides of the slot, substantially as described, and for the purpose set forth.

LIONEL HEYNEMANN.

Witnesses:

ALEXANDER HEYNEMANN,
OTTO HEYNEMANN.