No. 769,998. PATENTED SEPT. 13, 1904.

A. D. FOOTE.

GRAVITY TRAMWAY BLOCK.

APPLICATION FILED JULY 5, 1904.

NO MODEL.

Fig. 1.

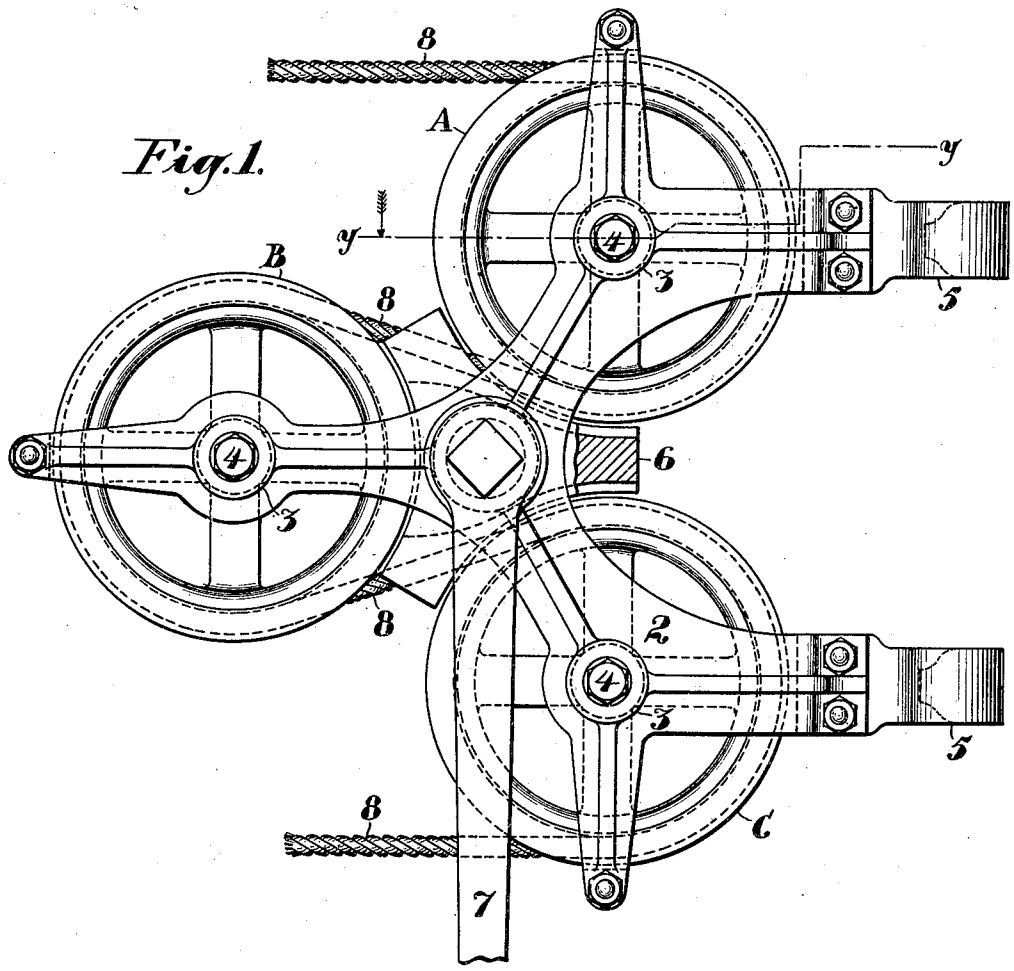
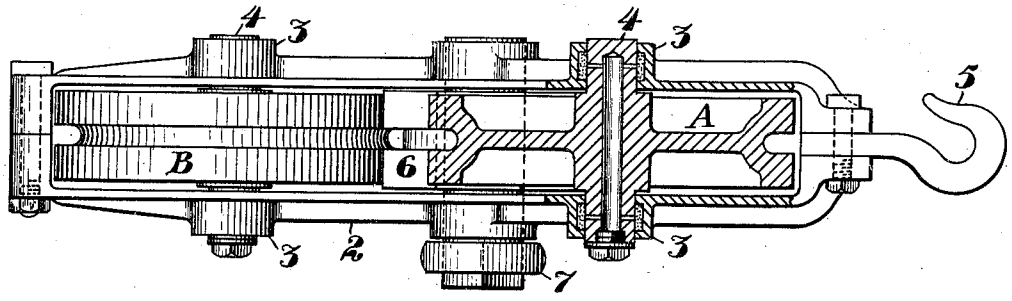


Fig. 2.



Witnesses:-
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By Geo. H. Strong. Atty

No. 769,998. Patented September 13, 1904.

UNITED STATES PATENT OFFICE.

ARTHUR D. FOOTE, OF GRASS VALLEY, CALIFORNIA.

GRAVITY-TRAMWAY BLOCK.

SPECIFICATION forming part of Letters Patent No. 769,998, dated September 13, 1904.

Application filed July 5, 1904. Serial No. 215,379. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR D. FOOTE, a citizen of the United States, residing at Grass Valley, in the county of Nevada and State of California, have invented new and useful Improvements in Gravity-Tramway Blocks, of which the following is a specification.

My invention relates to a pulley-block and brake attachment adapted for use upon gravity and like tramways.

It consists in combination of mechanism and in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a side view of my invention. Fig. 2 is a section on line *y y* of Fig. 1.

The object of my invention is to provide a means for regulating the speed upon inclined tramways where a loaded car connecting with one end of a rope pulls an empty car up while itself is going down.

As herein shown, my invention consists of three pulleys A, B, and C, mounted in a triangular frame 2, and this frame has suitable equidistant boxes, as at 3, within which the journals 4 of the pulleys are turnable. The peripheries of the pulleys are grooved and adapted to receive a wire or other rope of any required size for the work to be done. The frame or yoke in which the pulleys are journaled is provided with hooks or attachments, as at 5, by which it may be fixed at the head of the incline upon which the apparatus is to be used. In the space between the three pulleys is pivoted a brake-block 6, having three curved faces adapted to contact with the peripheries of the pulleys. The faces of the brake-block are grooved to correspond with the grooves in the pulleys, and the outer portions of the brake-block upon each side of the groove are adapted to press simultaneously against the edges of the pulleys upon each side of the grooves in which the rope travels, so that when in operation the brake may be applied without any danger of injury to the rope.

The fulcrum-shaft upon which the brake-block is mounted has one end projecting sufficiently outside of the frame to receive a lever 7, which is fixed to it, and by this lever the brake may be actuated.

The operation of the device will then be as follows: The apparatus is first secured to a timber or holding device of any sort at the upper end of the incline, and the rope 8 passes over the upper and lower pulley and thence around the intermediate pulley, as shown, thus producing sufficient friction to prevent any slip of the rope. The ends of the rope passing from the upper and lower pulleys extend down to and are connected with the cars, and the rope has sufficient length so that when one car has reached the bottom of the incline the other car will have reached the upper end. The loaded car being brought to the upper end of the incline is hooked onto one end of the wire rope and started down the incline. The other end of the rope being fast to an empty car at the bottom of the incline, the loaded car would bring the empty car up; but in order to control the movement and prevent too great a speed of the loaded car the brake herein described is applied, and as its pressure is substantially equal upon all the sheaves or pulleys the movements of the cars may be very perfectly controlled.

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

1. A pulley-block and brake device consisting of a frame or yoke, grooved pulleys journaled at equal intervals apart in said yoke, a rope passing around the pulleys, a brake located between and having grooved faces corresponding with the peripheries of the pulleys, and means for turning said brake.

2. A gravity-tramway pulley-block consisting of grooved pulleys journaled equidistant from each other and from a common center, said pulleys having frictional surfaces exterior to the grooves, a rope passing around the pulleys and having its ends connected with a load, a curved-face triangular brake-block pivoted between the pulleys having frictional faces corresponding with those of the pulleys and a lever by which said block may be turned into contact with the pulley-faces simultaneously.

3. A plurality of pulleys, a rope passing alternately over and under said pulleys to counteract slip, a brake-block located between the pulleys and with faces corresponding with the peripheries of the pulleys, and means whereby said faces may be simultaneously applied to the pulleys.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ARTHUR D. FOOTE.

Witnesses:
A. J. ARGALL,
FRED MORGAN.