

No. 805,644.

PATENTED NOV. 28, 1905.

B. V. GILMORE.

RAIL BRAKE.

APPLICATION FILED MAY 15, 1905.

Fig. 1.

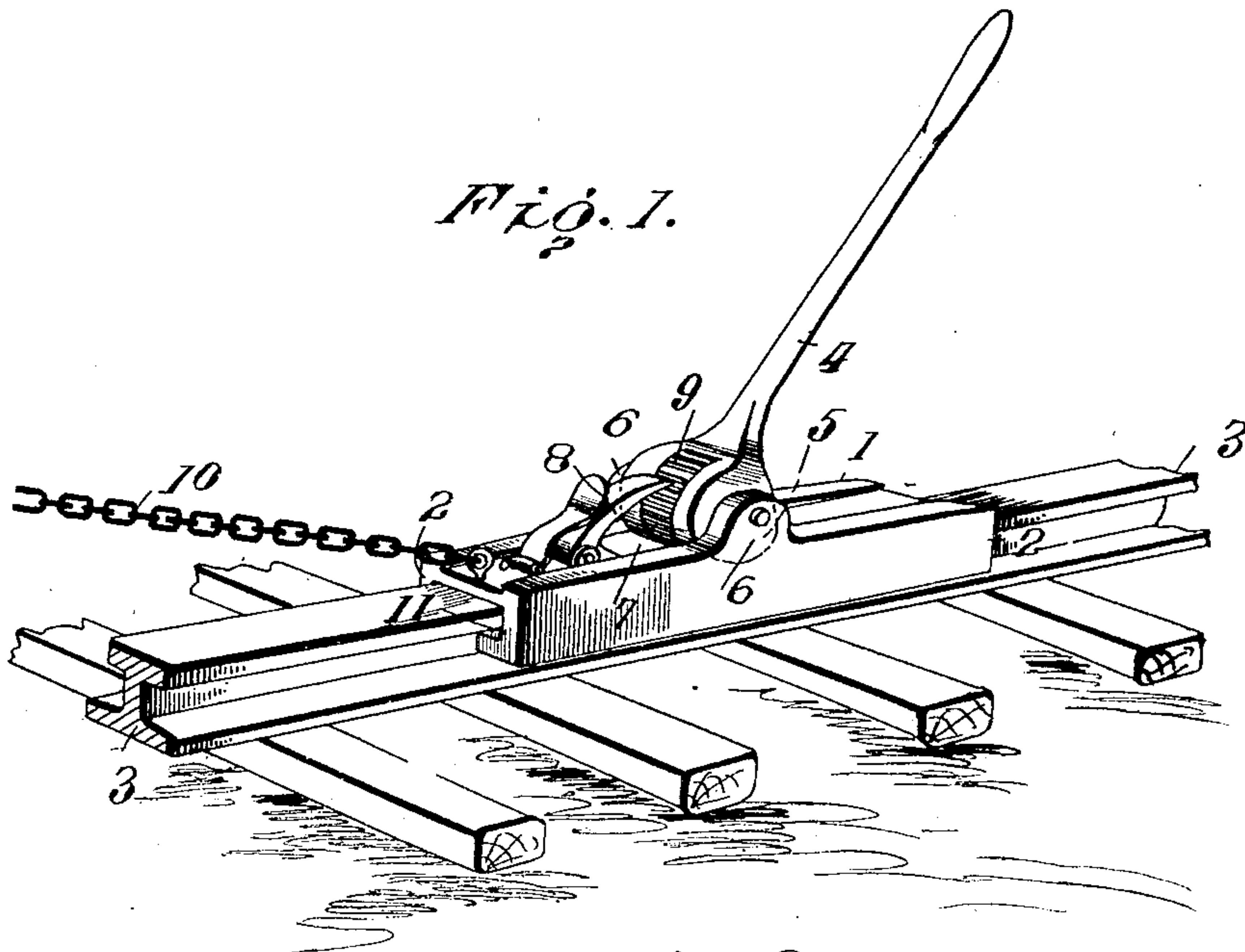


Fig. 2.

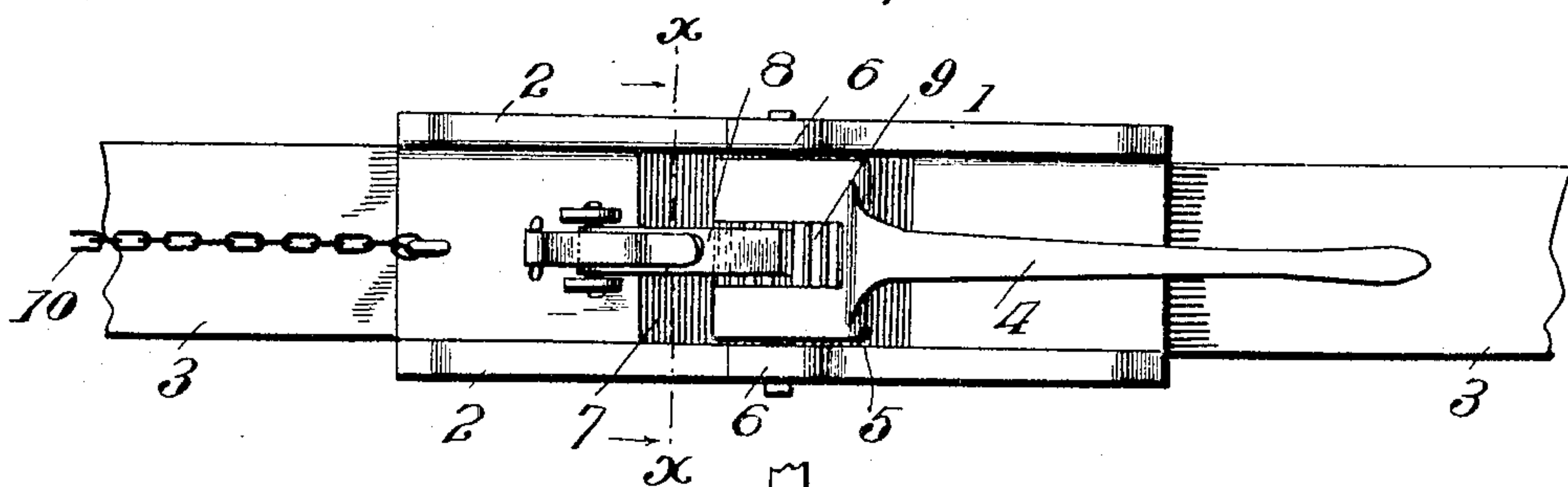
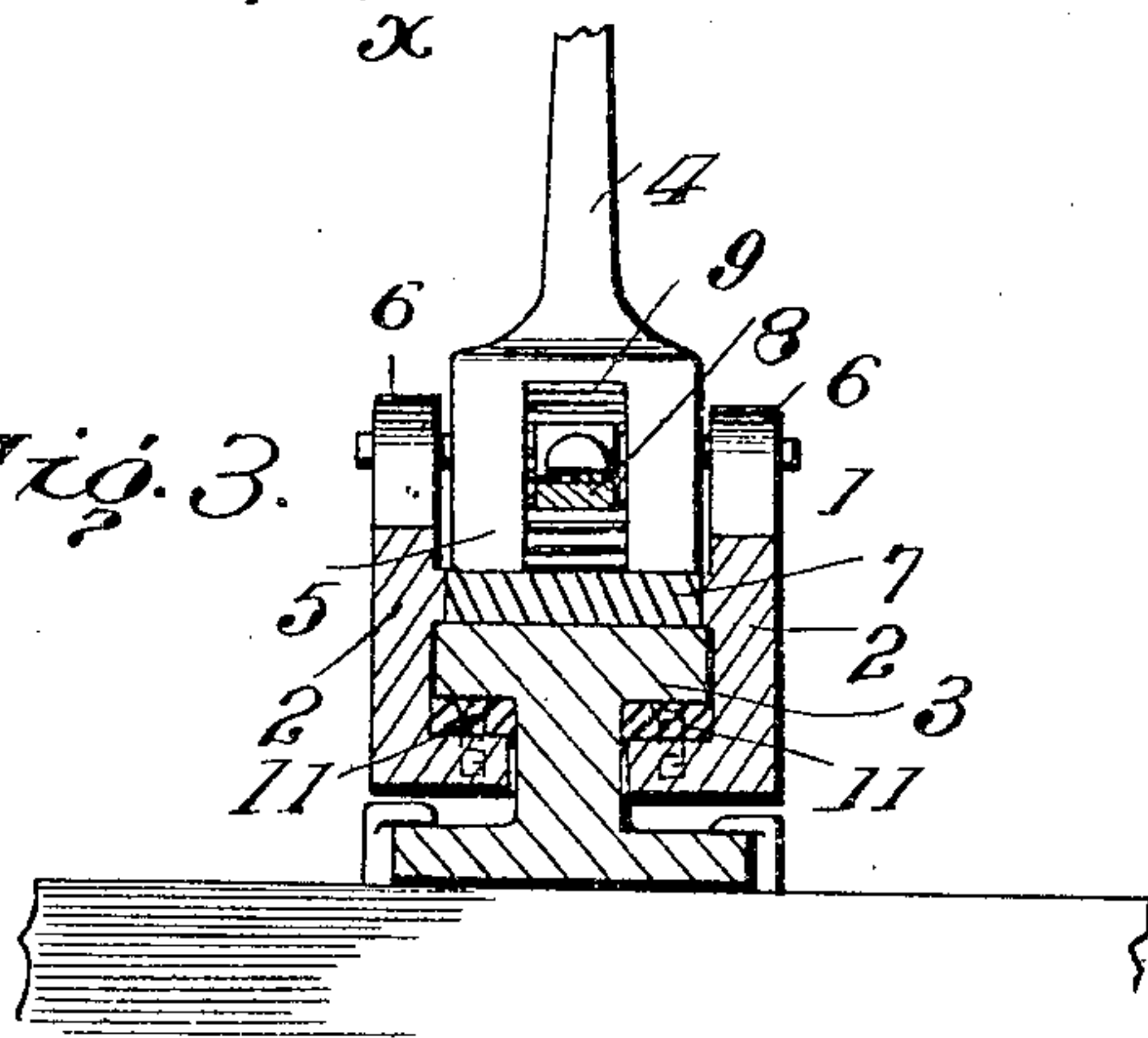


Fig. 3.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

BENJAMINE V. GILMORE, OF REDHOUSE SHOALS, WEST VIRGINIA.

RAIL-BRAKE.

No. 805,644.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed May 15, 1905. Serial No. 260,432.

To all whom it may concern:

Be it known that I, BENJAMINE V. GILMORE, a citizen of the United States, residing at Redhouse Shoals, in the county of Putnam and State of West Virginia, have invented certain new and useful Improvements in Rail-Brakes, of which the following is a specification.

This invention relates to improvements in friction-clutches, and more particularly to that class which are adapted to be used as brakes for cars or other similar purposes.

It has for its object to produce a device of this character which will be very effective in operation and which is at the same time very simple and durable in construction.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a perspective view of the device. Fig. 2 is a top plan view of the device, showing it applied. Fig. 3 is a transverse section on the line *x x* of Fig. 2 looking in the direction of the arrows.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

This device is intended primarily to be used as a brake for controlling the speed of cars which are moved down steep grades by the force of gravity.

The numeral 1 designates the body of the device, which is preferably made integral, so as to withstand great strain, and is formed with flanges 2, extending downward and inward to embrace the head of a rail 3. A lever 4, having an eccentric portion 5, is pivotally mounted upon the top of the body 1 between two upwardly-projecting lugs 6. The eccentric portion operates upon a shoe 7, located thereunder in an opening in the body 1 and bearing upon the top of the rail 3. A pawl 8 is also pivotally mounted upon the top of the body 1, so as to engage a series of notches 9 on the eccentric portion 5 of the lever to prevent same from swinging backward to relieve the pressure upon the shoe 7. The rail 3, upon which the brake operates, is intended to be located between the two rails of the track, and the device is connected to the car by means of a chain 10. Removable strips 11 are secured upon the upper side of the inner turned portions of the flanges 2 and are adapted to bear against the lower side of the head

of the rail 3. It will thus be seen that all the wear and tear will be upon the strips 11 and the shoe 7, which can be very quickly and cheaply renewed when necessary.

In operation the chain 10 is attached to the rear of the car, so that in its descent it will be compelled to draw the brake along the rail 3. The operator grasps the lever 4 and walks along behind the car. In order to check the speed of the car, it is simply necessary to pull the lever around, so that the eccentric portion 5 will force the shoe against the rail with a greater pressure. The pawl 8 automatically engages the notches 9 in the eccentric portion, so that any sudden or accidental releasing of the brake is rendered impossible.

This device will be very useful on mine-slopes for safely moving machinery or other appliances or for holding coal-cars on steep grades and may also be used as a safety device for elevators and mine-cages.

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

1. In a device of the character described the combination of a guideway, a member sliding thereon, a shoe bearing against the guideway, and a lever mounted upon the sliding member and having an eccentric portion to bear against the shoe.

2. In a device of the character described the combination of a guideway, a member sliding thereon, a shoe bearing against the guideway, a lever mounted upon the sliding member and having an eccentric portion to bear against the shoe, and a pawl adapted to engage notches in the eccentric portion to prevent any backward movement of the lever.

3. In a device of the character described the combination of a guideway, a sliding member having downwardly and inwardly projecting extensions to embrace said guideway and having an opening therein, a shoe located in said opening, and a lever mounted upon the sliding member and having an eccentric portion to operate upon the shoe.

4. In a device of the character described the combination of a guideway, a sliding member having downwardly and inwardly projecting extensions to embrace said guideway and having an opening therein, a shoe located in said opening, a lever mounted upon the sliding member and having an eccentric portion to

operate upon the shoe, and a pawl adapted to engage notches in the eccentric portion to prevent any backward movement of the lever.

5 In a device of the character described the combination of a guideway, a sliding member having downwardly and inwardly projecting extensions to embrace said guideway and having an opening therein, removable portions upon the inwardly-projecting extensions of
10 the sliding member, a shoe located in the be-

fore-mentioned opening, and a lever mounted upon the sliding member and having an eccentric portion to operate upon the shoe.

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

BENJAMINE V. GILMORE. [L. s.]

Witnesses:

C. W. GRANT,

L. A. HIGGINBOTHAM.