

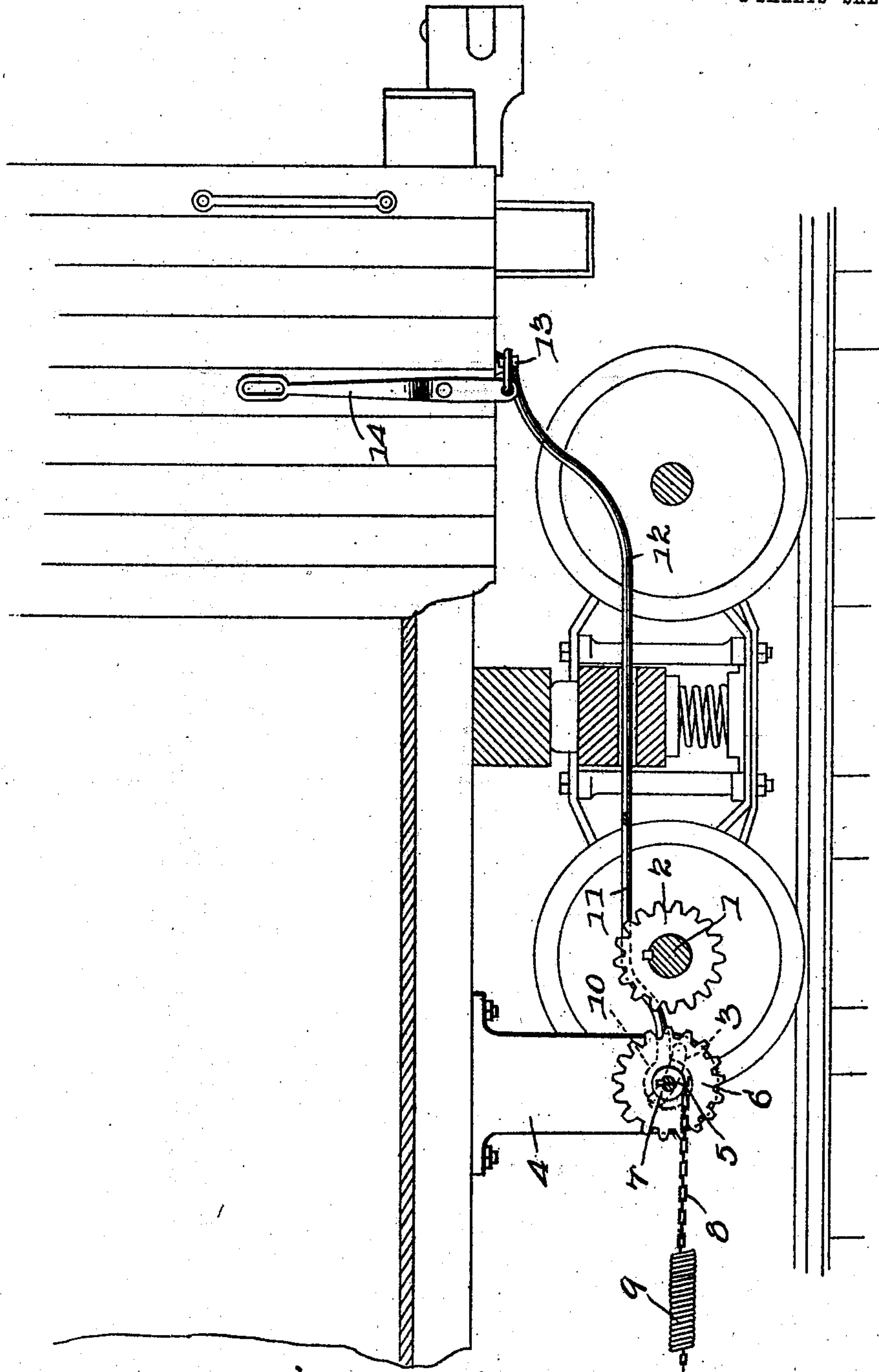
No. 824,093.

PATENTED JUNE 26, 1906.

P. W. CLARK.
CAR BRAKE.

APPLICATION FILED FEB. 26, 1906.

2 SHEETS—SHEET 1.



WITNESSES:

E. J. Stewart
Herbert D. Lawton

Fig. 1.

Patrick W. Clark, INVENTOR.

By *Calhoun & Co.*
ATTORNEYS

No. 824,093.

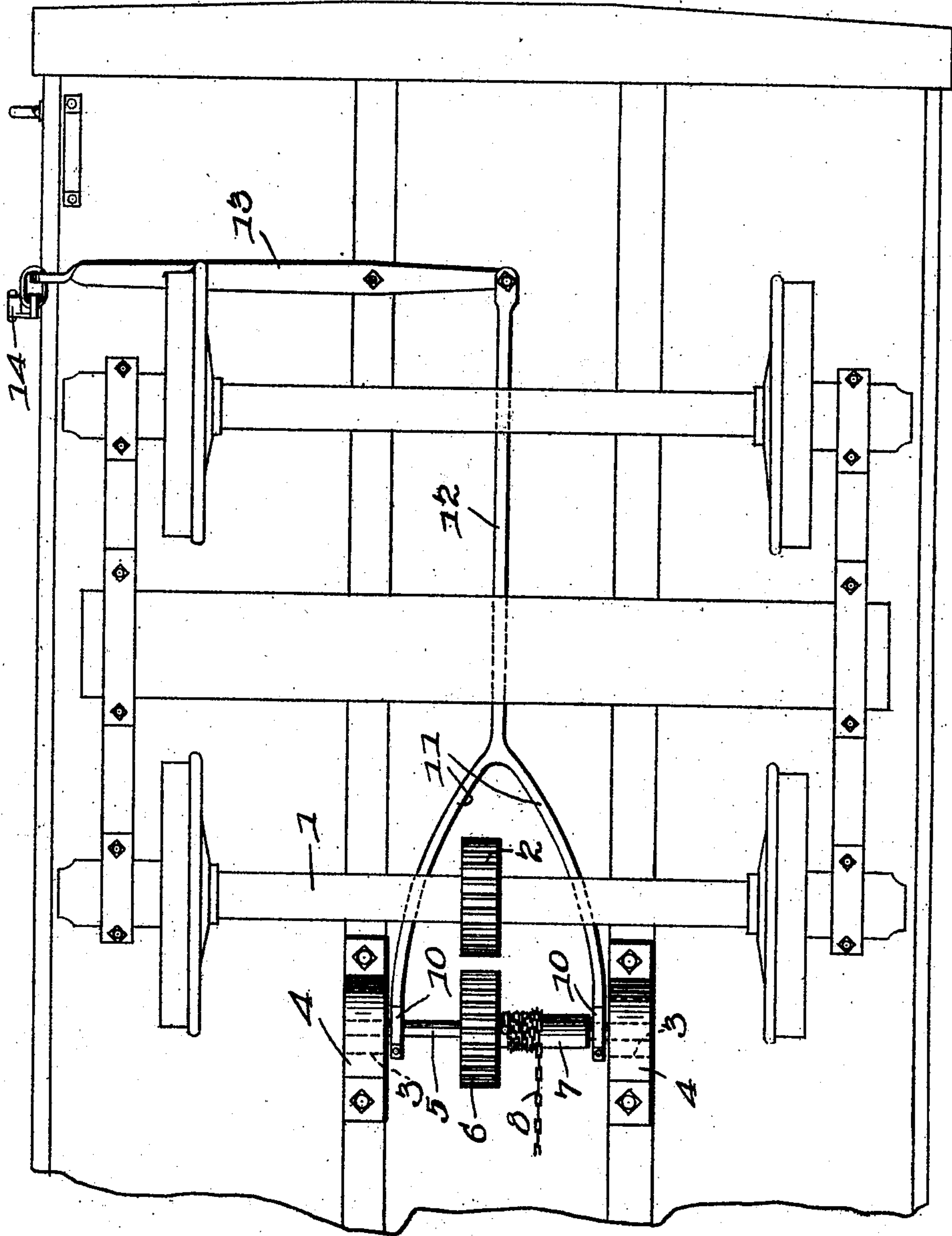
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WITNESSES:

E. H. Stewart
Arthur S. Lawson

Fig. 2.

Patrick W. Clark,
INVENTOR.

By *Chas. Snow & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

PATRICK WILLIAM CLARK, OF SUPERIOR, NEBRASKA.

CAR-BRAKE.

No. 824,093.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed February 26, 1906. Serial No. 303,029.

To all whom it may concern:

Be it known that I, PATRICK WILLIAM CLARK, a citizen of the United States, residing at Superior, in the county of Nuckolls and State of Nebraska, have invented a new and useful Car-Brake, of which the following is a specification.

This invention relates to car-brakes, and more particularly to means whereby the brakes may be applied by the utilization of power produced by the rotation of the car-axle.

A still further object is to provide means whereby the brake-applying mechanism may be thrown into operative position by means located within convenient reach of an operator standing adjacent the car.

The invention consists of hangers which are secured upon the car and which constitute bearings for a shaft slidably mounted therein and on which is located a gear and a drum. The ordinary brake-chain is connected at one end to the drum, and mechanism is located, preferably, at one side of the car, whereby the shaft can be moved so as to bring the gear supported thereby into mesh with a gear upon one of the axles of the car. Resilient means, such as a coiled spring, is interposed between the chain and the brake-beam, so as to ease the strain upon the mechanism while the brakes are being applied.

The invention also consists of certain other novel features of construction and combination of parts, which will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is a side elevation of the mechanism and showing the adjoining portion of the car, and Fig. 2 is a bottom plan view of said mechanism.

Referring to the figures by numerals of reference, 1 is a car-axle on which is secured a gear 2. Hangers 4 are secured to the car adjacent the sides thereof, and formed within these hangers are slots 3, in which is rotatably mounted a shaft 5. A gear 6 is mounted upon and rotates with the shaft and is so disposed as to move into mesh with the gear 2 when the shaft is shifted within the slots 3 and toward the axle.

A small drum 7 is disposed upon the shaft 5, and one end of a chain 8 is fastened thereto. This chain is secured to the usual brake-beam,

(not shown,) and a strong coiled spring 9 is preferably interposed between the chain and the beam, so as to prevent injury to the mechanism during the application of the brakes. Collars 10 are loosely mounted on the shaft 5 and are connected by means of a yoke 11, secured by a stem 12 to one end of a lever 13, which is fulcrumed beneath the car and is adapted to be operated by an actuating-lever 14, which is preferably disposed upon the side of the car at a point where it can be conveniently reached from the ground by the operator. It is thought that the operation of the brake will be clearly understood from the foregoing description.

When the car is moving forward, the gear 2 will of course rotate with axle 1. Should it be desired to apply the brakes, the operator grasps the actuating-lever 14 and swings it upon its fulcrum so as to cause the lever 13 to press backward upon rod 11 and collar 10. The shaft 5 will therefore be slid within the slots 3 and toward the axle, and the gear 6 will be brought into mesh with the gear 2. Said gear 6 will therefore be caused to rotate and chain 8 will be wound upon the drum and operate the brake-beam and cause the brakes to be applied. In order that no injury will result to the mechanism after the application of the brakes and during any further forward movement of the car, the spring 9 is utilized so as to bring the parts to a gradual stop.

Mechanism such as herein described is particularly adapted for use upon freight-cars because of the convenience with which the brakes can be applied while the cars are being shifted. The mechanism may, however, be used equally as well upon cars of other varieties.

Instead of using intermeshing gears I can employ friction-disks, and it is to be understood that by the term "gears" I intend to designate either intermeshing or friction devices of this character.

What is claimed is—

1. The combination with a rotatable axle, and a power-transmitting device rotatable therewith; of hangers having curved slots therein, a shaft rotatably mounted within said slots and adapted to slide therein, a power-transmitting device rotatable with the shaft, a brake-chain secured to and adapted to be held upon the shaft, and means for moving both ends of the shaft in unison to shift

the power-transmitting device on said shaft into operative relation with the device on the axle.

2. The combination with a car-axle and a
5 power-transmitting device rotatable there-
with, of slotted hangers, and shaft rotatably
and slidably mounted within the hangers, a
power-transmitting device rotatable with the
shaft, a brake-chain secured to and adapted
10 to be wound upon the shaft, a yoke loosely
mounted upon the shaft, a manually-oper-

ated lever, and connections between the lever and yoke for shifting the power-transmitting devices into operative relation.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature
in the presence of two witnesses.

PATRICK WILLIAM CLARK.

Witnesses:

A. C. FELT,

ILA L. ADAMS.