J. PERSAK.

BRAKE FOR RAILWAY CARS.

APPLICATION FILED FEB. 1, 1912.

1,067,057.

Patented July 8, 1913.

3 SHEETS—SHEET 1.

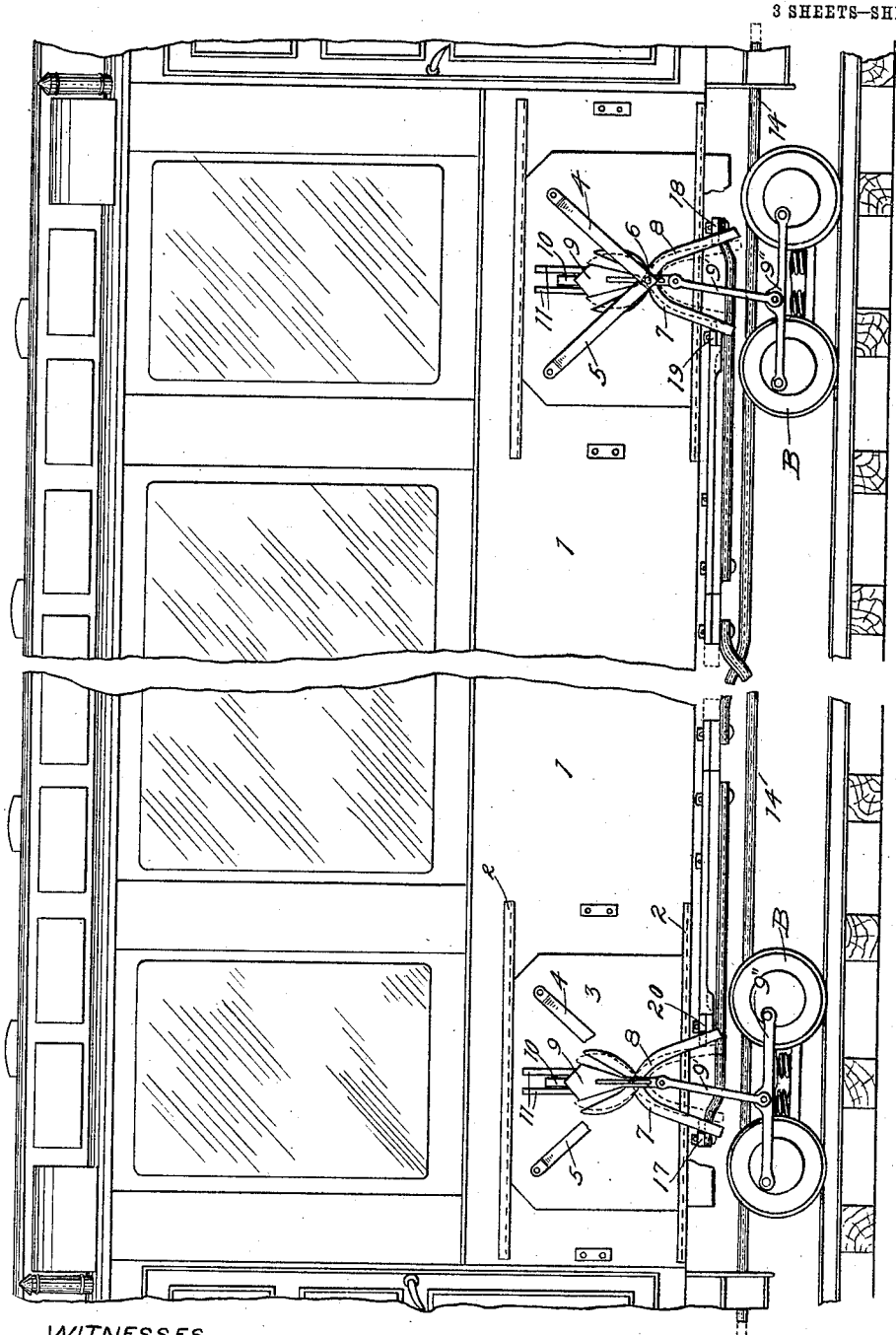


FIG. 1.

WITNESSES

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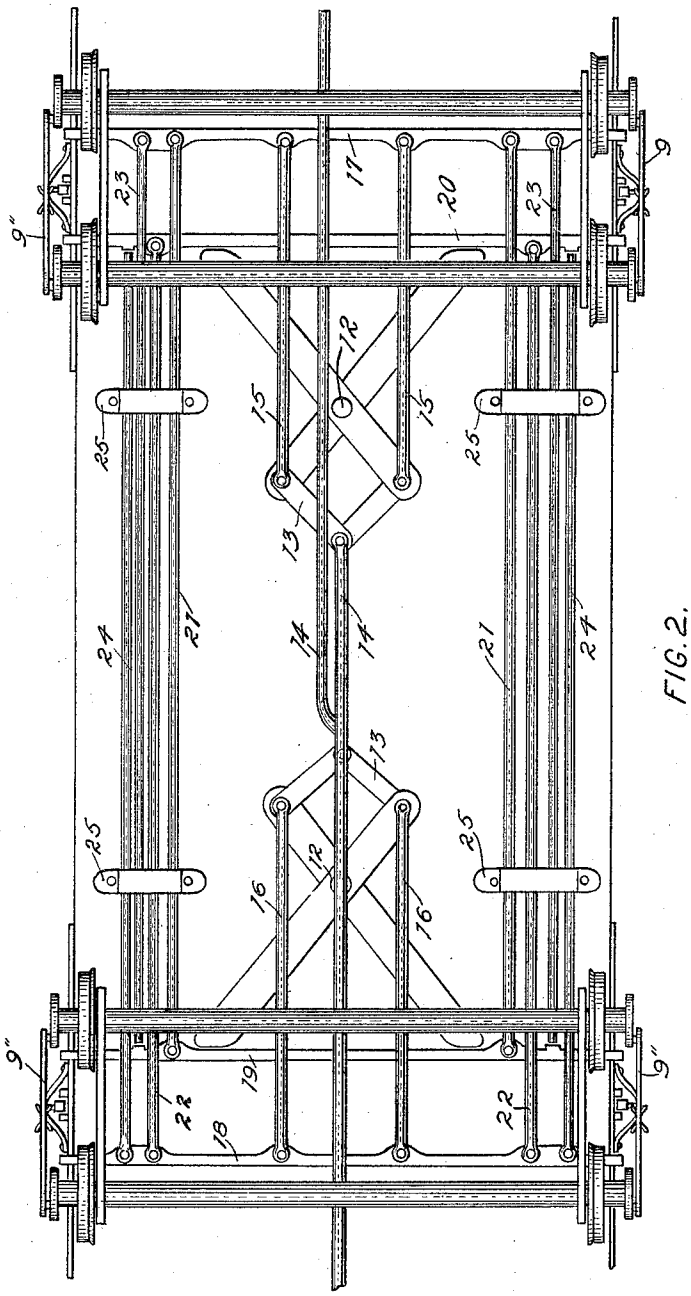


FIG. 2.

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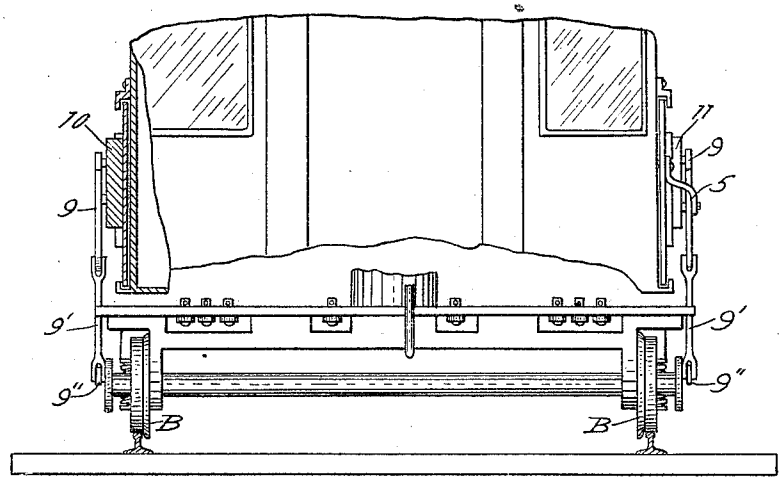


FIG. 3.

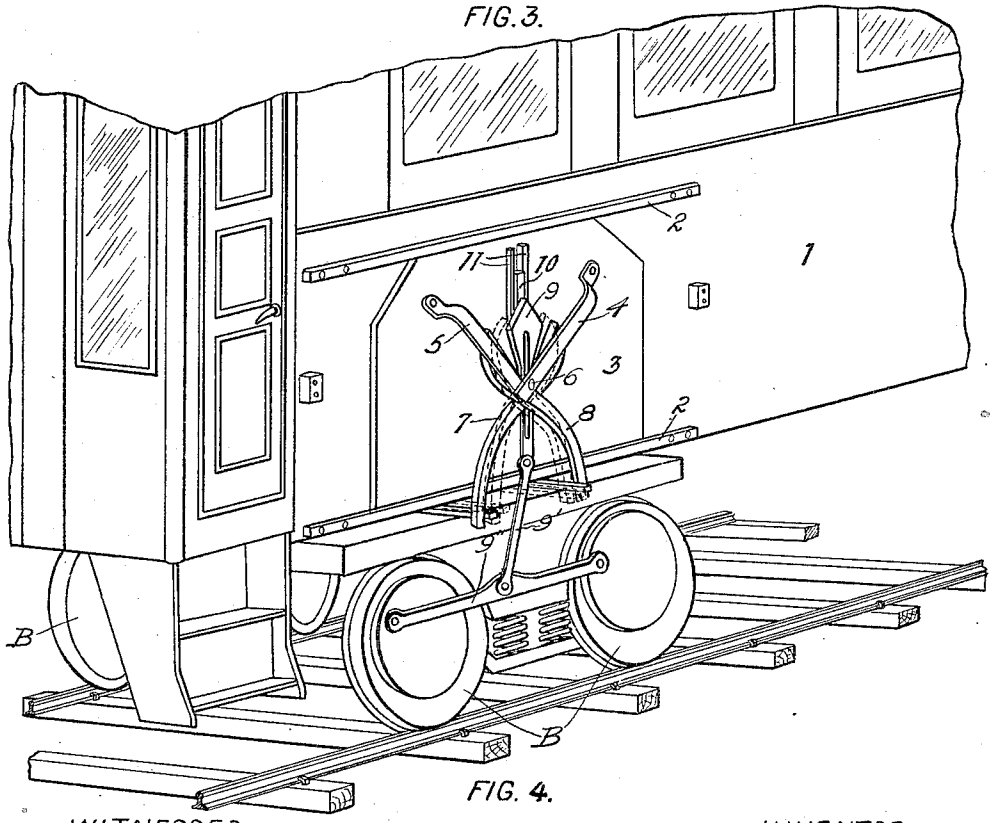


FIG. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH PERSAK, OF BURWELL, NEBRASKA.

BRAKE FOR RAILWAY-CARS.

1,067,057. Specification of Letters Patent. Patented July 8, 1913.

Application filed February 1, 1912. Serial No. 674,785.

To all whom it may concern:

Be it known that I, JOSEPH PERSAK, a citizen of the United States, residing at Burwell, in the county of Garfield and State of Nebraska, have invented certain new and useful Improvements in Brakes for Railway-Cars, of which the following is a specification.

This invention relates to improvements in brakes for railroad cars and its object is to produce a device of this class that is simple in construction and operation and positive in action.

With the foregoing and other objects in view the invention consists in the combination and arrangement of parts to be hereinafter fully described in the following specification, pointed out in the claims and illustrated in the accompanying drawings which form a part of the specifications and in which—

Figure 1 is a broken side elevation of a car with my improved brake applied thereto. Fig. 2 is an inverted plan. Fig. 3 is an end elevation with one side of the car in section. Fig. 4 is a perspective of one end of the car.

Like reference characters indicate corresponding parts throughout the several views.

1 is a car to which my improved brake is attached and the side of the car is provided with a pair of parallel guides 2 at either end between which a plate 3 is retained and upon which a portion of my brake mechanism is mounted. The plate 3 normally is held stationary by frictional contact with its supports but in the case of sudden impact caused by the brakes being suddenly applied it may yield to avoid breakage of the parts of the device. A pair of arms 4 and 5 each having one extremity secured to the plate 3 while the greater portion of either arm is bent outwardly away from the plate and the raised terminals united by a bolt 6 which also passes through and unites a set of scissors-like clamping members 7 and 8 that lie beneath the arms 4 and 5 and also beneath a longitudinally slotted rod 9 provided with an integral shoe 10 adapted to reciprocate between a pair of vertical guides 11, 11 secured to the plate 3. A connecting rod 9′, connects the rod 9 with a yoke 9″ joining the disks B terminally carried by each axle of either truck of the car.

The heads or free extremities of the clamping members 7 and 8 are offset so that they lie in the plane of the rod 9 and when drawn together on their pivot 6 will engage that rod. Either side of a car equipped with my improved brake is, of course, provided with a plate 3 at either end. Beneath the car and secured to the under side of either end thereof by bolts 12, 12 are lazy tongs 13, 13 to the apexes of which operating rods 14, 14 are secured which receive power and are operated from the engine to which they are connected in any suitable manner.

15, 15 and 16, 16 are each a set of connecting rods connecting a set of lazy tongs at one end of the car with a transverse bar 17 or 18 at that end of the car. Either extremity of either bar 17 or 18 extends beyond the side sills of the car and engages one of the clamping members of a set pivotally secured upon the plate 3 and the said bars 17 and 18 are connected, respectively, to similar transverse bars 19, 20 which engage the other clamping member of either set; the bars 17 and 19 and 18 and 20 being connected by rods 21 and 22 respectively. Idler rods 23, 23 are connected to transverse bars 17 and extend to the transverse bar 19 and idler rods 24, 24 are connected to transverse bar 18 and extend to transverse bar 20. All of the rods are supported by suitable braces 25. It will be noted that the base of one set of lazy tongs lies adjacent the transverse bar 19 while the base of the other set lies adjacent the bar 20. The bars 17, 18, 19, 20 are slidable longitudinally of the car and are terminally supported upon the trucks thereof.

Operation: When it is desired to apply the brakes either rod 14 of every car in the train is drawn in a direction that will exert power upon the apex of the lazy tongs to which it is connected in a manner to close up the said tongs or draw them together thus causing the base of one set of tongs to force the bar 19 toward the adjacent end of the car while the opposite set of lazy tongs will have the same effect upon the bar 20; these bars will engage one clamping member of each set of clamping members and the connected bars 17 and 18 will engage the remaining members thus bringing the clamping members 7, 8 together upon the rod 9, which through its connections stops rotation of the wheels. When it is desired to release the brakes the rods 14, 14 are

forced against the apexes of the lazy tongs thus opening them and forcing bars 17 and 18 toward the adjacent ends of the car and releasing the rod 9. When the brakes are in the off position the disks B will actuate the yokes 9'' which will reciprocate the connecting rods 9' and their connections or rods 9 which, in turn, will reciprocate the shoe 10 between the vertical guides 11 carried upon the plate 3.

What is claimed is:—

1. In a brake for railway cars, plates secured to the sides of the car, a guide disposed upon each plate, a rod slidable in said guide, mechanism connecting the said rod and the car axles, clamping members pivotally secured to the aforesaid plates for engagement with said rod and means carried beneath the car for engagement with the said clamping members.

2. In a brake for railway cars, plates secured to the sides of the car, a guide disposed upon each plate, a rod slidable in said guide, mechanism connecting the said rod and the car axles, clamping members pivotally secured to the aforesaid plates for engagement with said rod, transverse bars connected in pairs slidably supported beneath the car capable of engagement with the said clamping members and actuating mechanism for said transverse bars connected thereto and disposed beneath the car.

3. In a brake for railway cars, plates secured to the sides of the car, a guide disposed upon each plate, a rod slidable in said guide, mechanism connecting the said rod and the car axles, clamping members pivotally secured to the aforesaid plates for engagement with said rod, transverse bars connected in pairs slidably supported beneath the car capable of engagement with the said clamping members, lazy tongs operatively engaging the said transverse bars and power transmission mechanism operatively engaging the said lazy tongs.

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

JOSEPH PERSAK.

Witnesses:
F. W. MANASIL,
J. C. GREEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."