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J. KEZON.
CHOCK FOR RAILWAY CARS.
APPLICATION FILED JUNE 8, 1909.

Patented Sept. 14, 1909.

2 SHEETS—SHEET 1.

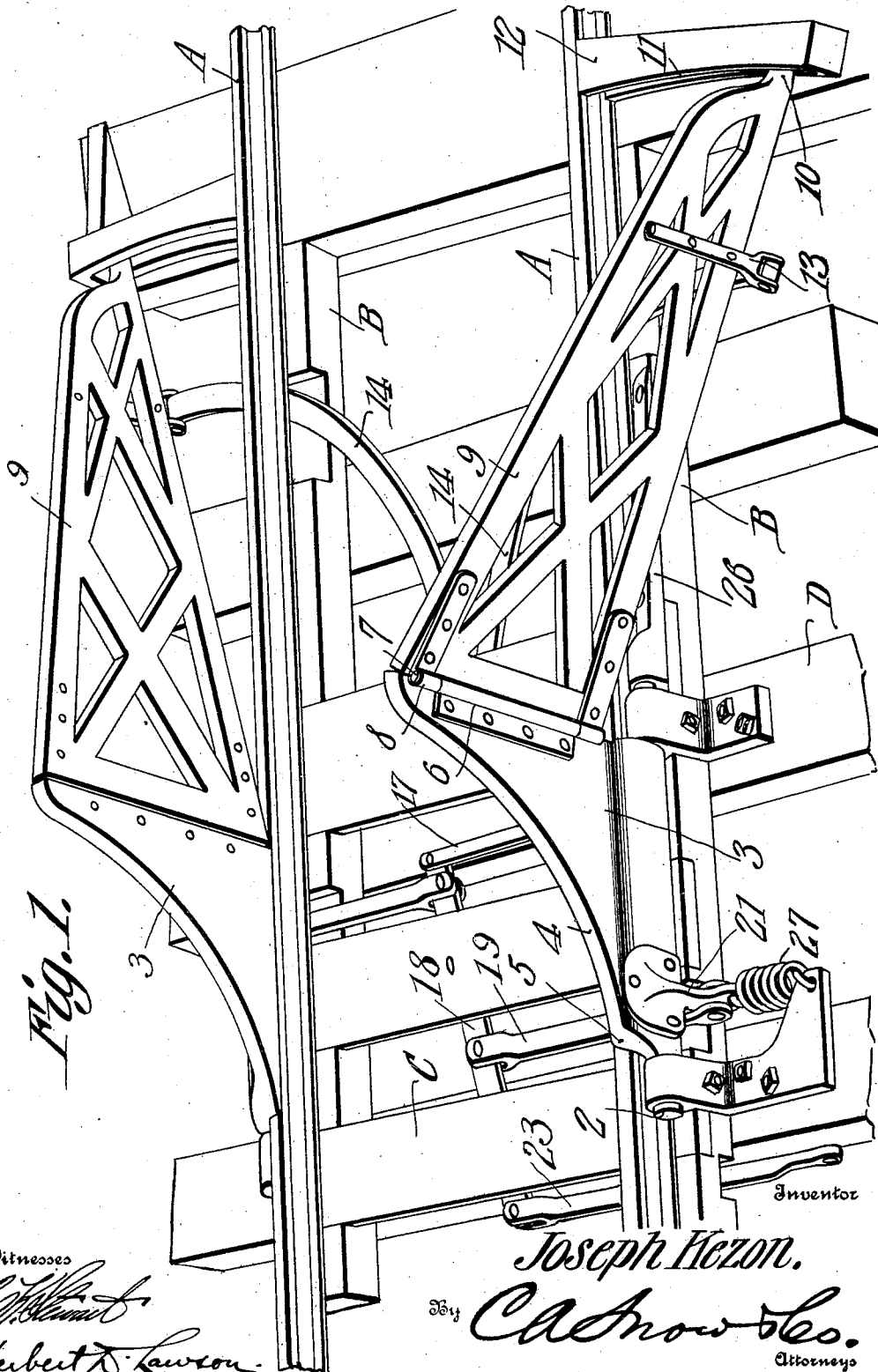


Fig. 1.

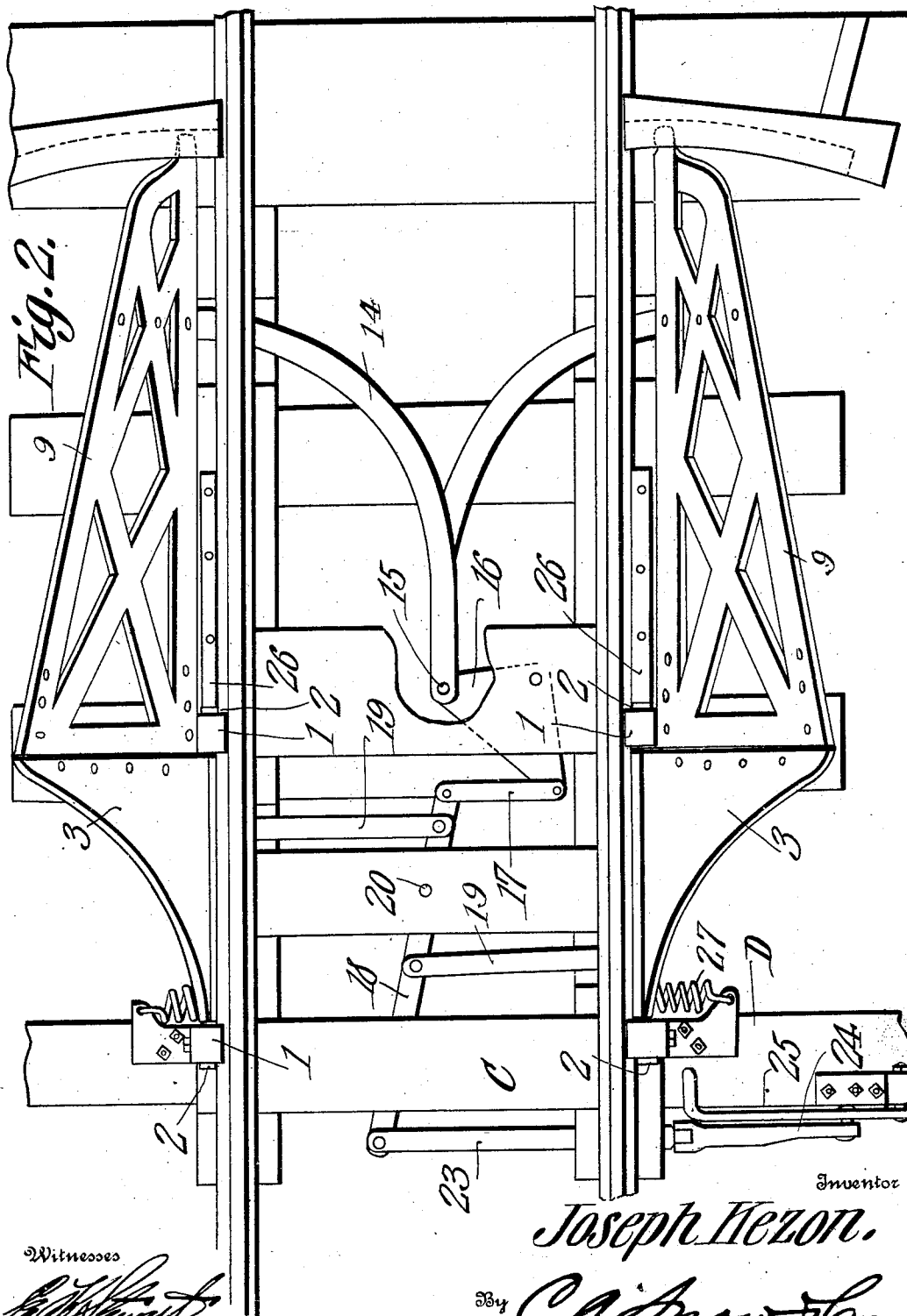
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UNITED STATES PATENT OFFICE.

JOSEPH KEZON, OF SCARBRO, WEST VIRGINIA.

CHOCK FOR RAILWAY-CARS.

933,760.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed June 8, 1909. Serial No. 500,805.

To all whom it may concern:

Be it known that I, JOSEPH KEZON, a subject of the King of Poland, residing at Scarbro, in the county of Fayette and State of West Virginia, have invented a new and useful Chock for Railway-Cars, of which the following is a specification.

This invention relates to chocks of that type designed to hold cars against movement, the device being particularly designed for use in connection with mine cars arranged to travel along an inclined track.

The object of the invention is to provide a chock which will securely hold a car against movement down an incline, means being provided whereby the chock is thoroughly braced against both longitudinal and outward lateral movement.

Another object is to provide means whereby the chock can be quickly shifted out of the path of the wheels so as to permit the car to continue its movement along the track.

Another object is to provide chocks arranged in pairs, mechanism being utilized whereby the chocks of each pair can be simultaneously shifted into position in front, or at the sides of the car wheels.

With these and other objects in view the invention consists in certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of a chock embodying the present improvements, the same being shown set up to hold a car against movement along the track. Fig. 2 is a plan view of the device, the chock being shown shifted out of holding position.

Referring to the figures by characters of reference A designates the rails of a track, the same being mounted on stringers B connected by cross-plates C. The stringers are

mounted on ties D, above which the mechanism hereinafter described is located.

Brackets 1 are secured to the ties D and to the stringers B and are arranged close to the outer faces of the rails A, these brackets constituting bearings for trunnions 2, extending from the ends of chock-blocks 3, the upper edges of which are concave longitudinally, as indicated at 4, so as to conform with the curvature of the periphery of a car-wheel. The chock 3 is so shaped as to lap the adjoining rail, A, there being a longitudinal shoulder 5 along the inner face of the chock, and which is designed to rest upon the rail, as clearly indicated in Fig. 1.

One end of each chock extends at right angles to the adjoining rail A and has a hinge member 6 secured thereto or formed thereon, said member engaging a pintle 7 which extends through eyes 8 secured to or formed upon a bracing wing 9. These wings are preferably in the form of substantially triangular skeleton frames, each frame being provided at its small end with a projecting stud 10 designed to travel within a guide groove 11 formed within a block 12 extending laterally from the rail A. The outer end of the groove is closed so as to constitute an abutment for the stud 10 and thus limit its movement in one direction.

Secured to and formed with each of the wings 9 is an ear 13 pivotally connected to an arcuate actuating bar 14. The bars of the two wings converge, as indicated clearly in Fig. 2, and are mounted upon a pivot stud 15 extending from one arm of a bell-crank lever 16, which is fulcrumed upon one of the connecting plates C. The other arm of this bell-crank lever is connected by means of a link 17 with one end of a lever 18. Links 19 extend in opposite directions from this lever 18, said links being connected to the lever at opposite sides of the fulcrum thereof. Each of the links 19 is pivotally connected to a bracket 21 secured to or formed with one of the chocks 3 and extend-

ing downwardly therefrom. That end of lever 18 farthest removed from link 17 has a draw-bar 22 pivotally connected to it, and this bar has a link 24 which is connected to an actuating lever 25.

In order to receive the thrust of the chock 3 when car wheels are bearing thereagainst, retaining or abutment bars 26 are preferably secured to the stringers B, and those trunnions 2 extending beyond the perpendicular edges of the chocks 3 are designed to bear against these bars, as indicated in the drawings.

As shown in Fig. 1, when the chock is set up for use the shoulders 5 rest upon the treads of the rails A and the bracing wings 9 extend laterally at acute angles to said rails and with the studs 10 seated within the outer ends of the grooves 11. These wings thus serve to hold the chocks both against forward and lateral tilting, and said chocks will thus constitute efficient means for holding a car or cars against movement along the rails A. Should it be desired to release the car so as to permit it to continue its movement along the rails, the lever 25 is actuated so as to shift the draw-bar 23 longitudinally and thus swing the lever 18 upon its fulcrum 20. The links 19 will therefore pull upon the depending brackets 21 and cause the chocks 3 to swing laterally, so as to clear the treads of the rails. At the same time the bell-crank lever 16 is shifted and pulls upon the arcuate bars 14, which thus draw the wings 9 toward each other and into the plane occupied by the chocks 3. Said wings are thus free to also swing outwardly with the chocks and into the positions indicated in Fig. 2. Obviously, by reversing the foregoing operation the chocks can be simultaneously set up so as to hold a car stationary.

A device such as herein described is especially designed for use upon inclined tracks and will be found of great utility in mines where it is desirable to hold the cars at points along inclined rails and until they are loaded or unloaded. It will be understood however that the chock can be used in various other places, and will always be found desirable in view of the facility with which it can be shifted into or out of operative position without the necessity of disconnecting any parts.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention. For example, and as shown in Fig. 1, a spring 27 may be connected to the depending ear or bracket upon each chock for the purpose of facilitat-

ing the elevation of the chock. Various forms of springs may be employed for this purpose.

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What is claimed is:—

1. The combination with a rail, of a pivotally supported chock adjacent thereto, a brace hingedly connected to the chock and means for simultaneously shifting the brace and chock.

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2. The combination with a rail, of a pivotally supported chock adjacent thereto, a brace pivotally connected to the chock, the pivot of the brace being disposed at an angle to the pivot of the chock, and means for simultaneously shifting the chock and brace upon their respective pivots.

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3. The combination with a rail, of a chock mounted for swinging movement adjacent thereto, a brace movably connected to and movable with the chock, and means for simultaneously shifting the chock and brace into operative or inoperative position.

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4. The combination with a rail, of a chock mounted for swinging movement adjacent thereto, a brace movably connected to the chock and shiftable laterally with relation thereto, and means for simultaneously elevating the chock above the rail and shifting the brace laterally.

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5. The combination with a rail, of a chock mounted for swinging movement adjacent thereto, a brace hingedly connected to the chock and shiftable laterally with relation thereto, a guide for the brace, and means for simultaneously elevating the chock above the rail and shifting the brace laterally from said rail.

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6. The combination with a rail, of a chock movably mounted adjacent thereto, a brace hingedly connected to the chock and shiftable laterally with relation thereto, and means for simultaneously shifting the brace toward the rail and into alinement with the chock and for shifting the chock beyond one side of the rail.

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7. The combination with a rail, of a chock movably mounted adjacent thereto, a brace hingedly connected to the chock and movable laterally with relation thereto, a guide for the brace, an actuating device, and separate means operated thereby for shifting the chock and brace respectively.

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8. The combination with a rail, of a chock movably mounted adjacent thereto, means for shifting the chock into position over or to one side of the rail, and a combined support and brace movably connected to and shiftable with the chock.

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9. The combination with rails, of a chock movably mounted adjacent each rail, each chock including a shoulder portion for contact with a rail when the chock is in opera-

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tive position, and means for simultaneously swinging the chocks in opposite directions to elevate or to lower them.

10 The combination with track rails, of a chock pivotally supported adjacent each rail, a brace hingedly connected to each chock and shiftable laterally with relation thereto, an actuating lever, means operated thereby for simultaneously swinging the chocks in
10 opposite directions, a bell-crank lever, means for transmitting motion thereto from the

actuating lever, and means actuated by the bell-crank lever for simultaneously shifting the braces in opposite directions.

In testimony that I claim the foregoing 15 as my own, I have hereto affixed my signature in the presence of two witnesses.

JOSEPH ^{his} X KEZON.
mark.

Witnesses:

F. T. CHAPMAN,
C. E. DOYLE.