

G. W. JENKINS & E. LOWRY.

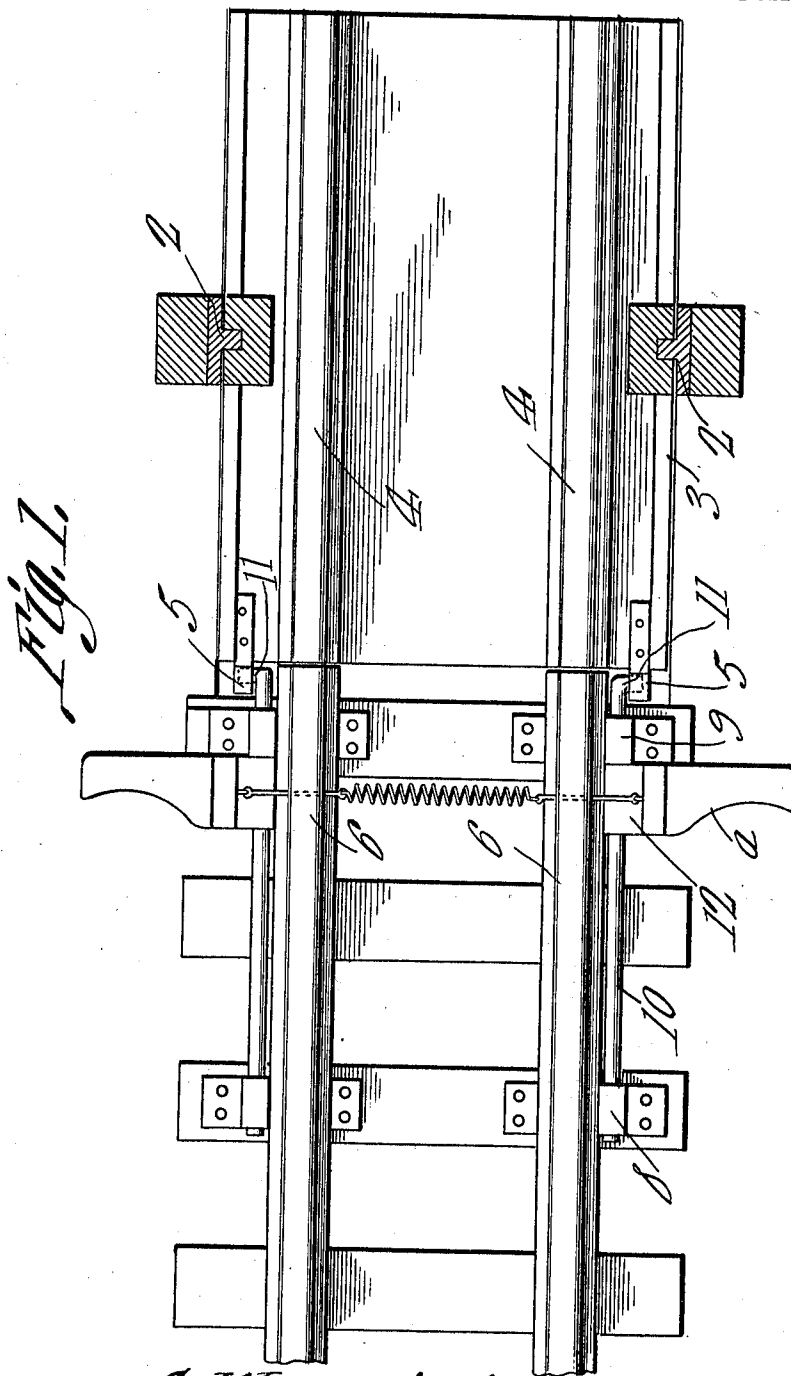
MINE CAR STOP.

APPLICATION FILED JUNE 26, 1911.

1,004,652.

Patented Oct. 3, 1911.

2 SHEETS—SHEET 1.



Witnesses

J. H. Wilson
S. H. Wilson

G. W. Jenkins & E. Lowry Inventors

by

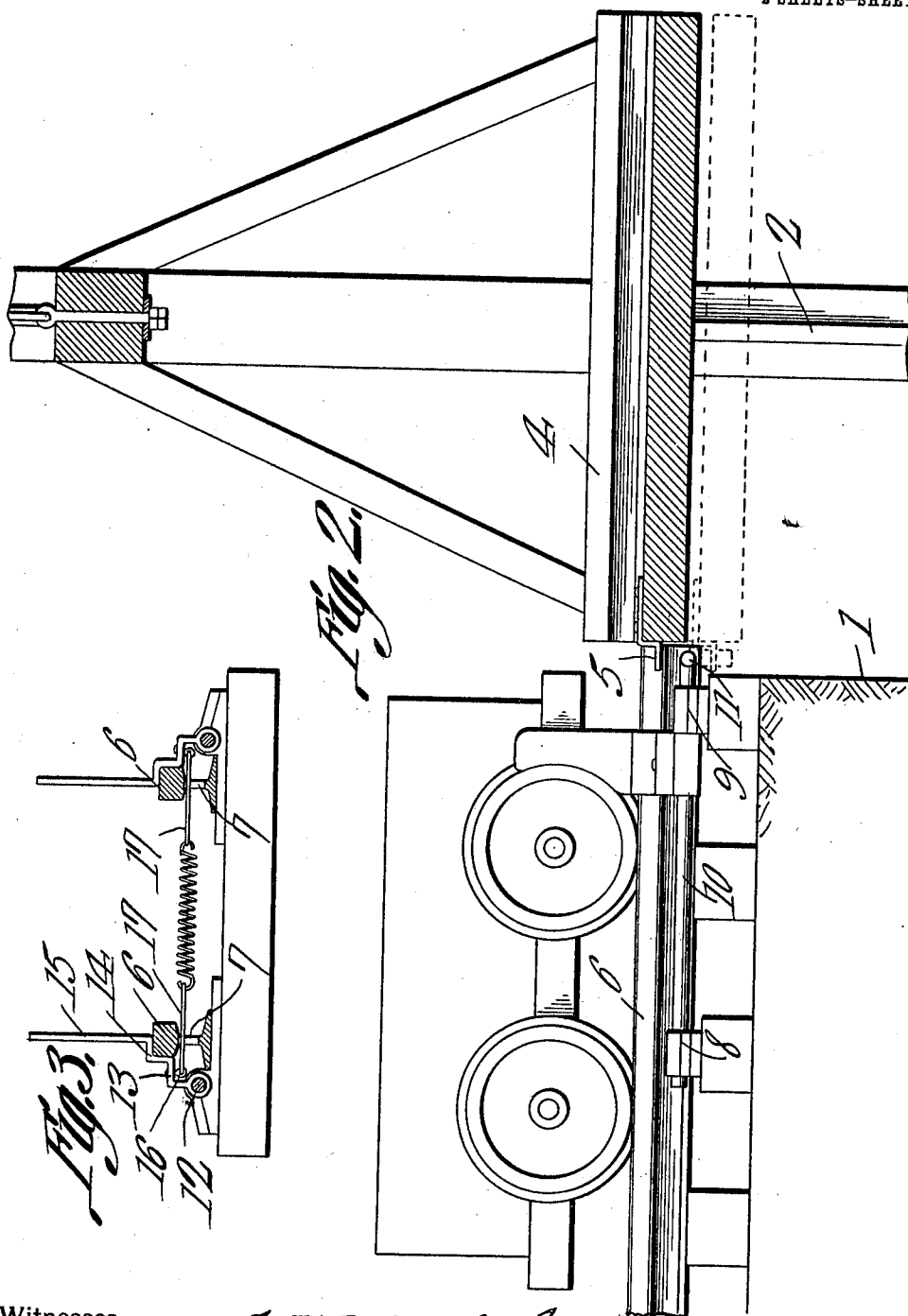
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3 SHEETS-SHEET 2.



Witnesses

J. P. Tomlin
J. H. Wilson

G. W. Jenkins & E. Lowry, Inventors

by *Chas. H. Co.* Attorneys

UNITED STATES PATENT OFFICE.

GEORGE W. JENKINS AND EDWARD LOWRY, OF NELSONVILLE, OHIO.

MINE-CAR STOP.

1,004,652.

Specification of Letters Patent.

Patented Oct. 3, 1911.

Application filed June 26, 1911. Serial No. 635,271.

To all whom it may concern:

Be it known that we, GEORGE W. JENKINS and EDWARD LOWRY, citizens of the United States, residing at Nelsonville, in the county of Athens, State of Ohio, have invented a new and useful Mine-Car Stop, of which the following is a specification.

This invention relates to improvements in mine car stops, and the primary object of this invention is the provision of a means adapted to be journaled parallel to the rails of the track at the lower end of an elevator shaft, and so mounted as to provide an automatic stop to prevent a car after the elevator has left operable position with relation to the rail so that a car may not be precipitated into the elevator pit.

A further object of the invention is the provision of two parallel disposed rock shafts, provided with car wheel engaging abutments adapted to be normally held in parallel and at right angles to the rails so as to engage the wheels of the car and prevent it from moving toward the pit, combined with means which are adapted to be actuated by engagement with the elevator to operate the rock shafts and extend the abutment to permit free access of the car to the elevator.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings—Figure 1 is a top plan view of a portion of a track adjacent the elevator, with the elevator being in the position to receive a car. Fig. 2 is a side elevation of a car in arrested position, an elevator and pit being shown in section and in the position just prior to releasing the car arresting device, dotted lines showing the position the parts assume when the car is free to passage upon the elevator. Fig. 3 is a sectional view taken through the main rails of the track showing the car arresting arms in car arresting position.

Referring to the drawings, the numeral 1 designates the pit, and 2 the oppositely disposed elevator guides, between which are slidably mounted the car carrying elevator

3, provided with the parallel rail sections 4. Disposed upon the forward edge of the elevator platform 3 and outside of the rails 4, are the two lugs 5, the purpose of which will presently appear. The main track rails 6, are provided with apertures 7 in their webs as clearly indicated in Fig. 3 of the drawings, and are so disposed as to co-act with the rails 4 of the elevator, to aline when the elevator is in the position as shown in Fig. 1 and in dotted lines Fig. 2. Disposed upon the guides exterior of the rail sections 6 and adjacent the pit, are the two pairs of journal blocks 8 and 9 respectively, which have mounted therein the rock shafts 10 whose forward ends 11 are bent at right angles and disposed above and within the pit 1 and in line for operable contact with the lugs 5 of the elevator, the said lugs 5 being disposed to engage the said right angled arms 11 to cause the rock shafts 10 to move in unison from the position as shown in Fig. 3 of the drawings to the position as shown in Fig. 1. Secured to and movable with the rock shaft near the journal 9 is a sleeve 12, which is provided with the double right angled portions 13 and 14 and with the car arresting and engaging arms 15, an eye 16 through the link 17 connecting each one of these car arresting and abutting members to the coiled spring 18, which is disposed between the rails as clearly shown in Figs. 1 and 3 and normally holds the car arresting arms in the position as indicated in Fig. 2 of the drawings. It will thus be seen that as the elevator is descending and is about to assume the position as shown in Fig. 2 of the drawings, that the lugs 5 as the car continues its descension, will engage the respective arms 11 of the rock shaft 10, and as the elevator assumes the position as shown in dotted lines in Fig. 2, the arresting arms 15 will be moved from the position as shown in Figs. 2 and 3 to the position as shown in Fig. 1, and permit free access of the car A to the rails 4 upon the elevator platform 3.

It will be noted in Figs. 1 and 2 of the drawings, that the arresting arms 15 are provided with the curved car engaging portions α and that by means of their mounting upon the rock shaft 10 between the journals 8 and 9 respectively, they are properly braced so as to prevent the passage of the car into the pit 1 should the elevator not be in receiving position. It will also be noted that by means of the spring 18, that

both of the respective arresting arms 15 will be normally held in the position as shown in Figs. 2 and 3 of the drawings when the elevator is depressing the right angled arms 11 and holding the said arresting arms 15 in the position as shown in Fig. 1, but that as soon as the elevator ascends or disengages the lugs 5 from the right angled arms 11, that the spring 18 will cause the simultaneous movement of the arresting arms 15 toward each other and cause them to assume the rail engaging position and car arresting position as clearly shown in Fig. 3 of the drawings.

15 What is claimed is:

1. The combination with an elevator pit, an elevator, and a section of rails terminating at said pit, of a car holding and arresting device, comprising two pairs of journals mounted upon the outside of each of said rails, a rock shaft journaled in each pair of journals, and having their inner ends projecting into the pit, a right angled arm carried by said inner end, a pair of lugs carried by the elevator and adapted to engage said right angled arms of the rock shaft, a spring for operating the rock shafts against the action of the elevator, and a pair of car arresting arms carried by the rock shafts and adapted to be normally held in the path of travel to arrest the car on said rail section.

2. The combination with an elevator pit, and an elevator, of a car arresting device,

comprising a pair of oppositely disposed spring actuated arms mounted adjacent to the rails and held normally in the path of travel of the car, said arms being provided with right angled ends projecting into the pit, and means carried by the elevator engaging said right angled arms for operating and releasing the car arresting devices.

3. The combination with an elevator pit, an elevator, and rail sections terminating at the pit, of a car arresting device, comprising two rock shafts journaled in parallel and upon the outside of each rail section, a pair of arms carried by said rock shafts, each arm being provided with a rail engaging angled portion and adapted when resting upon the rail to be at right angles to the tread thereof, a spring for actuating both arms and rock shafts simultaneously to hold the arms in rail engaging position, a pair of lugs carried by the elevator and projecting toward the rail sections, and a right angled arm carried by each rock shaft and projecting into the pit and in the path of said lugs of the elevator.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

GEO. W. JENKINS.
EDWARD LOWRY.

Witnesses:

FRANK J. PENDERGRASS,
SAM LENNIGAN.