J. ROSS.

MINE CAR TALLYING DEVICE.

APPLICATION FILED JAN. 10, 1910.

976,696.

Patented Nov. 22, 1910.

Fig. 1

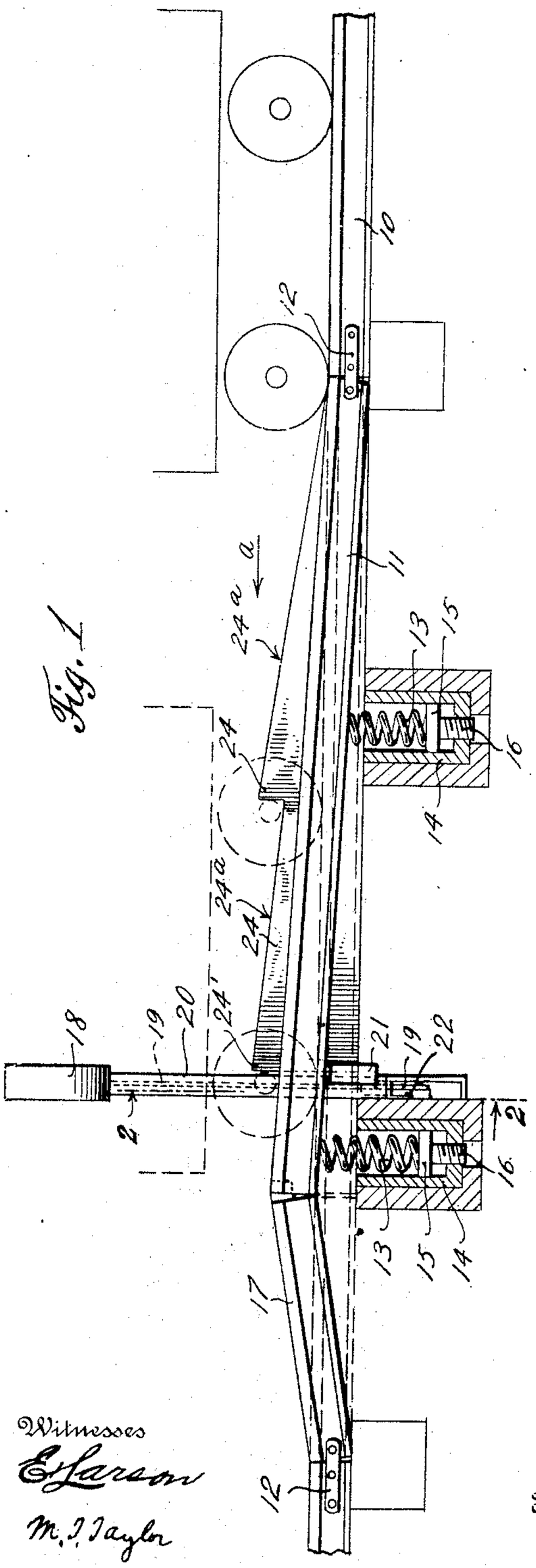
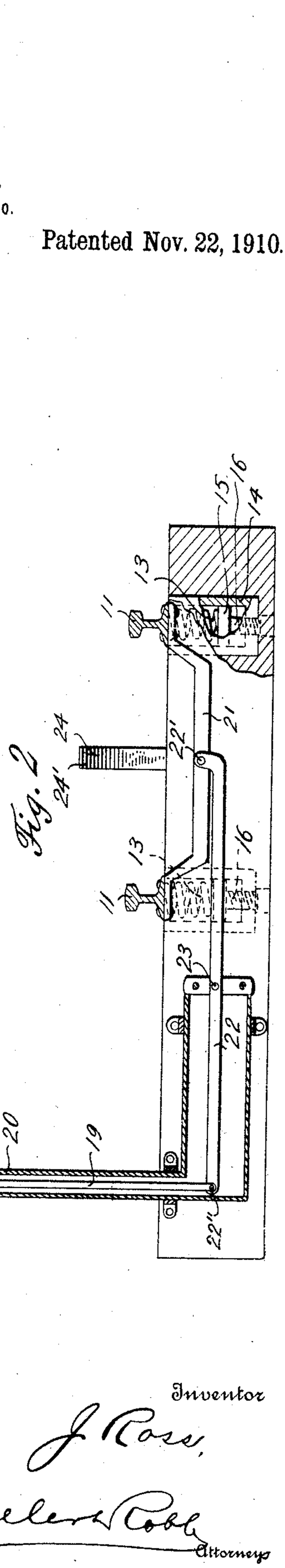


Fig. 2



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN ROSS, OF TERRY, SOUTH DAKOTA, ASSIGNOR OF ONE-SIXTH TO AND. NYBERG AND ONE-SIXTH TO LOUIS NYBERG, OF LEAD, SOUTH DAKOTA.

MINE-CAR-TALLYING DEVICE.

976,696. Specification of Letters Patent. **Patented Nov. 22, 1910.**

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To all whom it may concern:

Be it known that I, JOHN ROSS, a citizen of the United States, residing at Terry, in the county of Lawrence and State of South Dakota, have invented certain new and useful Improvements in Mine-Car-Tallying Devices, of which the following is a specification.

This invention relates to tallying devices for mine cars, and the novelty resides in certain specific features of construction hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, showing the movable track members in normal elevated position in full lines and depressed as when under the weight of a loaded car in dotted lines, and Fig. 2 is a transverse section substantially on the broken line 2—2 of Fig. 1, the movable rail members however being in their depressed position.

Throughout the following description and on the several figures of the drawings similar parts are referred to by like reference characters.

At 10 is indicated the main track-way over which the cars are adapted to be run in either direction, but it being understood that loaded cars are to be operated in the direction of the arrow *a*. Movable track members 11 are hinged at 12 to the main track in such a manner that the movable members may be normally elevated at the end 11′ opposite the hinge 12, such elevation being maintained normally by virtue of strong coil springs 13. The springs may be mounted and maintained in position by any suitable means, but preferably they are contained in boxes 14 with movable abutments 15 so that the tension or force of the springs may be varied in accordance with the particular service to be performed, such adjustment being effected by suitable means, such as screws 16. The ends 11′ of the movable track members may if found necessary be connected to the main track on the opposite side of the device by means of auxiliary movable members 17 so that an empty car may pass freely over the device in the reverse direction if desired.

At 18 is shown a conventional form of indicator dial, the mechanism of which is adapted to be operated step by step by means of a rod 19 extending from the indicator down through a supporting post or stand 20. The indicator dial 18 may be located at any convenient point or place and may be housed from outside interference from obstacles along the track-way. Connected near the ends 11′ of the movable track members is a transverse bar 21, movable bodily up and down with said track members. A lever 22 is pivoted at 23 upon any suitable stationary support, such as indicated at 24, and one end of said lever is connected at 22′ to the aforesaid bar 21 and the other end is connected to the rod 19 at 22″. It is contemplated that this device is for recording the number of loaded cars of a certain minimum weight as they pass along the track. The springs 13 are to be so constructed and adjusted as to resist downward movement of the track members 11 except when a car of the required weight is recived thereupon. When a sufficiently loaded car is received the track members will be depressed against the tension of the springs, causing the bar 21 to be forced downward and the rod 19 upward, and thereby registering one car in a manner well understood in this art.

An important feature of this invention resides in a device indicated at 24, which consists of a stationary rigid cam or stop, the function of which is two-fold. First, the stop 24 will prevent the reverse movement of a loaded car whereby it might be registered a second time undesirably, and secondly, the peculiar form of the cam member is such that it will insure the proper registering operation of a passing loaded car. As indicated the normal position of the track members 11 is such that an empty or a lightly loaded car may pass along in either direction thereover without the member 24 being engaged, but when a car to be registered comes along its weight will be sufficient to cause the axles thereof to strike or roll upon the point or points 24′, it being understood that sufficient force or power must be applied to the car to cause the same to ride over said point or points. When the car axles pass such points the effect will be for the car to partake of a slight drop, giving a decided impulse downward to the track members 11. The inclines 24ª leading to the points 24′ should of course be sufficiently long to prevent the car from being stopped in its operation thereover.

Having thus described the best form of the invention now known to me, but without desiring to be limited to the exact details of construction, except as may be required by the state of the art, what I claim is:

1. In a tallying device for cars, the combination of a track embodying movable members, means for normally sustaining said members in an elevated position with respect to the main track, an indicator, means connecting the indicator and movable track members for operation of the indicator thereby when the track members are depressed, and means associated with the movable track members to raise a car therefrom and drop said car bodily thereon as it passes over said members.

2. In a tallying device, the combination of a main track, movable track members associated therewith, means normally maintaining said movable members out of alinement with the main track, an indicator dial, connections between said dial and the movable track members whereby when the latter are depressed the indicator will be operated, and a rigid stationary stop device located between the movable track members having a pair of shoulders and slow inclines leading rearwardly therefrom to receive the car axles, for the purposes set forth.

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

JOHN ROSS.

Witnesses:

JOHN HODGKIN,

JOHN GUSTAFSON.