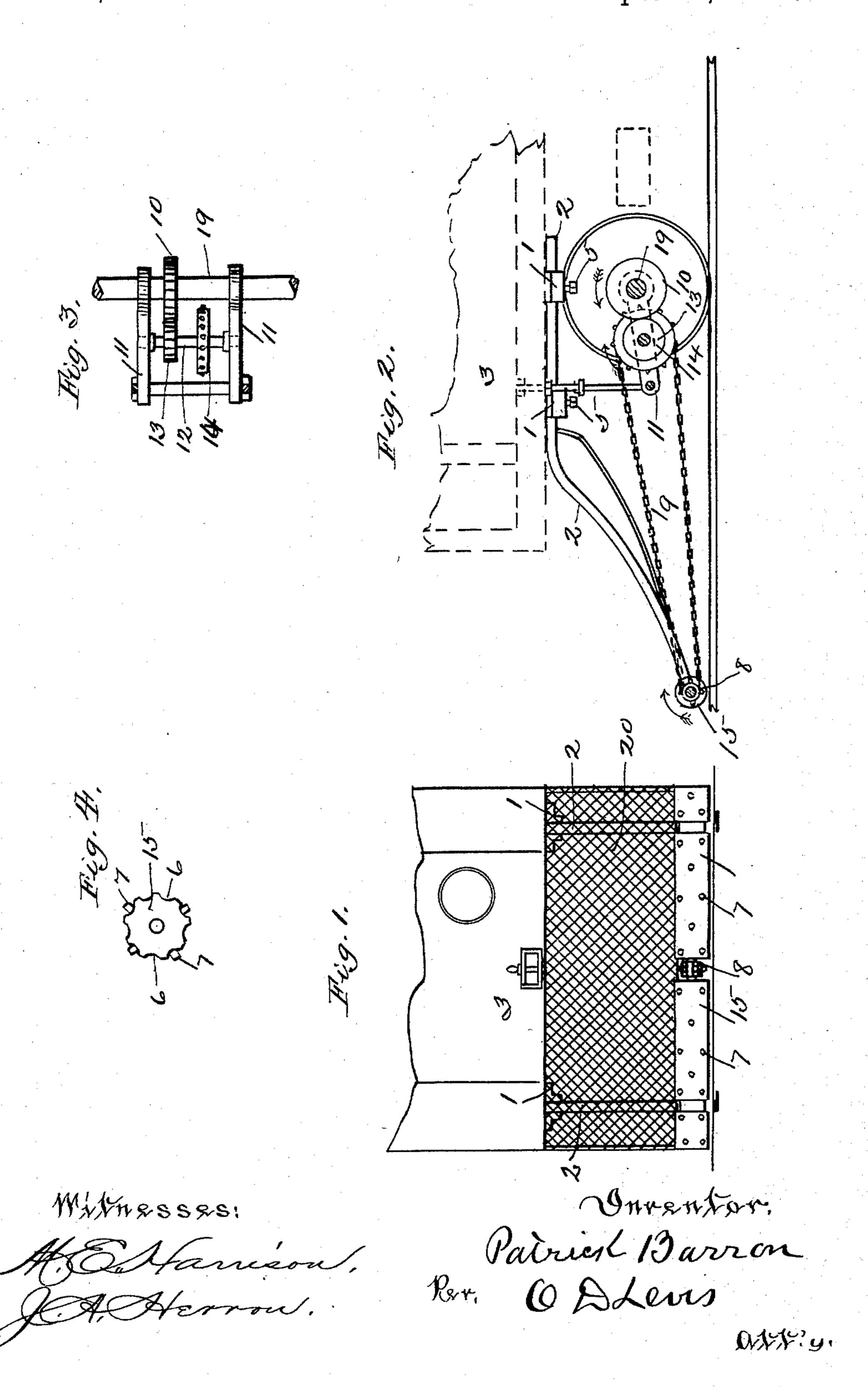
(No Model.)

P. BARRON. GUARD FOR RAILWAY CARS.

No. 483,202.

Patented Sept. 27, 1892.



United States Patent Office.

PATRICK BARRON, OF PITTSBURG, PENNSYLVANIA.

GUARD FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 483,202, dated September 27, 1892.

Application filed September 28, 1891. Serial No. 407,060. (No model.)

To all whom it may concern:

Be it known that I, Patrick Barron, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Guards for Railway-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved guard for street and other railway cars; and it consists in certain details of construction and combination of parts, as will be fully described beginness.

scribed hereinafter.

In the accompanying drawings, Figure 1 is a front elevation of my improved guard for railway-cars, which is constructed in accordance with my invention. Fig. 2 is a side sectional elevation of the same having the wire screen removed therefrom. Fig. 3 is a plan view of the gearing and supporting-frame attached to the axle of the car. Fig. 4 is an enlarged end elevation of the roller arranged at the front of the guard.

To put my invention into practice I ar-30 range in suitable slides 1 the frame 2 of the guard, which consists in several downwardlybent bars so arranged in the said slides as to permit the same to be adjusted forward or back in the direction of the length of the car 35 3 and held in the desired position by means of set-screws 5, which are passed through the slides above described. Journaled to the forward part of this frame 2 is a roller 15, having a series of corrugations 6 formed in the 40 direction of the length of the same and a series of short projecting pins 7 secured or integral therewith. Secured at the center of this roller 15 is a small sprocket-wheel 8, which is connected by a chain 9 and intermediate 45 gearing to the axle 19 of the car. Attached to the axle 19 is a gear-wheel 10 and a loosely-

connected frame 11. Mounted in this frame

11 is a shaft 12, to which is attached a pinion 13 in mesh with the toothed wheel 10, and a large sprocket-wheel 14, which is connected 50 to the above-described sprocket-wheel 8, attached to the roller 15. Placed over the frame 2 is a wire-netting 20, which extends the entire width of the car and from the top of the roller 15 back and up to the under side of the 55 floor of the car.

In operation the axle of the car while turning revolves the toothed wheel 10 and pinion 13, which in its turn rotates the large sprocketwheel 14, and its motion is transferred to the 60 roller 15 by means of the chain 19 and small sprocket-wheel 8, thus giving the said roller a rapid rotary movement in the direction indicated by the arrow. This movement of the roller, aided by the corrugations and small 65 projecting pins, lifts any obstruction from the track and casts the same upward upon the wire-netting, thereby removing the same from the track and preventing any large body from passing beneath the car.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

The herein-described guard for street and other railway cars, consisting of the frame 2, 75 arranged in slides, and a means for securing the same in any desired position, the roller 15, journaled to the said frame at the front of the guard, and a sprocket-wheel attached to the roller and connected by a chain belt to a 80 sprocket-wheel which is connected by intermediate gearing to one of the axles of the car, whereby the said roller is given a rapid rotary movement to cast obstructions upward upon a wire-netting arranged on the frame across 85 the front of the car, substantially as herein shown and described.

In testimony that I claim the foregoing I hereunto affix my signature this 5th day of September, A. D. 1891.

PATRICK BARRON. [L. s.]

In presence of— M. E. Harrison, Charles Large.