No. 639,577. Patented Dec. 19, 1899.

W. JACKSON.

CAR FENDER.

(Application filed June 6, 1899.)

(No Model.)

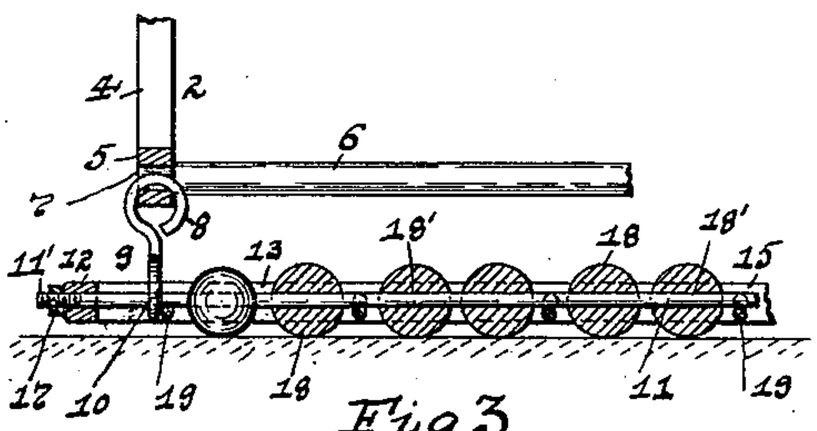

Fig. 3.

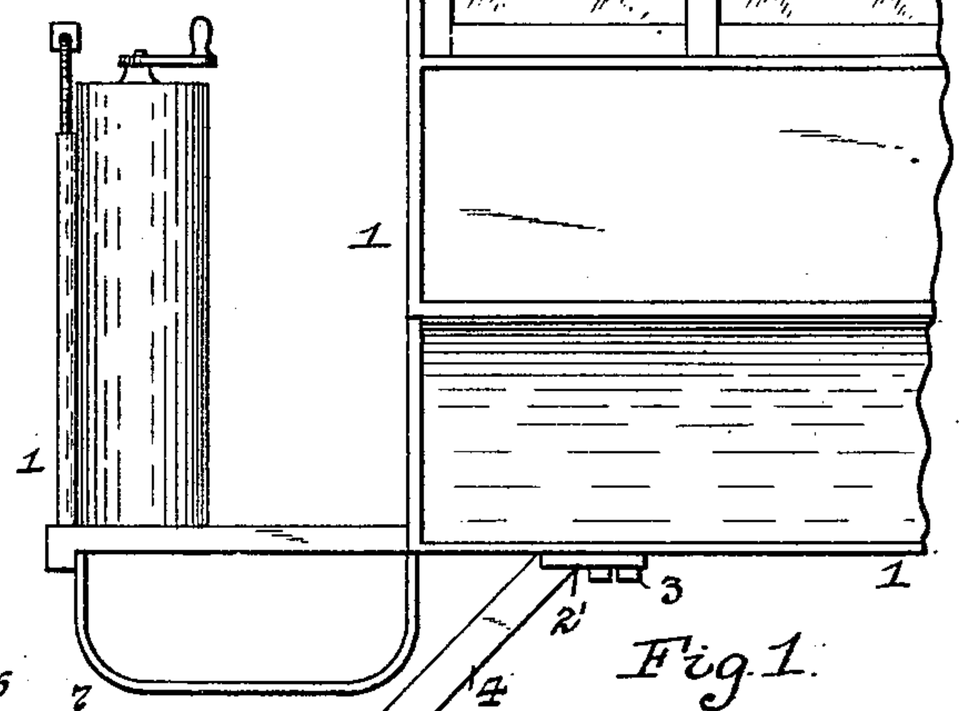

Fig. 1.

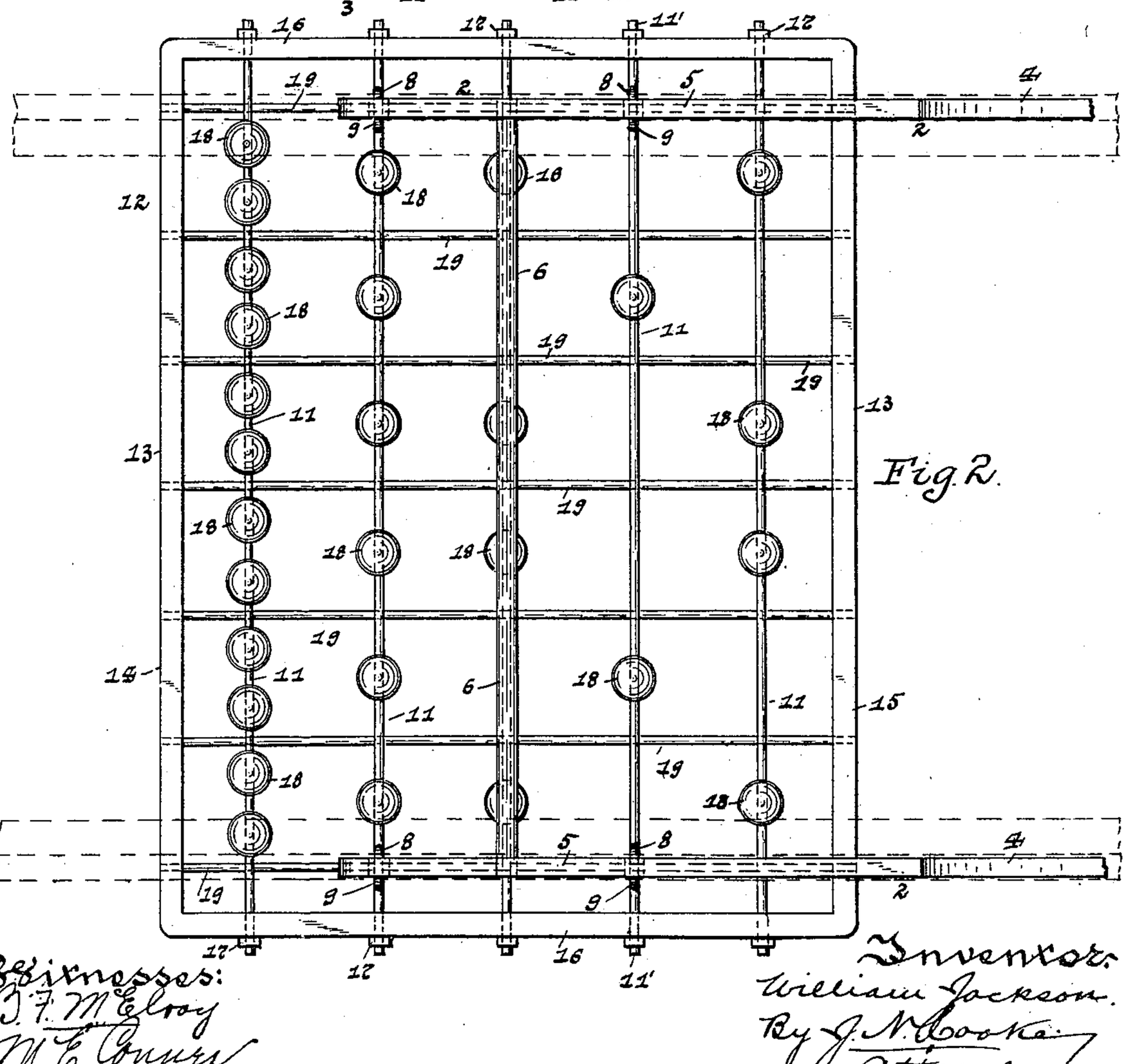

Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM JACKSON, OF ALLEGHENY, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 639,577, dated December 19, 1899.

Application filed June 6, 1899. Serial No. 719,540. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JACKSON, a citizen of the United States, residing at Allegheny, State of Pennsylvania, have invented a new and useful Improvement in Car-Fenders, of which the following is a specification.

My invention relates to fenders for cars, and has for its object to provide a cheap and effective fender for use on electric, cable, or other railway cars and one which will prevent injury or death to persons and animals that may be in the path of the car's movements.

Another object of my invention is to provide such a fender which will always be kept upon the road-bed and at the same time will allow stones and other such small objects to pass easily under the fender during the movement of the car.

My invention consists, generally stated, in the novel arrangement, combination, and construction of parts, as hereinafter more specifically set forth and described, and particularly pointed out in the claims.

To enable others skilled in the art to which my invention appertains to construct and use my improved fender, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 shows a side view of a portion of a car-body, showing my improved fender applied thereto. Fig. 2 is a top view of the fender, and Fig. 3 is a detail section thereof.

Like numerals herein indicate like parts in each of the figures of the drawings.

As illustrated in the drawings, 1 represents the car, which can be of any approved construction and has one end 2′ of the supporting-bars 2 rigidly connected thereto by means of bolts 3. These supporting-bars 2 extend down on each side of the car, as at 4, to form the horizontal portions 5, which project in front of the car 1 and have the cross-bar 6 extending across and rigidly connected between them. The horizontal portions 5 on the supporting-bars 2 are provided with the holes 7 therein, within which loosely fit the upper ends 8 of the hangers 9, and these hangers 9 are connected loosely at their lower ends 10 around cross-rods 11 on the fender 12 under the horizontal portions 5 of the supporting-bars 2. The fender 12 is formed of the frame 13, composed of the front portion 14, rear portion 15, and side portions 16, and the cross-rods 11 extend through and are secured in the side portions 16 of the fender 12 by means of nuts 17, engaging with the ends 11′ thereof and screwed up against the outer faces of said side portions 16. Fitting around the cross-bars 12 by means of openings or holes 18′ therein are the metal balls or rollers 18, which are preferably formed of steel and are adapted to rest upon and travel upon the road-bed or street upon which the car 1 moves. These metal balls or rollers 18 are adapted to slide loosely upon the cross-rods 11 and are held in place by means of rods 19, secured within the front portion 14 and rear portion 15 of the frame 13 and passing under the cross-rods 11.

The operation of my improved car-fender is as follows: During the momentum of the car 1 the parts composing the fender 12 are in their normal position, as shown in Fig. 1, and when a person or animal is struck by the fender 12 it will remain in such normal position on account of the fender 12 and parts being of sufficient weight and the metal balls or rollers 18 on the cross-rods 11 thereof traveling on the road-bed upon which the car 1 moves. By reason of this fender 12 remaining in this normal position the person or animal struck by such fender 12 will be pushed along in front of the same by the front portion 14 of the frame 13 or will be allowed to drop down onto the frame 13 of the fender 12. The fender 12, being supported by the loose hangers 9 in the horizontal portions 5 of the supporting-bars 2, will allow sticks, stones, and other small objects or articles to pass readily and easily under the fender 12, and the metal balls or rollers 18, sliding upon the cross-rods 11 of the fender, will materially assist such objects or articles to pass more easily and quickly under said fender. The metal balls or rollers 18 preferably extend all the way across the front cross-rod 11 of the fender 12, while those balls or rollers 18 in the rear of the front cross-rod 11 can be staggered on the rear cross-rods 11, as shown in Fig. 2.

If desired, suitable mechanism can be applied to the car-fender to be operated by the operator from the car for raising the fender when desired to allow the same to pass over

any obstructions or obstacles on the road-bed. Also, if desired, soft or yielding material—such as rubber, cloth, &c.—can be secured to the front frame portion of the fender, and also a network of soft or yielding cords or wire can be placed within the frame of the fender and over the rods and rollers therein to prevent any possible injury to the person or animal from that source by their striking these parts.

It will thus be seen that my improved car-fender is cheap and simple in its construction, as well as effective and practical in its operation, and the parts can be transferred from one car to another without any material change in any of its parts. The fender will be at all times held down upon the road-bed, so as to prevent loss of life or injury to persons and animals coming in contact therewith, and it allows sticks, stones, and like small objects to pass easily and quickly under the same without lifting the fender from the road-bed during the momentum of the car. Each car may be and preferably is furnished with a fender at either end, and the particular shape and location of which can be changed or varied as desired without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination with a car, of a support carried by the car, and a frame hung loosely from said support by connections pivoted to the support and to the frame, said frame having two or more series of rollers journaled therein and adapted to travel on the road-bed.

2. The combination with a car, of a support carried by the car, and a frame hung loosely from said support and having two or more series of rollers loosely and slidably journaled therein and adapted to travel on the road-bed.

3. The combination with a car, of a support carried by the car, a frame hung loosely from said support, and two or more series of balls or rollers mounted on cross-rods in said frame and adapted to travel on the road-bed.

4. The combination with a car, of a support carried by the car, a frame hung loosely from said support, and two or more series of rollers mounted on cross-rods in said frame and adapted to travel on the road-bed, said rollers having a sliding connection with said cross-rods.

5. The combination with a car, of a support carried by the car, a frame hung loosely from said support, two or more series of rollers mounted on cross-rods in said frame and adapted to travel on the road-bed, said rollers having a sliding connection with said cross-rods, and a series of rods in said frame between the rollers.

In testimony whereof I have hereunto set my hand, at Pittsburg, in the county of Allegheny and State of Pennsylvania, this 5th day of June, A. D. 1899.

WILLIAM JACKSON.

Witnesses:
J. N. COOKE,
B. F. MCELROY.