(No Model.)

E. KEMNITZ.

STREET OR RAILWAY CAR FENDER OR GUARD.

No. 524,207. Patented Aug. 7, 1894.

Fig. 1.

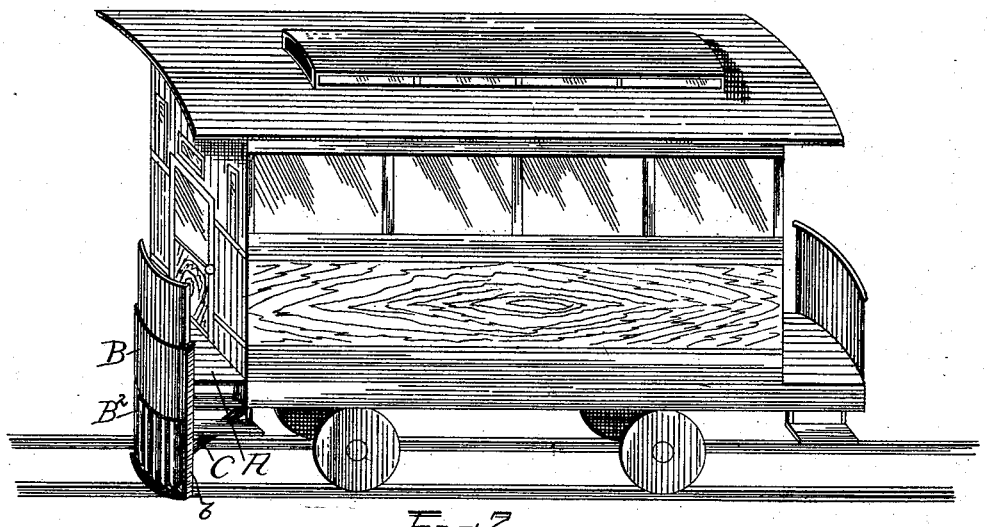


Fig. 2.

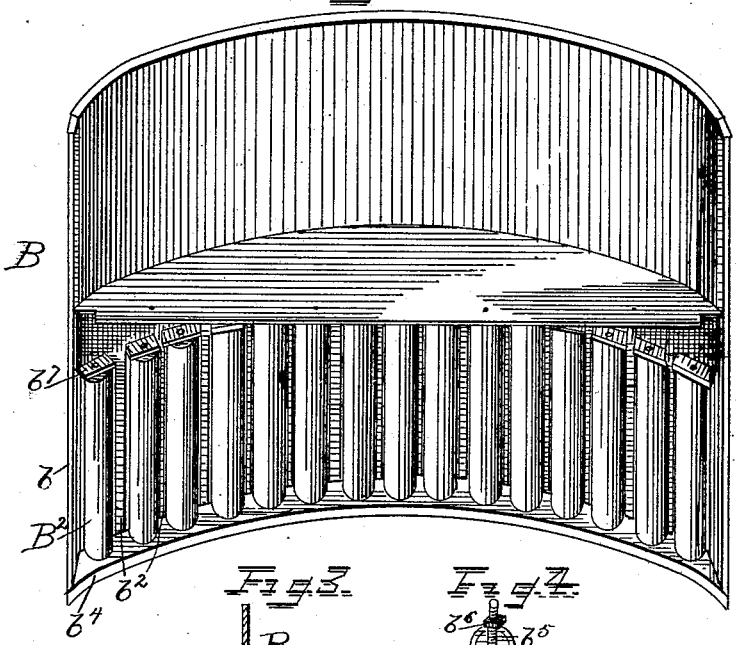


Fig. 3.

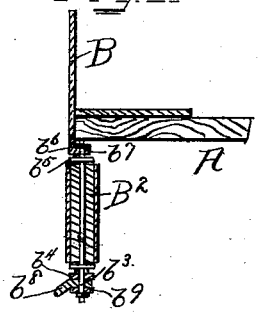
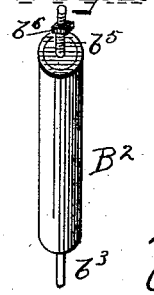


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

EMIL KEMNITZ, OF MEMPHIS, TENNESSEE.

STREET OR RAILWAY CAR FENDER OR GUARD.

SPECIFICATION forming part of Letters Patent No. 524,207, dated August 7, 1894.

Application filed October 27, 1893. Serial No. 489,290. (No model.)

To all whom it may concern:

Be it known that I, EMIL KEMNITZ, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Street and Railway Car Fenders or Guards; 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 appertains to make and use the same.

This invention relates to fenders for street and railway-cars, &c.

The object is to produce a simple, efficient, and inexpensive device, by which a body may be removed from a railway-track by a car without injury either to the body or to the car.

With this object in view, the invention consists of the device and its details of construction, substantially as hereinafter set forth and claimed.

The invention is illustrated in the accompanying drawings, in which—

Figure 1—represents a perspective view of a street-car with my improved fender applied; Fig. 2—a perspective view of the inner side of the fender; Fig. 3—a vertical sectional view of the fender; and Fig. 4—a perspective view of one of the rollers.

In the drawings, A designates the platform of a car with which is formed, in the case of new cars a body, B, extending in front, the body being, in the case of old cars, attached thereto in any suitable manner. The body, B, has a convex front, the curve being practically about the arc of a circle and of a circle of considerable diameter, yet not so great but that the curve will be well rounded, so that an object struck will be moved to one side or the other. The lower part of the body, B, is composed of a frame, b, having a series of openings, at each side of which is a rod or bar, b^2. Between each pair of rods or bars, b^2, is arranged a roller B^2, which is suitably mounted in the frame in such manner as to permit of its free revolution. The preferred manner of mounting the rollers is by providing their lower ends with projections, b^3, which extend into a plate, b^4, and by providing, at their upper ends, a pin, b^5, having on it a nut, b^6, which is designed to come in contact with plates, b^7, provided for the reception of the pins, b^5. The use of the nuts, b^6, may be dispensed with and the rollers may be retained in place by the employment of the projections at their ends, which enter the horizontal plates on the inner face of the curved body, B. The rollers, B^2, are arranged between the rods or bars, b^2, in such manner that only a small portion of the surface of each projects beyond the front of the frame, and the rollers are of a size and shape almost completely and, also, uniformly to close the space between the rods or bars, b^2, thereby preventing possibility of passage between them and the rods or bars of any large object, or the catching and holding of the same. As shown, the rollers are preferably cylindrical, whereby they may be placed quite closely together.

The rollers, B^2, are composed of, or their outer faces are provided with, a coating of some elastic, soft, or yielding material such as india rubber, felt, or the like, so that, an object struck will not be injured nor cause injury to the car or its occupants.

Below the plate, b^4, is attached, by any suitable means, as, for instance, by the pin, b^3, on the roller, B^2, a depending curved plate, b^8, which extends downward to within a short distance of the track. This plate, b^8, is preferably composed of rubber, or other suitable soft substance, and, as it depends from the front face of the fender in a downward direction, any object with which it comes in contact will be raised and thus be prevented from getting under the car. The lower part of the plate, b^8, is preferably sustained by a bar, b^9, whereby it will be retained in suitable position with reference to the plate, b^2.

The rollers may be of any suitable length according to the uses to which the fender is to be put.

It will, of course, be understood that the body, B, is suitably braced, so that bending or injury to the same by coming in contact with a human being or other object, will be prevented.

It will be obvious that my invention has also this advantage, that if there are two

tracks, one beside the other, and an object is struck by a locomotive or car on one track, it cannot be run over on the other track. The object will either be thrown between the tracks or to one side.

The advantage of giving to the fender a substantially uniformly curved front face, as shown, instead of giving it any prominent projection, will be apparent at once. By the form employed, possibility of distinct injury from a pointed or a reduced portion will be avoided. An object struck by the curved front face of my fender will be removed from the track with a minimum amount of bruising or other injury.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A fender, comprising a body provided with upright rollers arranged, practically, in the form of the arc of a circle of large diameter, that is, of substantially uniform general curve outward, avoiding marked prominence of the curve or at any portion thereof, substantially as and for the purpose described.

2. A fender having upright rollers arranged in a curve of moderate and practically uniform convexity outward or toward the front, that is, in a curve without marked prominence in whole or in part, the rollers being composed of or provided with a coating of elastic, soft, or yielding substance or material, substantially as set forth.

3. A fender consisting of a body provided with a series of rods or bars having placed between them and projecting to the front beyond them, upright rollers arranged in a curve of moderate and practically uniform convexity outward, avoiding any marked prominence, substantially as described.

4. A fender having upright rollers arranged in a curve of moderate and practically uniform convexity outward, the rollers being cylindrical, whereby they may be set close together along their entire length to prevent any large object passing through them or being caught and held at any part of their length, substantially as set forth.

5. A fender, comprising a series of rollers arranged in a curve and a depending plate designed to extend to a short distance from the track, substantially as described.

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

EMIL KEMNITZ.

Witnesses:
E. A. NEELY,
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