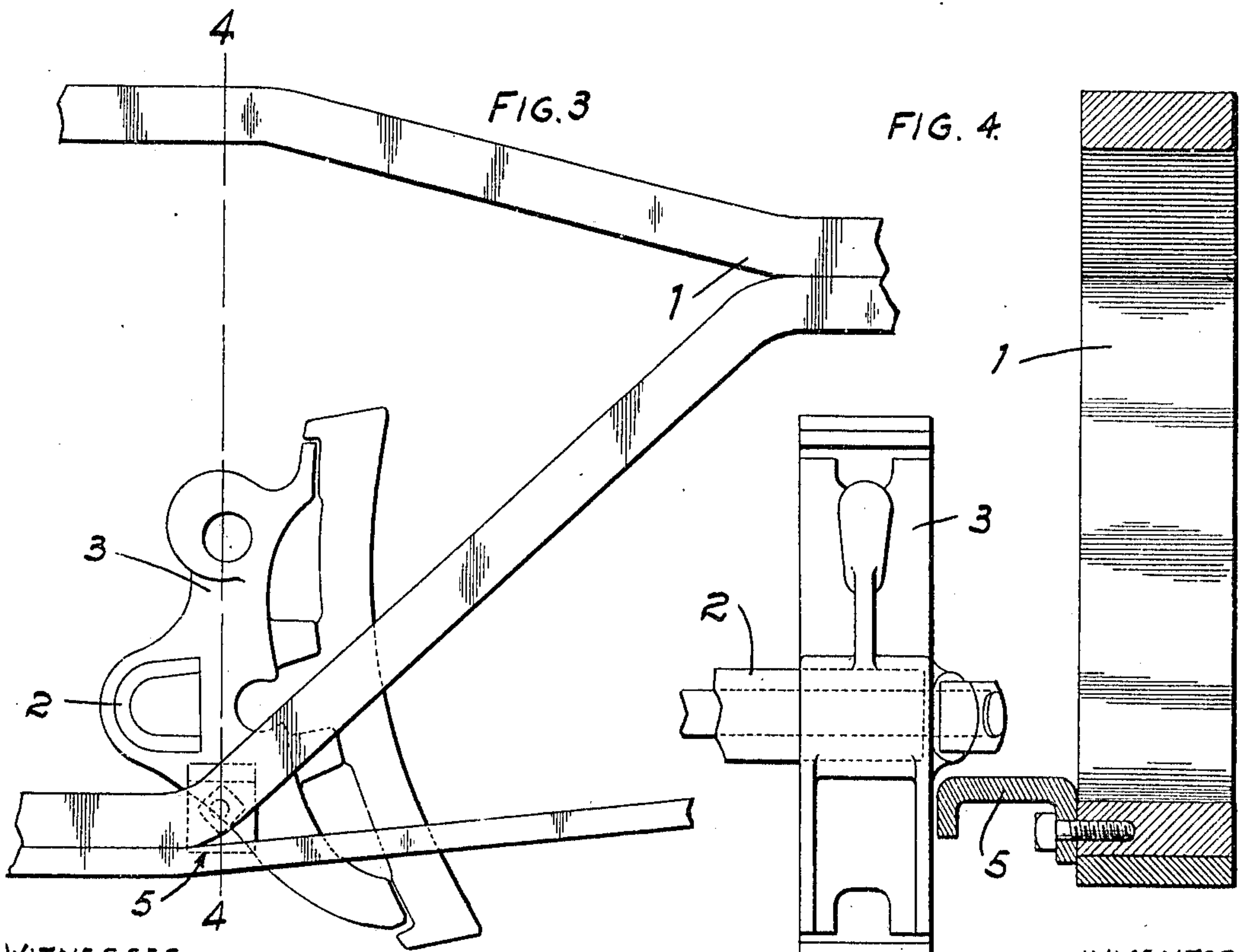
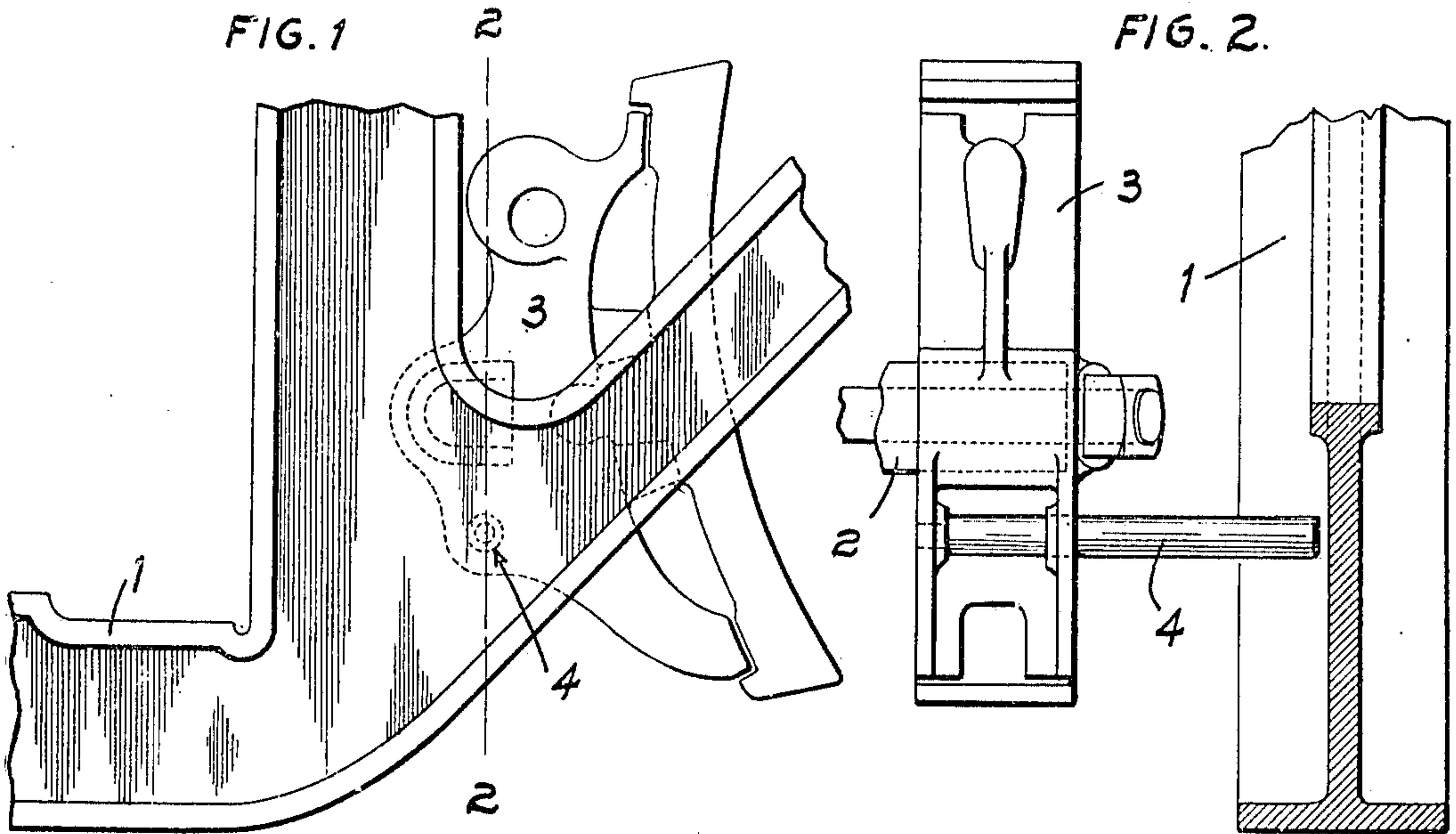


F. T. DE LONG.
 GUARD FOR BRAKE BEAMS.
 APPLICATION FILED JULY 14, 1909.

950,632.

Patented Mar. 1, 1910.



WITNESSES

J. W. James
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UNITED STATES PATENT OFFICE.

FREDERICK T. DE LONG, OF CHICAGO, ILLINOIS, ASSIGNOR TO CHICAGO RAILWAY EQUIPMENT COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

GUARD FOR BRAKE-BEAMS.

950,632.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed July 14, 1909. Serial No. 507,652.

To all whom it may concern:

Be it known that I, FREDERICK T. DE LONG, a citizen of the United States, residing at Chicago, Illinois, have invented a certain new and useful Improvement in Guards for Brake-Beams, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of a portion of a truck side frame and illustrating the brake beam carrying my improved guard. Fig. 2 is a vertical section taken approximately on the line 2—2 of Fig. 1. Fig. 3 is an elevation of a portion of a diamond-shape truck frame and showing the guard arranged on said side frame. Fig. 4 is a vertical section taken approximately on the line 4—4 of Fig. 3.

My invention relates to a guard in the form of a finger or bracket, particularly designed so as to permit the application of brake beams to swing motion arch bar or diamond-shape side frame trucks where the brake beams are suspended from the truck bolster, and which guard prevents the beam from swinging or shifting laterally on curves, thus maintaining the proper relation between the brake shoes and peripheries of the car wheels at all times.

The object of my invention is to provide a simple, inexpensive arrangement which will maintain the brake beam in proper position at all times, regardless of the position of the swing motion trucks, and which guard will in no wise interfere with the action of the beam when the brakes are applied.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts hereinafter more fully described and claimed.

Referring by numerals to the accompanying drawings, 1 designates a cast metal side frame, 2 the brake beam suspended from the truck bolster in the usual manner and carrying upon its ends the usual brake heads 3. Rigidly fixed in any suitable manner to each head and projecting outwardly therefrom is a horizontally disposed pin or finger 4, which is of such length as that the outer end occupies a point immediately adjacent the inner surface of the web of the

side frame 1. These fingers maintain the brake beam in proper position so that when the brakes are applied the shoes on the ends of the brake beam will engage against the peripheries of the wheels regardless of the position of the truck relative to the car body.

It will be readily understood that brake beams hung from the bolsters of swing motion trucks or any inside hung beam capable of lateral motion, shift laterally when going around curves, thus changing the relative positions of the brake shoes and the peripheries of the wheels, and therefore, if the brakes are applied while on a curve, the brake shoes will not be brought into proper contact with the peripheries of the car wheels. My improved construction overcomes this defect, inasmuch as the guard fingers prevent the brake beam from shifting laterally when the truck swings laterally, and thus the brake shoes are held in proper working positions.

In the modified construction shown in Figs. 3 and 4, guard fingers in the form of brackets 5 are rigidly fixed to the side frames of the truck, which brackets project inwardly and terminate immediately adjacent the outer faces of the brake heads 3. This arrangement is merely the reverse of the arrangement shown in Figs. 1 and 2 and obviates the mounting of the guard fingers on the brake heads. Thus it will be seen I have provided simple means whereby brake beams suspended from the truck bolsters of swing motion trucks are prevented from swinging laterally when the trucks shift or swing laterally in going around curves.

It will be understood that minor changes in the construction and form of my device can be made and substituted for those herein shown and described, without departing from the spirit of my invention.

I claim:

1. In a car truck, the combination with the side frames and brake beam, of means interposed between the ends of the beam and the side frames for permitting independent vertical movement and preventing excessive lateral swing of said beam.

2. In a car truck, the combination with the side frames and brake beam, of means carried by the beam and interposed between the ends thereof and the side frames of the truck for permitting independent vertical

movement and preventing excessive lateral swing of said beam.

3. In a car truck, the combination with the side frames and brake beam, of brake heads fixed on the ends of the beam, and guard fingers interposed between the brake heads and the side frames for preventing excessive lateral swing of the brake beam.

4. In a car truck, the combination with the side frames and brake beam, of brake heads fixed on the ends of the beam, and guard fingers fixed to the brake heads and adapted to bear against the side frames of the truck for preventing excessive lateral swing of the brake beam.

5. In a car truck, a brake beam and guard fingers projecting outwardly from the ends thereof, and which permit vertical movement.

6. In a car truck, a brake beam, brake heads located on the ends thereof, and guard fingers projecting outwardly from said brake heads.

7. In a car truck, a brake beam, brake heads located on the ends thereof, and guard fingers projecting outwardly from said brake heads, the ends of which guard fingers terminate immediately adjacent the inner faces of the side frames of the car truck.

8. In a car truck, rigidly held guard fingers interposed between the ends of the brake beam and the side frames of the car truck.

9. In a car truck, rigidly fixed means interposed between the ends of the brake beam and the side frames of the car truck for maintaining the proper relative positions between the heads on the ends of the brake beam and the peripheries of the car wheels, said means permitting free vertical movement of said beam.

10. In a car truck, a brake beam, heads fixed on the ends thereof, and rigidly fixed means interposed between the brake heads and the side frames of the car truck for preventing excessive lateral swing of the brake beam.

11. In a car truck, a brake head having an opening to receive a guard finger, and a guard finger arranged therein.

12. In a car truck, a brake beam having a guard finger extending substantially parallel to the longitudinal axial line of the beam.

13. In a car truck, a brake head having a guard finger extending substantially parallel to the longitudinal axial line of the beam.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 2d day of July 1909.

FREDERICK T. DE LONG.

Witnesses:

EDWARD T. WALKER,

M. F. HUNTOON.