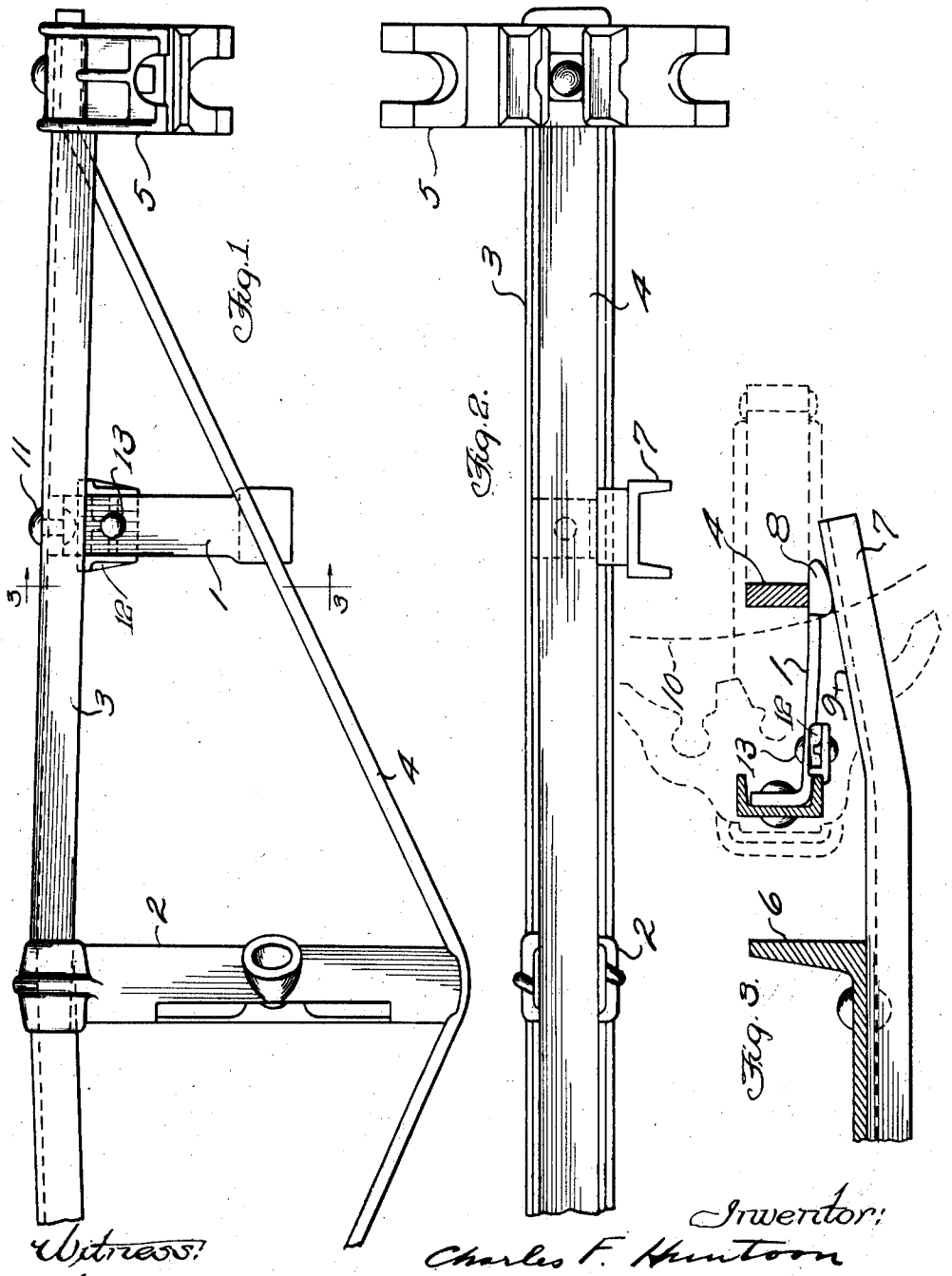
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BRAKE BEAM.

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1,390,968. Patented Sept. 13, 1921.



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BRAKE-BEAM.

1,390,968. Specification of Letters Patent. Patented Sept. 13, 1921.

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To all whom it may concern:

Be it known that I, CHARLES F. HUNTOON, a citizen of the United States of America, and a resident of Chicago, county of Cook and State of Illinois, have invented certain new and useful Improvements in Brake-Beams, of which the following is a specification.

This invention relates to brake beams and more particularly to beams of that class having additional guiding and supporting members located between the center and ends of the beam. The object of the invention is to provide a support of this nature which will allow the necessary slight flexing of the beam when under strain while at the same time serving to protect the beam from wear at this point of support. The said guiding members are permanently attached to the beam so that they can not become displaced in service and allow the beam to come in contact with or wear on the supporting members attached to the truck.

In the accompanying drawing—

Figure 1 shows the improved design of brake beam, in plan, partly broken away.

Fig. 2 is an elevation from the tension side of the beam.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1.

The invention relates particularly to the design of a guide or support indicated by 1 in the drawings. This supporting element is permanently attached to the compression member of the beam and extends from it to beneath the tension member in position to support the beam while saving the tension member from wear that it would have if it contacted directly with the usual supports extending from the spring plank. The particular design of supporting, guiding and wearing element is intended to provide for the proper functioning of said support without weakening the beam in any respect while permitting the latter to have such relative movement as is bound to occur when working or under strain.

Referring to the drawings, the brake beam is shown as having the usual central truss 2, channel or compression member 3 and the strap or tension member 4, and carried at the ends of the beam are the usual brake heads 5. The spring plank 6 is shown in section in Fig. 3 and has extending therefrom the supporting and guiding channels 7 for the beam. The head 8 of the guiding and supporting element 1 is located between the tension member 4 and the inclined surface 9 of the channel 7. When the brake beam moves toward and away from the car wheels 10 it is guided by the member 1 in a desired direction, that is, radially of the wheels, by the surface 9 of channel 7. The wear which occurs is therefore mainly between the head 8 and the channel 7 and the tension member is therefore properly protected.

The guide 1 is permanently attached to the compression member 3 by the rivet 11, and has a member 12 which shoulders against the flange of channel 3 to relieve any side strain on guide 1. The member 12 is secured to the guide 1 by a rivet 13. Since the strains are of compression the shank of the rivet compensates for perforating the compression member at this point.

In the operation of the device, when the beam is moved toward and away from the wheels in the braking action the guide 1 travels along the surface 9 of the supporting channel 7, practically no relative motion taking place between the guide 1 and the tension member 4, the wear then being mainly on the guide 1; but this guide can not act as an abutment for the tension member when the beam is subjected to strains.

The guide 1 being permanently attached to the beam, it can not become displaced, in its relation to the channel support 7. Where clamps are used, attached to either the tension or compression members, or both, they become displaced in service, resulting in the tension member of the beam bearing directly on the support 7, thereby being cut and worn and seriously injuring the brake beam structure.

I claim:

1. A brake beam comprising the usual compression and tension members and the central truss, and supporting elements permanently attached to the compression member and extending therefrom to beneath the tension member but unattached thereto.

2. A brake beam comprising the usual compression and tension members and the central truss, and supporting elements permanently attached to the compression member and extending therefrom to beneath the tension member but unattached thereto, said supporting members having enlarged wearing heads at the points of contact with the tension member.

3. A brake beam comprising the usual compression and tension members and the central truss, and supporting elements permanently attached to the compression member and extending therefrom to beneath the tension member but unattached thereto, in combination with a spring plank having horizontally projecting supports engaging said supporting elements at points below the tension member.

Signed at Chicago this 12th day of January, 1921.

CHARLES F. HUNTOON.