(No Model.)

2 Sheets—Sheet 1.

L. K. JEWETT.

CAR BODY BOLSTER.

No. 512,968. Patented Jan. 16, 1894.

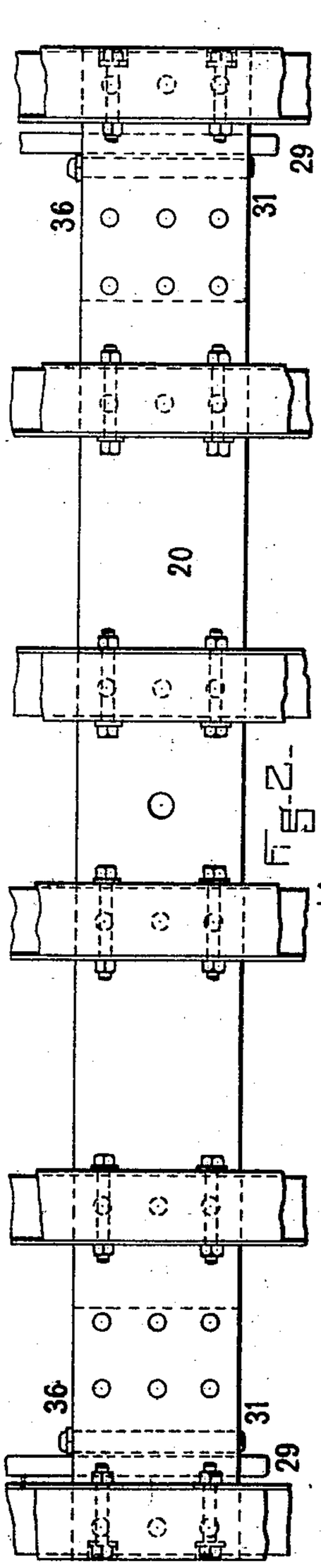

Fig. 2.

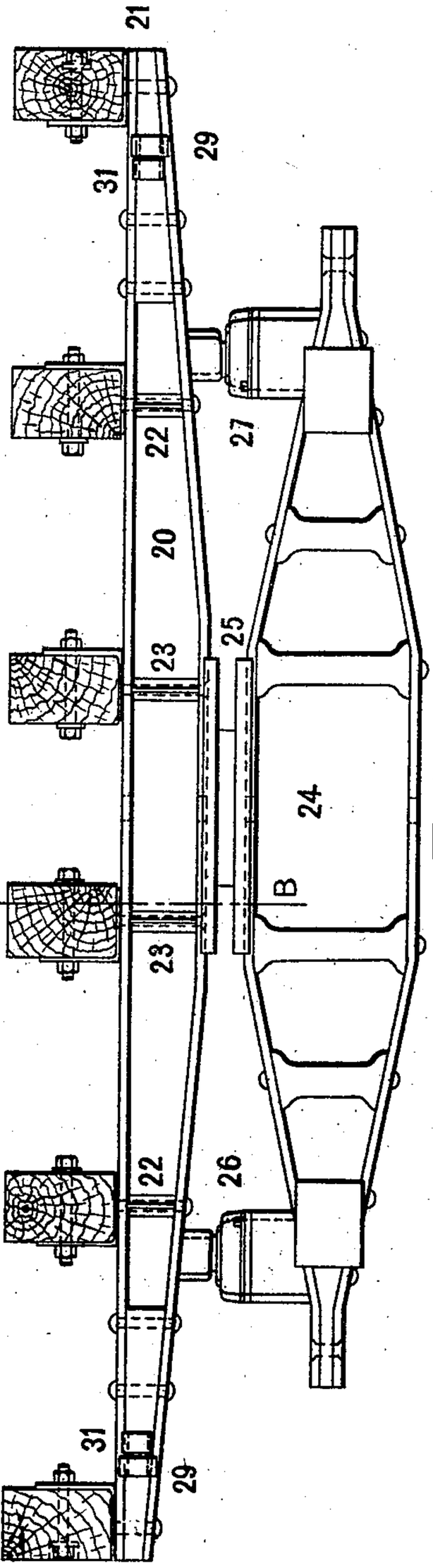

Fig. 1.

Fig. 5.

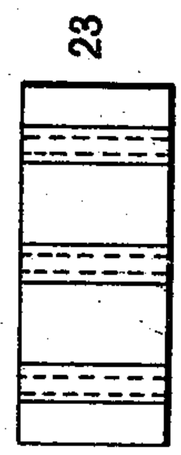

Fig. 4.

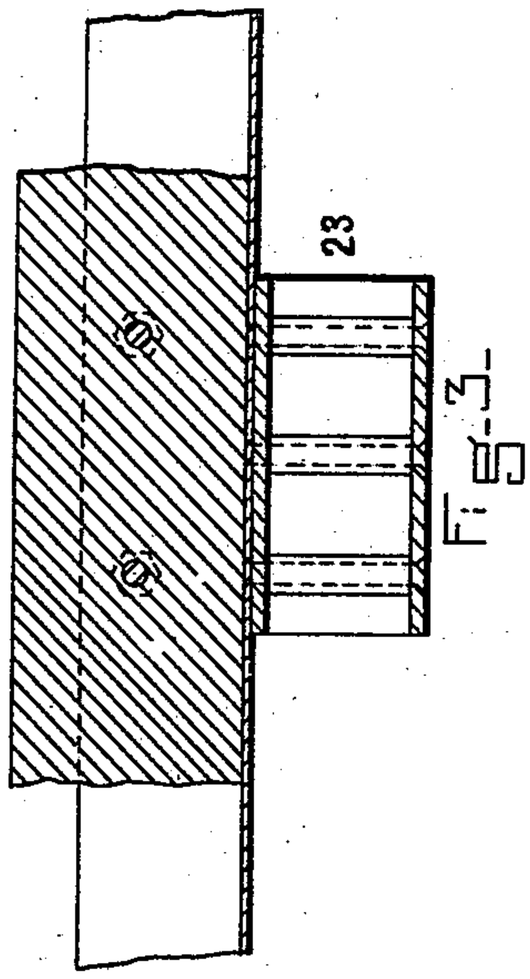

Fig. 3.

WITNESSES.

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(No Model.) 2 Sheets—Sheet 2.

L. K. JEWETT.

CAR BODY BOLSTER.

No. 512,968. Patented Jan. 16, 1894.

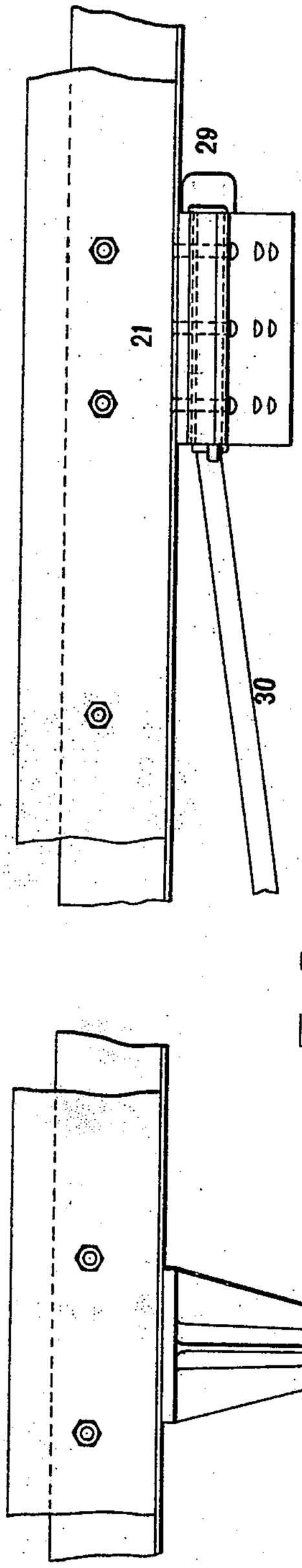

Fig. 6.

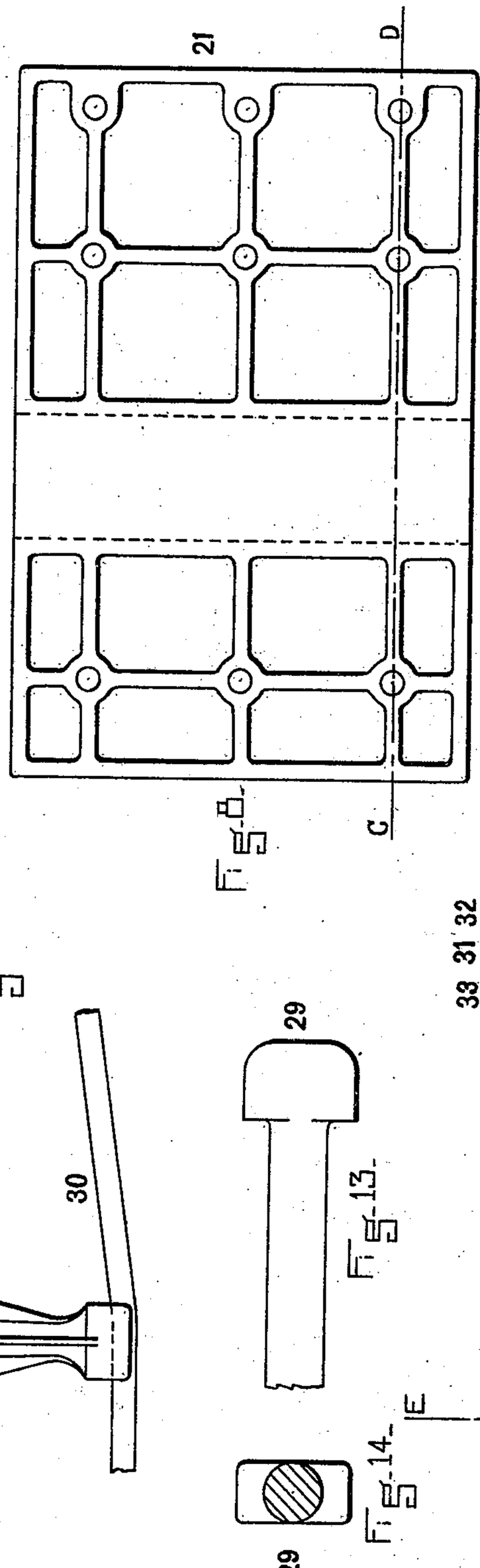

Fig. 8.

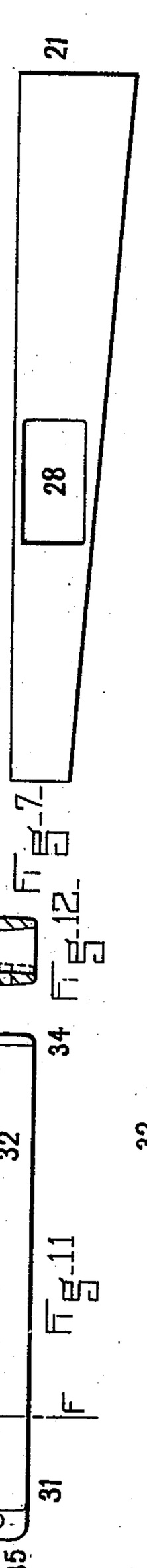

Fig. 7.

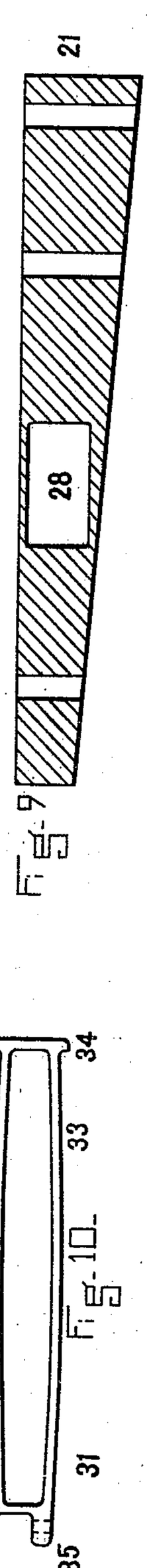

Fig. 9.

Fig. 12.

Fig. 13.

Fig. 14.

Fig. 11.

Fig. 10.

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UNITED STATES PATENT OFFICE.

LUTHER K. JEWETT, OF BOSTON, MASSACHUSETTS.

CAR-BODY BOLSTER.

SPECIFICATION forming part of Letters Patent No. 512,968, dated January 16, 1894.

Application filed September 4, 1893. Serial No. 484,765. (No model.)

To all whom it may concern:

Be it known that I, LUTHER K. JEWETT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Car-Body Bolster, of which the following is a specification.

My invention relates to car body bolsters designed for use upon railway cars.

It has for its object, the construction and arrangement of the parts composing the bolster, particularly of the bolster end blocks, by means of which, the truss rods may be securely, readily, and cheaply fastened to the bolster and car body.

This invention is an improvement upon the car body bolster described and claimed by me, in my application for Letters Patent of the United States, Serial No. 468,894, filed April 3, 1893, and the bolsters are substantially the same, except as above noted, as shown in said application.

Figure 1 represents in front elevation my invention as applied to the bolsters of a car, the car sills being shown in section. Fig. 2 is a plan of Fig. 1. Fig. 3 is a sectional view upon an enlarged scale of the car body bolster and car sill on line A B of Fig. 2. Fig. 4 represents in side elevation, upon an enlarged scale, one of the center posts of the car body bolster, and Fig. 5 is a plan of Fig. 4. Fig. 6 is a side view, drawn upon the same scale as Figs. 3, 4, and 5, of the side car sill, illustrating the application of my device, the car sill, car body bolster, truss rod, and truss rod bearing, being shown in elevation, the sill and truss rod being broken in their length, in order to permit the drawing to be made upon an enlarged scale. Figs. 7 to 14 inclusive, show upon an enlarged scale, the details of construction of the end blocks of the car body bolster, the head end of the truss rod, and the truss rod lock or guard. Fig. 7 is a front elevation of the car body end block. Fig. 8 is a plan of Fig. 7, and Fig. 9 is a sectional view of Fig. 8 on line C D. Fig. 10 is a side elevation of the truss rod lock or guard. Fig. 11 is a plan of Fig. 10, and Fig. 12 is a sectional view of Fig. 11 on line E F. Fig. 13 is a side view of the head end of the truss rod, and Fig. 14 is an end view of Fig. 13.

The car body bolster 20 is of the "queen post" construction and it is provided with the end blocks 21, intermediate posts 22, and the center posts 23. The truck bolster 24 is of the open truss construction, and the bolsters are provided with the center plates 25 and the side bearings 26 and 27.

Between the top and bottom plates of the car body bolster are placed the posts and end blocks; then these parts are riveted together as shown. Some of the rivets extend through and are used to fasten the bolster to the angle steel stills which are designed to receive and to be bolted to the car sills, all as shown.

When my improved car body bolster is used in ordinary car construction (when the angle steel sills are not used) the rivets extend only through the top and bottom plates.

One of the car body end blocks 21 is shown in detail by Figs. 7, 8, and 9, and it is constructed as follows:—It is of the open rib construction and it is provided with rivet holes to take the rivets used in constructing the complete car body bolster. It is also provided with the rectangular truss rod opening or hole 28 designed to receive the head end of the truss rod. The head end or head 29 of the car body truss rod 30 is of rectangular shape, as shown. The rectangular section of the head 29 is less than the section of the hole 28. The truss rod lock or guard 31 is composed of the top and bottom spring members 32 and 33, the flanged head 34, and the projecting flange 35. These guards are designed to be secured in their longitudinal positions by means of the split pins, as 36, as shown in Fig. 2.

In Fig. 6 the car body bolster truss rod bearing 37 is shown in order to give a better idea of the arrangement of the truss rod.

The operation of my device is as follows:—The truss rod is turned so that its rectangular head will be opposite the inside end of the rectangular opening of one of the end blocks. The truss rod head is then pushed forward through the opening and the rod being given a one quarter turn it will be in its position as shown by Fig. 6, the head of the truss rod being in contact with the top and bottom plates of the car body bolster. The truss rod guard, which is used mainly as a matter of convenience, acts simply as a filling in piece, occupying that portion of the opening in the end

block not filled by the truss rod when in position. In order to prevent the rattling of the guard it is provided with the spring top and bottom members constructed as shown so that it will be a drive fit into the opening of the end block. To prevent the movement of the guard longitudinally the split pin is used.

The car body can be cheaply made and it possesses great strength. The openings in the end blocks can be made without any appreciable increased cost over a plain block. The head of the truss rod can be cheaply made and its construction and the method of locking are of the very strongest. The guard is simple and effective, and the truss rod can be put into position with a minimum amount of labor.

When my invention is applied to cars in which more than the usual number (two) of truss rods are required, the intermediate and center posts of the car body bolster may be provided with rectangular openings same as the end blocks.

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

1. In a car body bolster, each block of which is provided with the truss rod opening, between the top and bottom car body bolster plates, in combination with the truss rod provided with the head end which extends through said opening and locks against said plates, substantially as specified.

2. The car body bolster 20 provided with the blocks 21 having the truss rod openings, as 28, in combination with the truss rods, as 30, having the truss rod heads, substantially as described.

3. A car body bolster comprising the top and bottom plates, the center and intermediate posts, and the end blocks provided with the truss rod openings, in combination with the truss rods, provided with heads, by means of which the head end of the truss rod is locked to the bolster, substantially as described.

4. A car body bolster comprising the top and bottom plates, the center and intermediate posts, and the end blocks provided with openings to receive the truss rods, having the heads by means of which the head end of the truss rod is locked to the bolster; and the steel angle car sills, substantially as described.

5. A car body bolster, each end block of which is provided with an opening adapted to receive the head end of the truss rod, in combination with the truss rod which extends through the end block, the head of the truss rod locking against the side of the bolster; and the guard for the truss rod, substantially as described.

6. In a car body bolster, each block of which is provided with the truss rod opening between the car body bolster top and bottom plates, in combination with the truss rod provided with the head end which extends through said opening and locks against said plates, said head being held in its position by means of the guard, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LUTHER K. JEWETT.

Witnesses:
E. FRANK WOODBURY,
CHARLES L. ELLIS.