

No. 716,773.

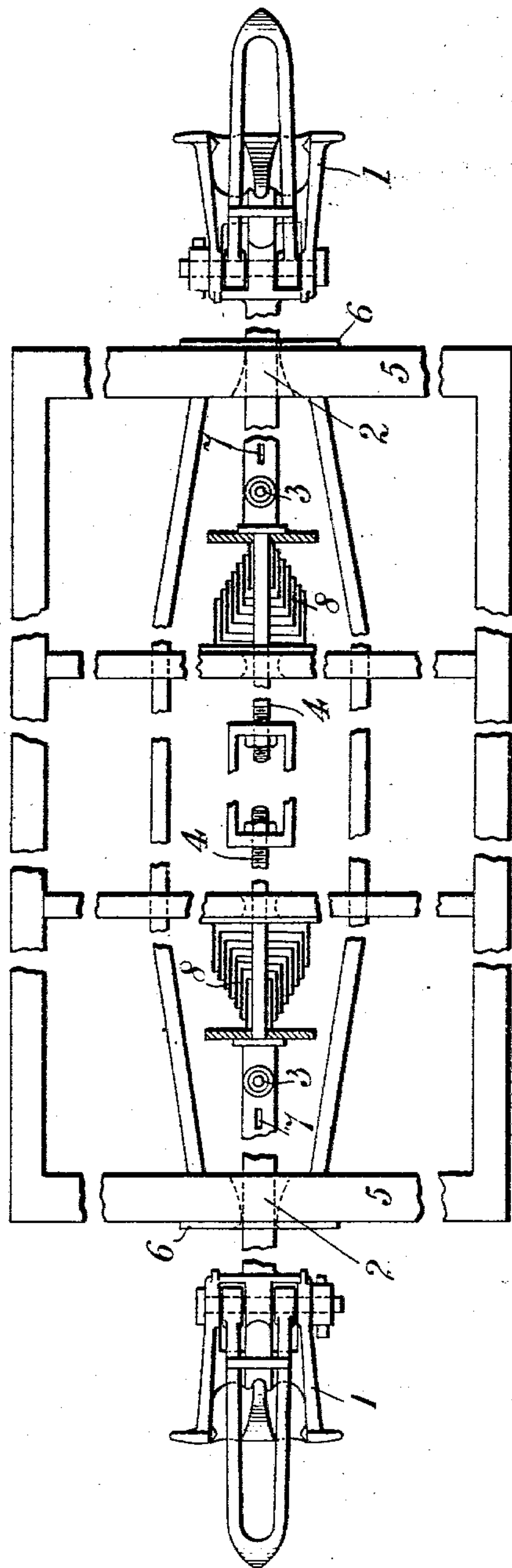
Patented Dec. 23, 1902.

A. D. SMITH.

DRAW GEAR FOR RAILWAY OR LIKE CARS.

(Application filed Oct. 4, 1902.)

(No Model.)



WITNESSES.

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ALLISON DALRYMPLE SMITH, OF EDINBURGH, SCOTLAND.

DRAW-GEAR FOR RAILWAY OR LIKE CARS.

SPECIFICATION forming part of Letters Patent No. 716,773, dated December 23, 1902.

Original application filed July 18, 1902, Serial No. 116,107. Divided and this application filed October 4, 1902. Serial No. 125,940. (No model.)

To all whom it may concern:

Be it known that I, ALLISON DALRYMPLE SMITH, a subject of the King of Great Britain, residing at Edinburgh, Scotland, have invented a certain new and useful Improvement in Draw-Gear for Railway or Like Cars, of which the following is a specification.

This invention relates to draw-gear for railway and like cars, and is particularly well adapted for use in connection with automatic buffer-couplers—such, for example, as are described in an application filed by me under date of July 18, 1902, Serial No. 116,107, of which this application is a division—but applicable for use with couplings of other descriptions where it is desirable that the draw-bar or buffer-head should be capable of lateral play in the draw-plate.

In the drawing is represented in plan view the framework of a car with this invention applied and connected to the form of automatic buffer-coupler described in specification filed under Serial No. 116,107, above referred to, the mechanism for lifting the coupling-links being omitted.

In said drawing each buffer 1 is provided with a short plunger 2, whose inner end is, as usual, flattened and provided with a vertical hole, so as to give a jointed connection with the draw-bar by means of a pin 3, passing through the end of the plunger and through corresponding holes in the forked outer end of the draw-bar 4. Instead, however, of laterally enlarging the opening in the head-stock 5 through which the plunger passes, as has been usual hitherto, it is preferred to make the opening in the draw-plate 6 approximately the same size as the plunger, but to bevel out laterally the opening in the head-stock 5 in the rear of the draw-plate, so that the plunger is enabled to swivel laterally in the head-stock, with the vertical center line of the draw-plate as its center of motion.

In order to avoid the danger that the buffer-coupler may be pulled out, owing to the breakage of any part of the draw-gear, a safety-cotter 7 may be inserted between the rear of the head-stock and the junction of the plunger and draw-bar. The central draw-springs

8 may also be used to keep the jointed portions of the draw-gear, and thereby the buffer-heads, normally in alinement, while permitting the lateral swiveling above described. For this purpose the openings in the base-block and the bearing-plates on the wagon which support the central springs are enlarged laterally, and thus allow lateral deflection of the draw-bar.

When, for example, in the act of coupling on a curve the buffer-head 1 is caused to swivel and thereby the draw-gear 2 is deflected, the central spring 8 is also laterally deformed; but as soon as the side strain on the buffer-head is removed the central spring operates to restore the draw-gear and buffer-head to its normal central position.

It is of course evident that the head-stock 5 may be beveled outward and the draw-gear be caused to pivot on a plate in the rear thereof.

What is claimed is—

1. In draw-gear for railway-cars and the like a head-stock, a tapered or countersunk opening therein, a draw-bar in said opening, a main draw-bar in the rear thereof, a hinged connection between said draw-bars, and a spring adapted normally to hold said draw-bars in alinement while permitting slight lateral play to the outer one all substantially as set forth.

2. In draw-gear for railway-cars and the like a coupler, a short draw-bar in the rear thereof, a head-stock provided with a bearing-surface for said draw-bar, a main draw-bar in the rear thereof, a hinged connection between said draw-bars and a spring adapted to act thereon and adapted normally to hold the draw-bars in alinement while permitting the short draw-bar to swivel in the head-stock all substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALLISON DALRYMPLE SMITH.

Witnesses:

PHILIP M. JUSTICE,
A. KNIGHT CROAD.