

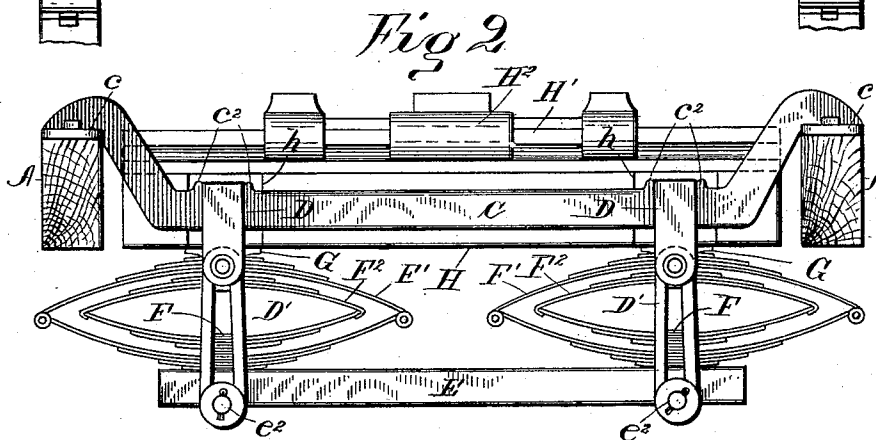
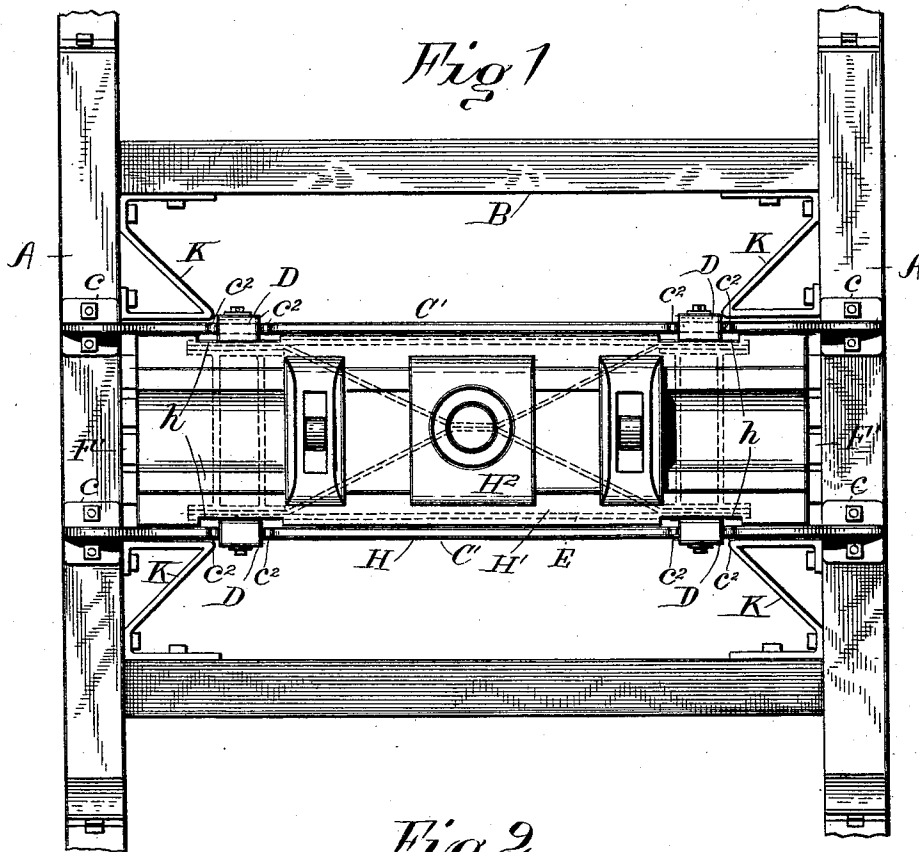
(No Model.)

2 Sheets—Sheet 1.

A. MILLER.
CAR TRUCK.

No. 477,766.

Patented June 28, 1892.



Attest;
C. C. Burdine
S. S. Bacon

Inventor,
Arnold Miller
per J. H. Hunter
Att'y

(No Model.)

2 Sheets—Sheet 2.

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Fig 3

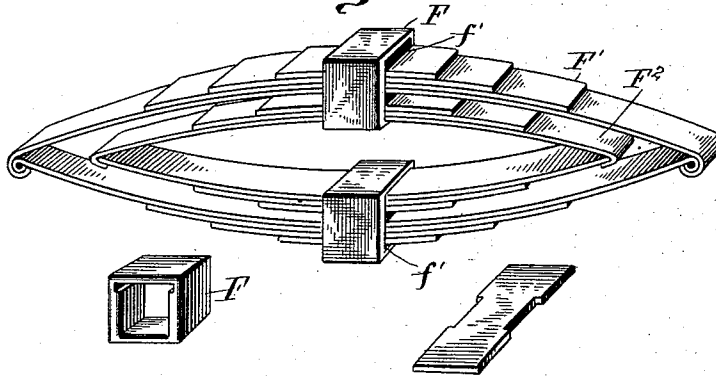


Fig 4

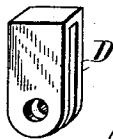
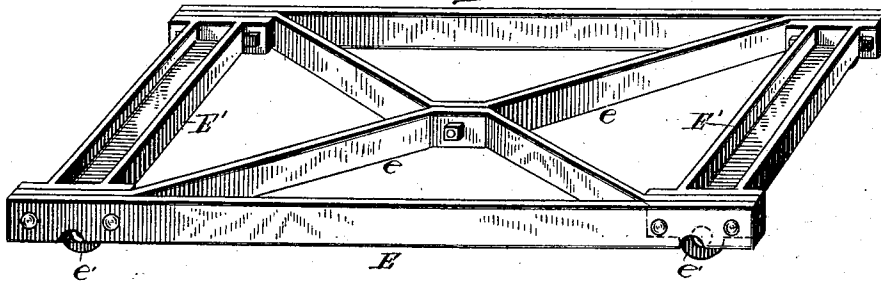


Fig 5

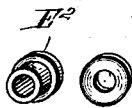
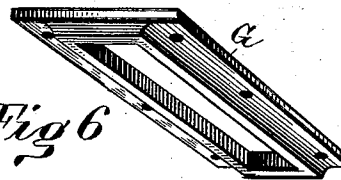


Fig 6



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UNITED STATES PATENT OFFICE.

ARNOLD MILLER, OF MEDFORD, WISCONSIN.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 477,766, dated June 28, 1892.

Application filed March 4, 1892. Serial No. 423,692. (No model.)

To all whom it may concern:

Be it known that I, ARNOLD MILLER, a citizen of the United States, residing at Medford, in the county of Taylor and State of Wisconsin, have invented certain new and useful Improvements in Car-Trucks, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in car-trucks; and it consists in the construction and arrangement of parts more fully hereinafter described, and definitely pointed out in the claims.

The object of my invention is to provide an improved means for adjusting and arranging the parts of the supporting-beam of a car-truck, rendering the same more directly applicable for laterally-sliding bolsters, and is intended more especially to be used in connection with the bolster and its supporting-plates shown and described in my application for improvement in "car-trucks" filed on even date herewith. I attain this object by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate corresponding parts in the several views, and in which—

Figure 1 represents in a top plan view my improvement, the adjacent parts of the truck being broken away. Fig. 2 is an end view. Fig. 3 is a detail view of the spring, the retaining-block of which is also shown detached, as well as one of the leaves. Fig. 4 is a detail perspective view of the spring-supporting frame. Fig. 5 is a perspective view of a clevis, link, and collar; and Fig. 6 is a detail perspective view of an upper plate.

In the drawings, A represents the side bars of the car-truck, and B the central cross-bars. C and C' represent two steel yokes extending across from one side bar to the other, having a depressed central portion and flanged ends c, through which suitable bolts pass for securing the same in place. On the upper edges of the yokes, near the opposite ends thereof, are formed ridges c², between which are placed clevises D, spanning the bars C and projecting below the lower edges thereof. To the lower ends of these clevises are secured swinging links D', the union being made by

suitable bolts passing through the wings of the clevises below the bars C.

E represents a spring-supporting frame formed of two parallel side bars and braced by V-braces e, the outer ends of which are carried parallel with the side bars and support suitable bearing-boxes E', having longitudinal channels formed in their centers and depending perforated ears e' on their outer lower ends. Through the perforations in the ears e' cylindrical supporting-rods e² pass, their ends projecting beyond the frame E and through suitable sleeves E², located in the curved lower ends of the links D'. These sleeves are provided with a flange at one end to fit the inner faces of the link and washers are fitted on the bars e² for engaging the other faces of the links, the washers being held in place by suitable keys.

It will be seen that the frame E is practically rectangular and is supported from its four corners by the links and clevises mounted on the steel yokes C, the projections c² preventing the movement of the clevises; but the links are allowed a swinging movement.

Fitted in the channels of the end bars of the frame E are suitable rectangular hollow blocks F, through which pass double leaf-springs F' and F², the springs being united at their ends by crimping or turning in the metal. They are inserted in the blocks by forming the blocks with side recesses at their upper ends, which will admit of the passage of one leaf, the center of each leaf being cut away, so that the leaf first introduced into the block may be forced down to the bottom thereof. When all of the leaves of the spring have been placed in, a suitable key f' is forced into the extended opening and the springs are locked in place. The inner and outer springs F' and F² are separated from each other by interposed metallic packing. The blocks F are placed in the channels of the end bar E' and a series of four or more springs of like construction are fitted in the channel and occupy the entire space therein, the upper boxes of the springs being placed in suitable socketed plates G, secured to the under side of the supporting-beam H. The supporting-beam H is made of a length less than

the distance between the beams A, so that the same may move slightly. This beam is supported on the spring on the frame E, and by virtue of the swinging links the entire beam is allowed a lateral movement relative to the side beams of the truck. On this beam H is mounted the supporting-rail H' and the sliding plate H², which carries the bolster of the truck, as fully described in detail in my aforesaid application.

K represents stops or bumpers formed of angle-iron and secured to the beams A, their outer ends projecting in proximity to the clevises, so that should the clevises suddenly be thrown from their seats they will engage these bumpers and be again reseated. The sides of the beam H adjacent to the clevises are cut away, as at *h*, so that the end movement of the beam may be had without engaging the projecting face of the clevis and bolt, and the beam is thereby permitted to bear against the yoke C, so that all lateral movement of the beam is prevented.

By the above-described construction it will be noticed that I provide a strong and durable support for the supporting-beam of the truck and one which will permit the longitudinal movement of the beam. It may further be stated that the outer ends of the springs are secured by suitable rods passing through eyes formed therein, so that the springs may be held tightly together. I may also form the bumpers K with offsets to brace the beams

B, as shown. I am aware that many minor changes in the construction and arrangement of the parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. In a car-truck, the combination, with the side beams of the frame, of cross-supporting yokes, links on the yokes extending below the same, a metallic frame below the yokes, channeled bearings on the ends of the frames, rods passing through said bearings, sleeves on the rods located in the links, springs having retaining-blocks fitted in said channels, a supporting-beam mounted on the springs, and plates on the under side of said beam, in which the upper blocks of the springs are located.

2. In a car-truck, the combination, with the frame, of a movable supporting beam, springs supporting said beam, consisting of two members, blocks through which the members are passed, and keys for locking the members in the box, substantially as described.

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

ARNOLD MILLER.

Witnesses:

E. H. SCHWEPPE,
ALBERT PRIES.