(No Model.) 2 Sheets—Sheet 1.

M. M. HUNT.

CAR COUPLING.

No. 364,256. Patented June 7, 1887.

Fig. 1.

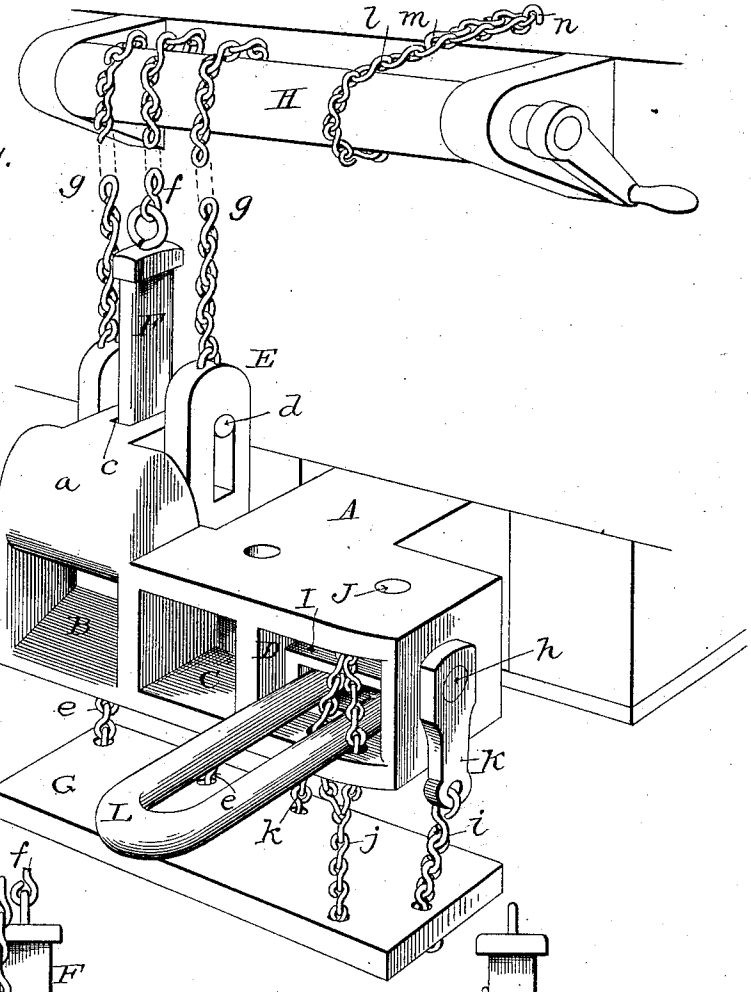


Fig. 2.

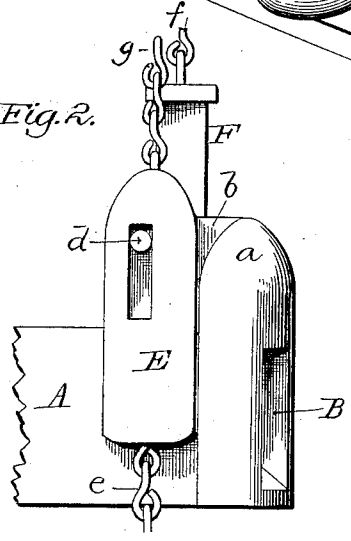
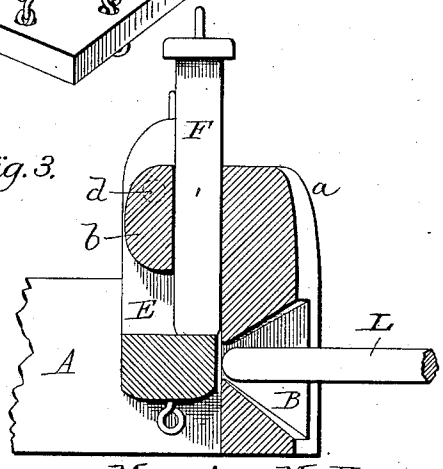


Fig. 3.



Witnesses:

James P. DeHamel

Walter A. Dodge

Manning M. Hunt,
Inventor,

by Dodger Lee,

his Attys.

(No Model.) 2 Sheets—Sheet 2.

M. M. HUNT.

CAR COUPLING.

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Fig. 4.

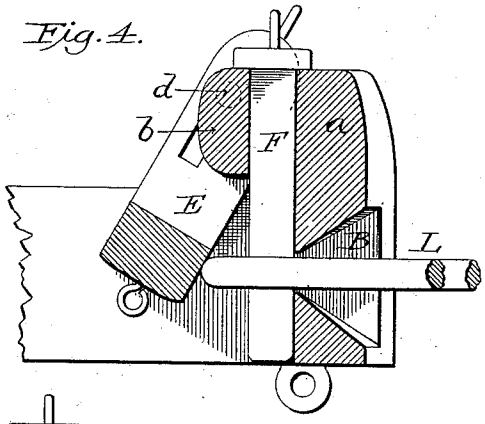


Fig. 5

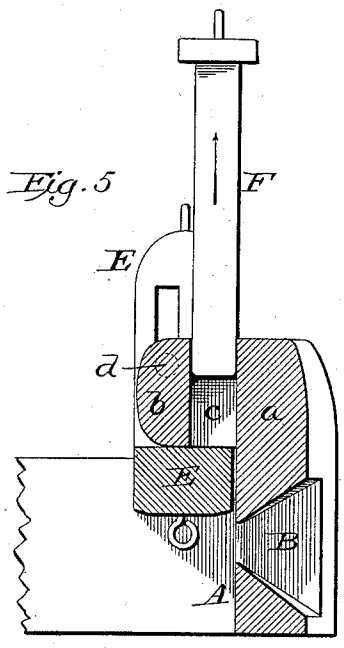


Fig. 6.

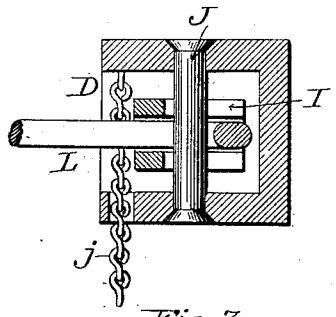
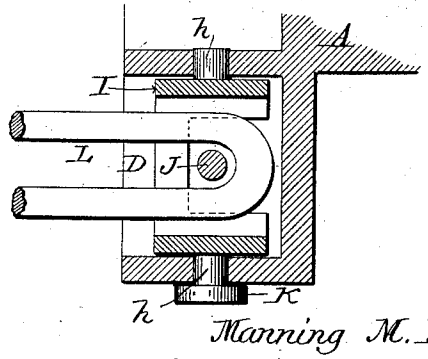


Fig. 7.



Witnesses:

James F. Duffamel

Walter S. Dodge.

Manning M. Hunt,
Inventor,

by Dodger Son,

his Attys.

UNITED STATES PATENT OFFICE.

MANNING M. HUNT, OF TECUMSEH, NEBRASKA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 364,256, dated June 7, 1887.

Application filed March 22, 1887. Serial No. 231,975. (No model.)

To all whom it may concern:

Be it known that I, MANNING M. HUNT, of Tecumseh, in the county of Johnson and State of Nebraska, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention relates to car-couplings; and it consists in various features, hereinafter fully set forth and claimed.

In the drawings, Figure 1 is a view of the end of a car, showing my improvements applied thereto; Fig. 2, a side view of the coupler; Figs. 3, 4, and 5, views showing the parts in different positions, and Figs. 6 and 7 sectional views showing the construction of the link-supporting devices.

A indicates the draw-head provided with three sockets, B, C, and D, the first to receive the link of another car, the second to be used with the ordinary link and pin in case of accident to the automatic coupler, and the third holding the coupling-link.

The cars will be provided with my improved coupler at each end, and it will be seen that each car will be provided with a link and with a link socket and pin at each end.

Referring now to Figs. 1, 2, 3, 4, and 5, I will first describe the construction of the coupling-pin and attendant parts.

Immediately above the socket B the draw-head is formed with an upward extension, *a*, provided on its rear face with a lug, *b*, and extending vertically through said lug *b* is a slot, *c*, which will conform, preferably, though not necessarily, to the form in cross-section of the coupling-pin.

E indicates a U-shaped yoke pivoted to and clasping the sides of lug *b*, as shown in Figs. 1, 2, 3, 4, and 5, the vertical arms of the yoke being slotted and working on a pin, *d*, projecting from opposite sides of the lug *b*. The yoke E is so pivoted that its bottom remains normally beneath the vertical slot *c*, as shown in Fig. 3, and it will also be noticed that when in this position the coupling-pin F rests upon the bottom of the yoke. The yoke is of such length that its under face comes about opposite to the center of socket B, and the front lower face of the yoke is slightly curved or beveled, so that when the link strikes thereagainst it will push the lower end of the yoke backward from beneath the pin and allow the latter to fall through the link. After the pin has passed or dropped through the link the yoke will bear against the inner end of the link and hold the pin firmly against the rear face of the draw-head, as shown in Fig. 4.

In order to hold the yoke firmly against the link, I attach to the lower end of the yoke, by means of chains or links *e*, or equivalent means, a weight, G, which, pulling down upon the lower end of the yoke, holds it in the desired position.

H indicates a shaft, journaled in brackets upon the end of the car and provided with cranks or handles at each end, by which it may be turned. Secured to said shaft are bands or chains *f* and *g g*, the former attached to the coupling-pin F and the latter attached to the upper ends of the yoke, as shown in Fig. 1, so that when it is desired to withdraw the link to uncouple the cars it is only necessary to rotate the shaft and wind the chains thereupon. In thus winding upon the shaft, the chain *f*, owing to its being shorter than the chains *g g*, will cause the pin F to be withdrawn before the yoke is moved; but as soon as the pin is withdrawn from the link the chains *g g*, acting upon the yoke, raise the latter a slight distance and permit its lower end to ride off the end of the link. The link can then be withdrawn without hinderance. As the chains are unwound, the weight G, acting upon the yoke, draws the latter into the position shown in Figs. 3 and 4, so as to receive the pin when the latter is permitted by its chain *f* to drop.

L indicates an ordinary link, which, as shown in Figs. 6 and 7, is carried at its inner end in a block, I, having lateral gudgeons or trunnions *h*, journaled in the upright walls of socket D. Block I is open at its front and rear, and also at the top and bottom at the inner end, as shown in Figs. 6 and 7, so that the link may move back and forth within the block, or tip or rock with the latter, and also move laterally in the block.

In order to prevent the link from being withdrawn from the block, I employ a vertical pin or bolt, J, about which the link passes, the said bolt or pin being rigidly secured centrally within the socket, as shown in Figs. 6 and 7.

This construction permits the link to readily adjust itself to cars varying in height, and also allows it to swing or move laterally in turning curves.

K indicates an arm rigidly secured to one of the gudgeons *h*, and extending downwardly therefrom alongside the draw-head, as shown in Figs. 1 and 7. This arm is connected by means of a chain or band, *i*, with one end or corner of the weight G, and of course said weight will have a tendency to retain the block I, to which the arm K is attached, in a horizontal position. A chain or band, *j*, is also connected to one corner of the weight, and extends upward through an opening in the bottom wall of the socket D, as shown in Figs. 1, 6, and 7, and is secured at its upper end to the top wall of the socket. This chain encircles one arm of the link and bears upon the same, thereby tending, in connection with the chain *i*, connected with the weight G, to keep the link in proper position. The chain *j* also prevents the link from being moved laterally too far. A chain, *k*, also connects the weight G with the draw-head, as shown in Fig. 1.

In order to retain the parts in the position shown in Figs. 1 and 5, I provide the shaft H with a chain, *l*, which chain passes through an eye, *n*, and is provided at its end with a hook, *m*, as shown in Fig. 1, the said hook being adapted to engage with any of the links of the chain *l*, and thereby prevent the shaft from rotating.

Having thus described my invention, what I claim is—

1. In combination with draw-head A, provided with socket B, an overhanging lug, *b*, provided with a vertical slot, *c*, a pin, F, working in said slot, and a yoke, E, pivoted to the lug *b* and arranged, substantially as shown, to swing beneath the lug.

2. In combination with draw-head A, provided with lug *b*, pin F, and pivoted yoke E, constructed substantially as shown, a weight, G, connected to the yoke E and serving to hold it in position.

3. In combination with draw-head A, provided with socket B and slotted lug *b*, a yoke, E, pivoted to lug *b*, a pin, F, a shaft, H, and chains *f g*, connecting the shaft with the pin and yoke.

4. In combination with the draw-head A, the pivoted block I, link L, mounted loosely therein, and a fixed bolt or pin, J, passing vertically through the link.

5. In combination with draw-head A, a link, L, a block, I, supporting said link and provided with lateral gudgeons *h*, all substantially as shown.

6. In combination with draw-head A, pivoted link I, and link L, a weight, G, attached to said block, substantially as described.

7. In combination with draw-head A, pivoted block I, link L, and weight G, a chain, *j*, connected with the weight and with the draw-head and encircling one arm of the link.

8. In combination with draw-head A, pivoted yoke E, and pin F, pivoted block I, link L, and a weight, G, connected with the pivoted block and the yoke.

9. In combination with the draw-head A, and pin F, and yoke E, and the chains *f g* and shaft H for operating the same, a chain, *l*, secured to the shaft and provided with a hook, as *m*, all substantially as shown, whereby the chains *f f g* are prevented from unwinding from the shaft.

MANNING M. HUNT.

Witnesses:
D. F. OSGOOD,
LORING A. OSGOOD.