E. W. HARTOUGH.

RELEASING DEVICE FOR CAR COUPLINGS.

APPLICATION FILED JAN. 25, 1915.

1,167,066. Patented Jan. 4, 1916.

Fig. 1.

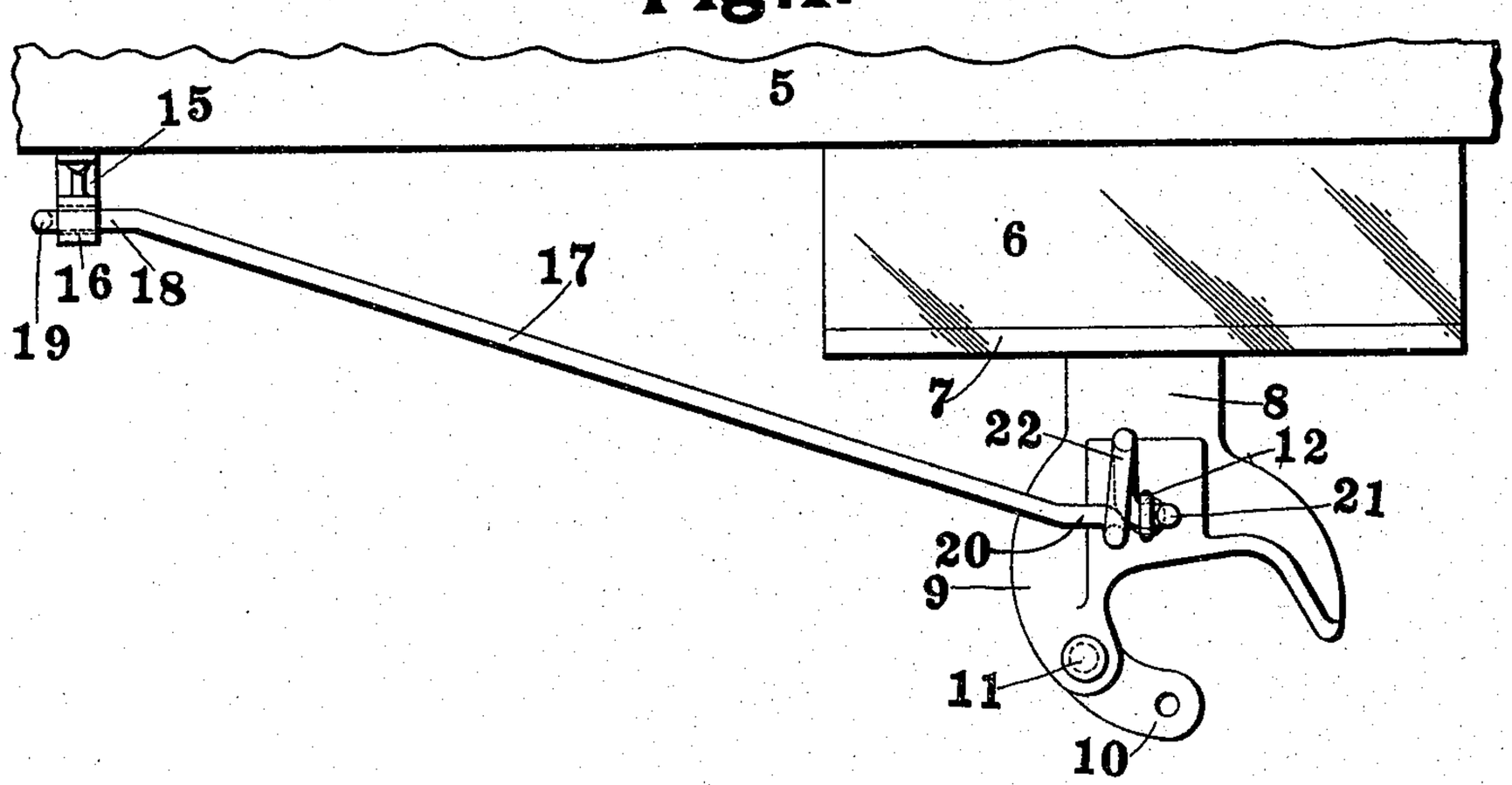


Fig. 2.

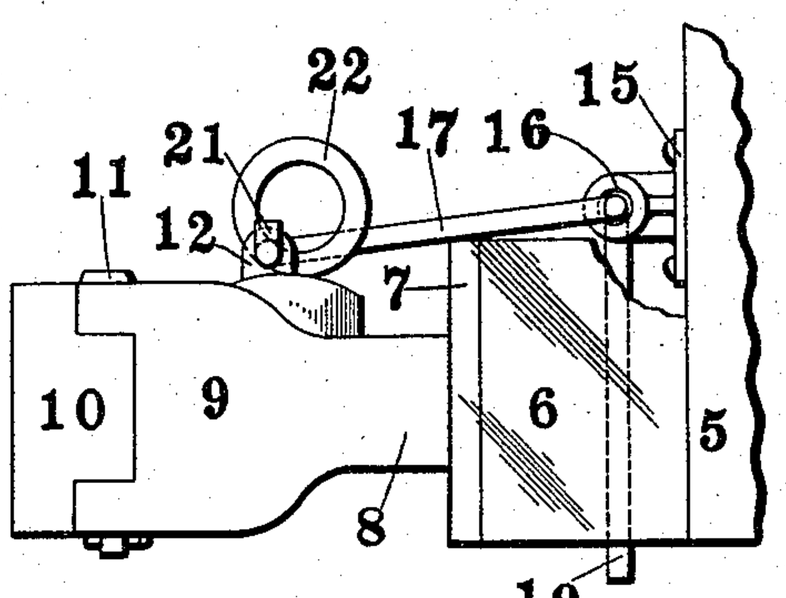


Fig. 3.

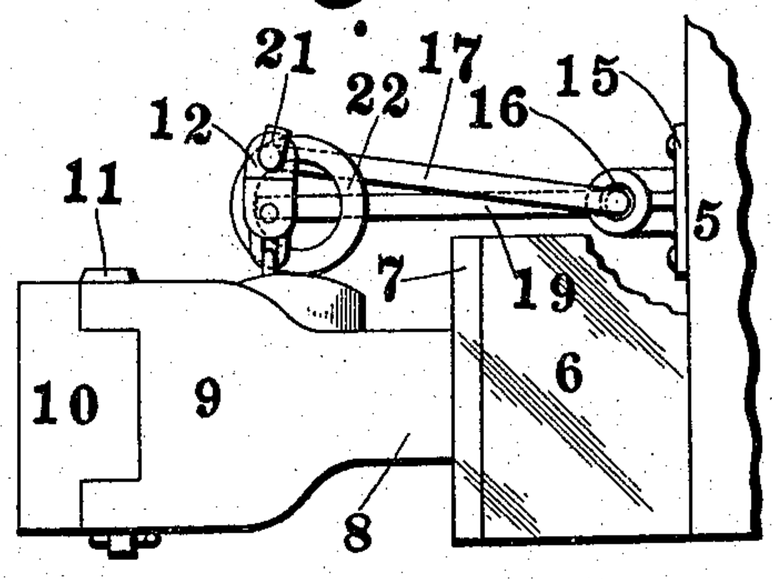
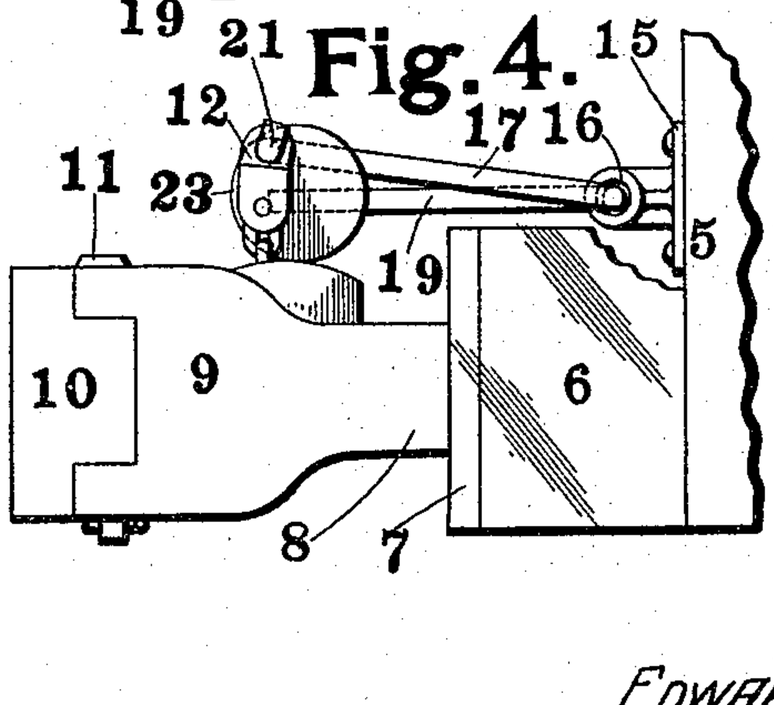


Fig. 4.



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RELEASING DEVICE FOR CAR-COUPLINGS.

1,167,066. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed January 25, 1915. Serial No. 4,104.

To all whom it may concern:

Be it known that I, EDWARD W. HARTOUGH, a citizen of the United States of America, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Releasing Device for Car-Couplings, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a releasing device for car couplers and has for its object the production of a device of the class referred to which will be simple and strong in construction and efficient in operation.

In the accompanying drawings, which illustrate a releasing device for car couplers made in accordance with my invention, together with so much of a railway car as is necessary to show its application thereto, Figure 1 is a top plan view; Fig. 2 is an end view showing the locking pin in its lower position; Fig. 3 is an end view showing the locking pin in its raised position, and Fig. 4 is a view similar to Fig. 3, showing a slight modification.

Like marks of reference refer to similar parts in the several views of the drawings.

5 represents a car body carrying a striking block 6. This striking block 6 is provided with a face plate 7. Projecting through the striking block 6 is a draw bar 8 carrying a coupler head 9. The coupler head 9 is provided with a knuckle 10 pivoted to the head by means of a pin 11. The knuckle 10 is controlled by a locking pin 12. All of the above parts may be of any usual or well-known construction.

Carried by the car body 5 is a bracket 15 having an opening 16 for the passage of the lifter rod 17. The opening 16, however, is considerably larger than the diameter of the rod 17 so as to allow movement of the rod which will be hereinafter explained. A portion 18 of the rod 17 which passes through the opening 16 is bent at a slight angle to the body of the rod so that this portion 18 will be substantially parallel with the end of the car 5 when the parts are in their normal position. Adjacent to the part 18 a portion 19 of the rod 17 is bent at right angles to the part 18 so as to form an operating handle which, in the normal position of the parts, stands in a vertical position, as best shown in Fig. 2 of the drawings. The body of the rod 17 extends from the portion 18 to a portion 20 which is bent at a slight angle to the body of the rod 17 so as to be parallel with the part 18. This portion 20 of the rod projects through the eye of the locking pin 12 and is prevented from being disengaged from said eye by any suitable means, such, for instance, as a turned up end 21 shown in the drawings. The portion 20 of the lifting rod is provided with a cam which is adapted to coöperate with the upper surface of the coupler head in order to raise the pin 12. In the form shown in Figs. 1 to 3 of the drawings, this cam consists of a circular loop 22 formed of the material of the rod itself.

It will be evident that when the handle 19 is raised from the position shown in Fig. 2, to that shown in Fig. 3, the cam 22 will be rotated so as to force the end of the rod upwardly and thus raise the locking pin 12 so as to release the knuckle 10. The play between the part 18 of the lifting rod 17 and the passage 16 in the bracket 15 not only allows of the necessary relative movement between the coupler head and the car but also allows the rod 17 to assume the proper position in a vertical plane when moving from the position shown in Fig. 2 to that shown in Fig. 3. It will be evident that a very effective lifting force will be exerted by the action of the cam 22 on the upper face of the coupler head 9.

In Fig. 4 of the drawings, I have shown a slight modification in which the cam, in place of being formed of the material of the rod, is formed of a disk 23 which is eccentrically secured to the portion 20 of the rod by being shrunk on said portion or in any other suitable manner. This disk 23 operates in exactly the same manner as the circular loop 22 hereinbefore described.

It will be evident that while my releasing device is of the simplest possible form, it is very strong and effective in operation and cannot possibly get out of order.

Having fully described my invention, what I claim as new and desire to secure by Letters-Patent of the United States is:

1. In a releasing device for car couplers, the combination with a rod pivotally attached to the car, of a cam located on said rod and coöperating with the upper face of the coupler between the coupler pin and the outer bearing, said cam being actuated by

said rod for lifting the locking pin of the coupler.

2. In a releasing device for car couplers, the combination with a rod pivotally attached to the car, of a cam formed of a bent portion of the rod, said cam being located between the coupler pin and the outer bearing, said cam being adapted to lift the locking pin of the coupler.

3. In a releasing device for car couplers, the combination with a rod pivotally attached to the car and engaging with the locking pin of the coupler, of a cam formed by a substantially circular loop of the rod adjacent to the releasing pin, said cam operating to raise said pin.

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

EDWARD W. HARTOUGH. [L. S.]

Witnesses:
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G. M. SHORE.