No. 639,899 Patented Dec. 26, 1899.

A. KEUSINK.

DEVICE FOR OPERATING CAR COUPLINGS.

(Application filed July 19, 1899.)

(No Model.)

Fig. 1.

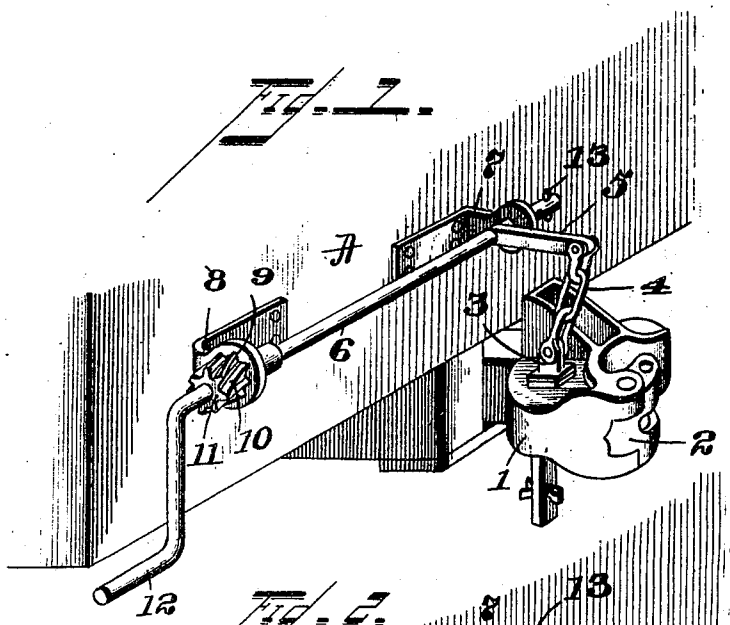


Fig. 2.

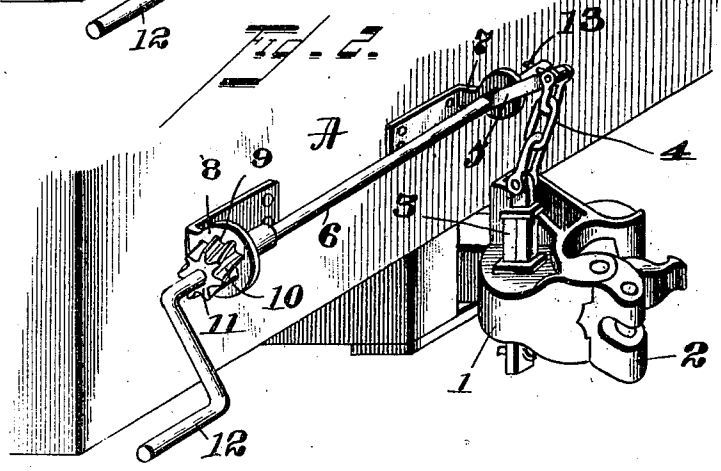


Fig. 3.

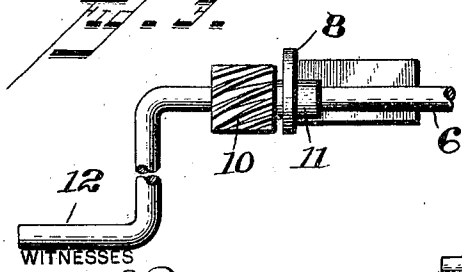


Fig. 4.

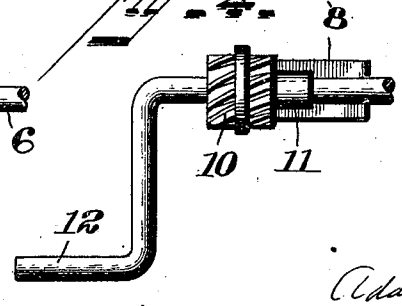
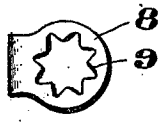


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

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DEVICE FOR OPERATING CAR-COUPLINGS.

SPECIFICATION forming part of ~~Letters Patent~~ No. 639,899, dated December 26, 1899.

Application filed July 19, 1899. Serial No. 724,396. (No model.)

To all whom it may concern:

Be it known that I, ADAM KEUSINK, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Devices for Operating Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in mechanisms for operating couplers of the Janney or swinging-hook type; and the object of the said invention is the construction of such a mechanism as will not only permit of the operation of the locking-pin from the side of the car, thus avoiding the necessity of the operator going between the cars and the maintenance of the pin in its unlocked position, but will as well permit of the automatic return of the pin to a locking position.

It consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the front end of a car having a swinging-hook coupler, the swinging hook and the releasing mechanism being shown in locked position. Fig. 2 is a perspective view of the same, the swinging hook being in an unlocked position. Fig. 3 is a detail view of the locking mechanism in an unlocked position. Fig. 4 is a detail view of the same in a locked position, and Fig. 5 is an end elevation of the serrated bracket.

The draw-head 1, with its swinging hook 2 and locking-pin 3, are of the usual form and construction found in the Janney or other similar class of swinging-hook couplers, and the draw-head is connected to the car A in any suitable manner. The locking-pin 3 or other suitable device employed for locking the hook in operative or closed position is connected by a chain 4 or other suitable means, preferably of a flexible character, to a lever-arm 5, secured to the shaft 6. This shaft is mounted in suitable brackets 7 and 8, secured either to the end sill or body of the car. The bracket 7 is of ordinary construction, permitting of the rotation of the shaft, and the bracket 8 is provided with serrations 9, adapted to engage spiral teeth 10, formed on the periphery of a collar 11, secured to the shaft 6. The outer end of the shaft is provided with a handle 12, whereby the shaft may be rotated, thereby raising the pin 3 and unlocking the hook 2. This shaft is made of sufficient length to permit the brakeman or other person to operate it without passing between the cars. To prevent the shaft from slipping through the bracket 7, a pin 13 may be secured to the said shaft at its inner end.

By providing the collar 11 with teeth when it enters the bracket 8 it will engage the serrations on the said bracket, and thereby lock the shaft in such position. By providing this collar with spiral teeth it will permit of a slight twist after the collar has been inserted in the bracket, which movement will tighten the slack in the chain 4.

In order to operate the shaft, it is simply necessary to bring the same to the position shown in Fig. 3, or, in other words, pull the collar 11 out of engagement with the bracket 8, when the handle may be turned to raise the locking-pin to any desired height through the medium of the lever-arm and chain and unlock the swinging hook When the desired position is obtained, it is simply necessary to bring the collar 11 into engagement with the bracket 8, thereby locking the shaft in such position.

The locking pin or bolt in the Janney type of car-coupler has to be raised to a certain height, so as to allow the tail of the knuckle to pass out when it is unlocked and hung up by the shaft, and by my construction a very fine adjustment is obtained and all slack in the chain will be taken up by means of the spiral teeth on the bracket 8.

It will be apparent that my device is very simple in its construction and yet effective in operation and that it can be easily manipulated from the side of the car.

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

1. A device for operating car-couplings comprising in its construction a shaft, said shaft being provided with a handle at one end, a collar mounted on the said shaft and provided with spirally-arranged teeth on its pe-

riphery, brackets supporting the said shaft, one of said brackets being provided with serrations adapted to engage the teeth on the said collar, and means connected to the shaft for operating the locking-pin of the coupler, substantially as described.

2. A device for operating car-couplings, comprising in its construction a shaft, provided at one end with a handle, a collar mounted on the said shaft and provided on its periphery with spiral teeth, brackets supporting the said shaft, one of the said brackets being provided with serrations, a crank or lever arm secured to the said shaft, and a chain connected with the said lever-arm at one end and to the locking-pin of the coupler at the other end, whereby the pin may be raised or lowered, as desired, substantially as described.

3. A device for operating car-couplings, comprising in its construction a shaft, a handle on one end of said shaft, a collar mounted on the said shaft and provided on its periphery with spiral teeth, brackets secured to the end sill of the car for supporting said shaft, one of said brackets being provided with serrations which are adapted to engage the teeth on the collar, and means connected to the shaft for operating the locking-pin of the coupler, the construction being such that the said pin may be raised to any height and locked in such position, substantially as described.

4. A device for operating car-couplings, comprising in its construction a shaft, a collar mounted on said shaft and provided on its periphery with spiral teeth, brackets secured to the end sill of the car for supporting the shaft, one of said brackets being provided with serrations, and means connected to the shaft for operating the locking-pin of the coupler, the construction being such that after the collar has been inserted in the serrated bracket, the spiral teeth on the said collar will permit of a slight additional movement or twist, which movement will take up the slack in the chain, substantially as described.

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

ADAM KEUSINK.

Witnesses:

HERBERT N. DE GRAFF,

FRANK J. MILLER.