(No Model.)

A. J. BEARD.

CAR COUPLING.

No. 594,059. Patented Nov. 23, 1897.

Fig. 1.

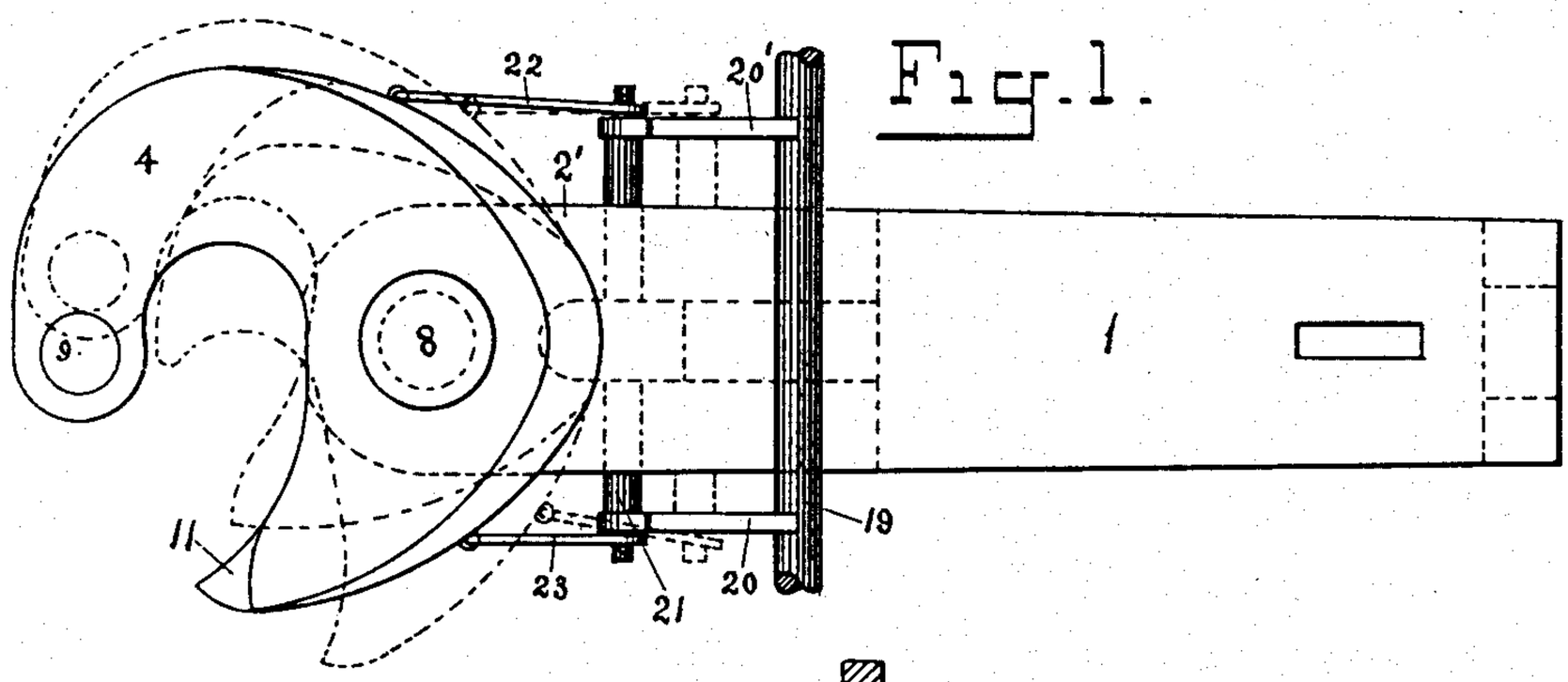


Fig. 2.

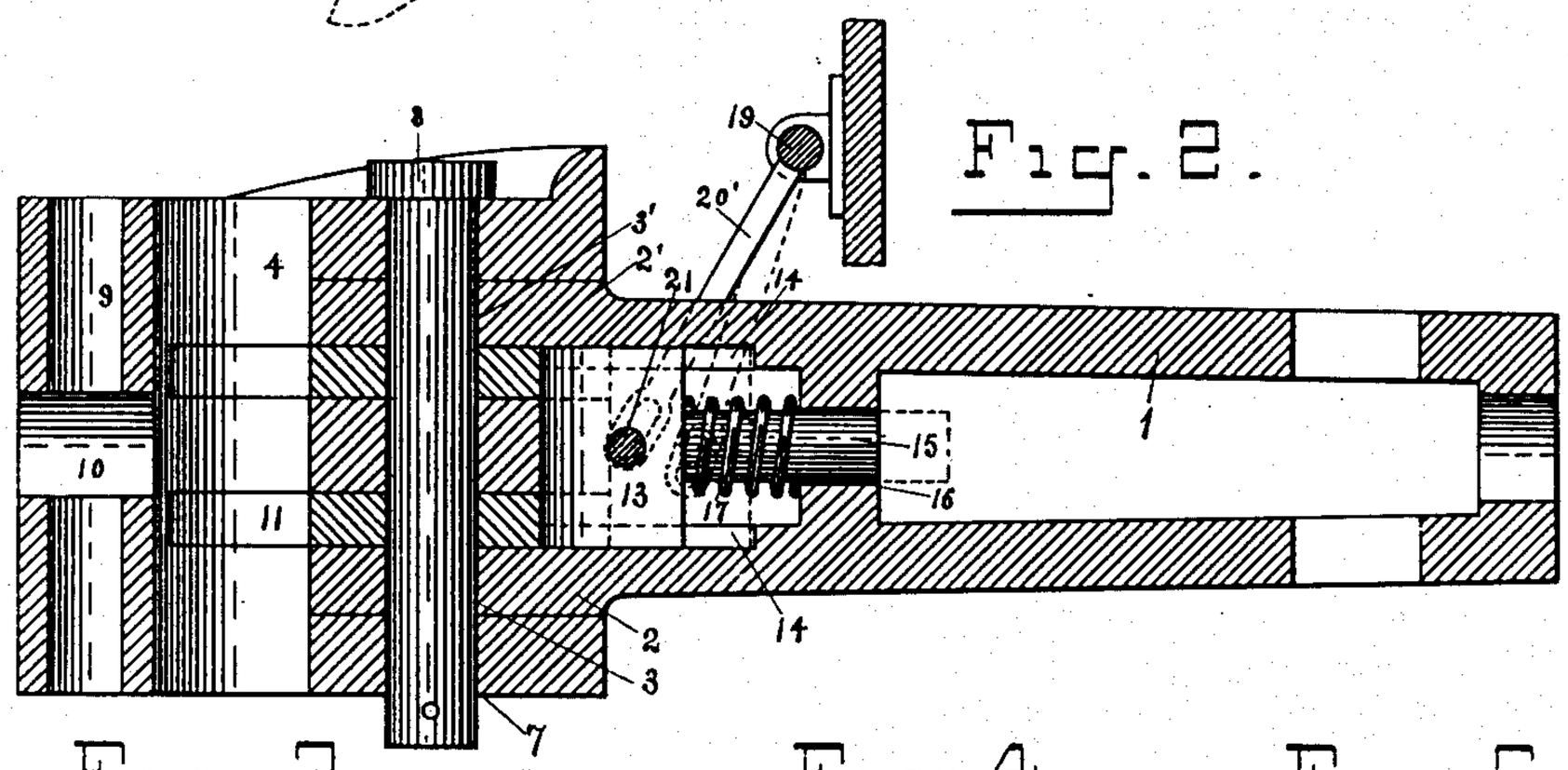


Fig. 3.

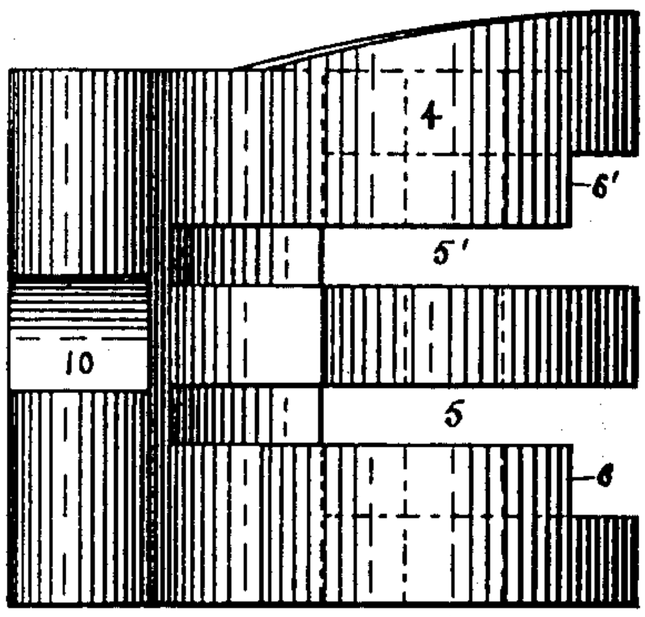


Fig. 4.

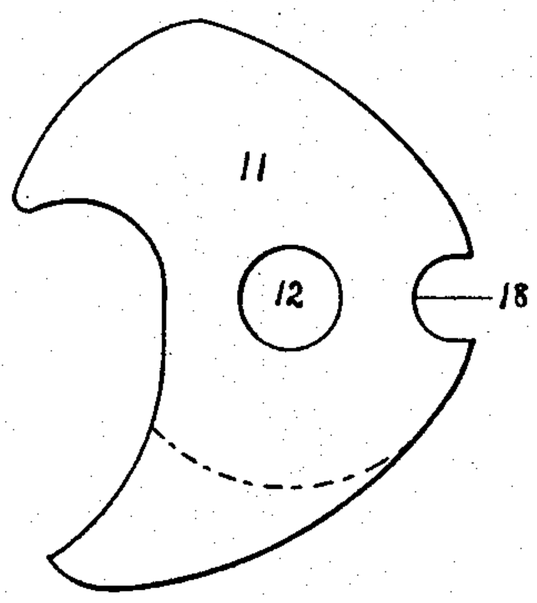
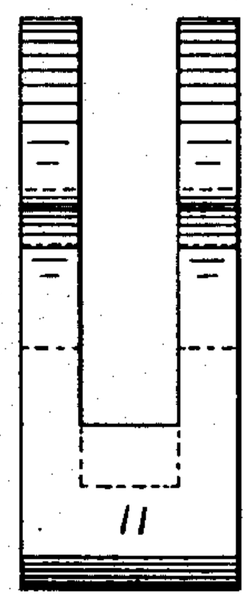


Fig. 5.



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UNITED STATES PATENT OFFICE.

ANDREW JACKSON BEARD, OF EASTLAKE, ALABAMA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 594,059, dated November 23, 1897.

Application filed September 20, 1897. Serial No. 652,393. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JACKSON BEARD, a citizen of the United States, residing at Eastlake, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in 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 that class of car-couplings in which horizontal jaws engage each other to connect the cars; and the objects of my improvement are, first, to provide a car-coupler of a simple and cheap form of construction, the coupler assembled in parts adapted to replace any of the pieces as desired; second, to provide a car-coupler having the head and shank constructed in separate parts and pivotally connected by a pin, by which a new head or shank can readily be attached to replace a broken part; third, to provide an automatic car-coupling having a head and side jaw pivotally attached to the shank, the head and jaw adapted to open and close in opposite directions to couple or uncouple the cars. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top or plan view of my improved automatic car-coupler. Fig. 2 is a vertical sectional view of the same through the center. Fig. 3 is a detail vertical side view of the head. Fig. 4 is a detail plan view of the side jaw. Fig. 5 is a front view of the same.

The draw-head shank 1 is made of any suitable metallic material, preferably of wrought or cast steel. The body of the shank is formed to fit the usual car dimensions and is adapted to be attached to the car in the usual manner. Two lugs 2 2′ are provided on the front end of the shank. The lugs extend forwardly from the shank and have pin-holes 3 3′ provided therein.

The head 4 is made of cast-steel or other suitable metallic material. The head is provided with slots 5 5′, formed therein to receive the jaw. Slots 6 6′ are also provided in the head to receive the lugs formed on the front end of the shank. A pin-hole 7 is formed through the head to receive the pin 8, the pin pivotally connecting the head and shank together. The usual pin-hole 9 is formed in the front of the head to connect with a link, the usual slot 10 being provided to admit the use of a link, if desired.

The jaw 11 is made of cast-steel or other suitable metallic material, formed as shown, the tail-wings formed thereon being adapted to fit the slots formed in the head. The jaw is provided with a pin-hole 12 to pivotally connect the jaw, in connection with the head, to the draw-head shank by the pin 8, as shown.

The head-lock 13 is made of suitable metallic material, formed as shown. The lock slides in grooves 14 14′, provided in the shank-lugs. A tail-pin 15 is formed on the lock. The tail-pin extends through a bearing 16, provided in the shank. A coiled spring 17 is provided on the tail-pin. The spring pressing against the head of the lock keeps the same pressed forward to engage the concave recess 18, provided in the head and side jaw.

The operating-rod 19 extends across the end of the car and is attached thereto by any of the usual methods. Any desired form of cranks can be formed on the ends of the rod. The rod ends or cranks are not shown in the drawings or any particular form claimed.

Two rigidly-connected levers 20 20′ extend downwardly from the operating-rod 19. The levers are pivotally connected at their lower ends to the transverse bar 21, connected to the locking device. The rod 22 connects the lock with the head. The rod 23 connects the lock-bar with the side jaw. The turning of the operating-rod to withdraw the lock and release the head also operates the connecting-rods to open the head and jaw, as shown by dotted lines in Fig. 1. The head and jaw when open allow the draw-heads to come apart and uncouple the cars. The cars, if pushed together, recouple the draw-heads automatically.

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

1. In a draw-head, the combination with the shank having projecting lugs formed on the front end thereof, of the head having slots formed therein to receive the shank-lugs, the jaw engaging in slots formed in the head, the pin pivotally connecting all the parts together, and the sliding locking device

to engage the recesses formed in the head and jaw, substantially as and for the purpose described.

2. In a car-coupling, the combination with the operating-rod having two downwardly-extending arms, the lower ends of the arms pivotally connected to a transverse bar attached to the locking device, of a rod connecting the head to the lock-bar, and a rod connecting the side jaw to the lock-bar, substantially as described.

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

his
ANDREW J. × BEARD.
mark

Witnesses:
W. T. ROBINSON,
P. K. MCMILLER.