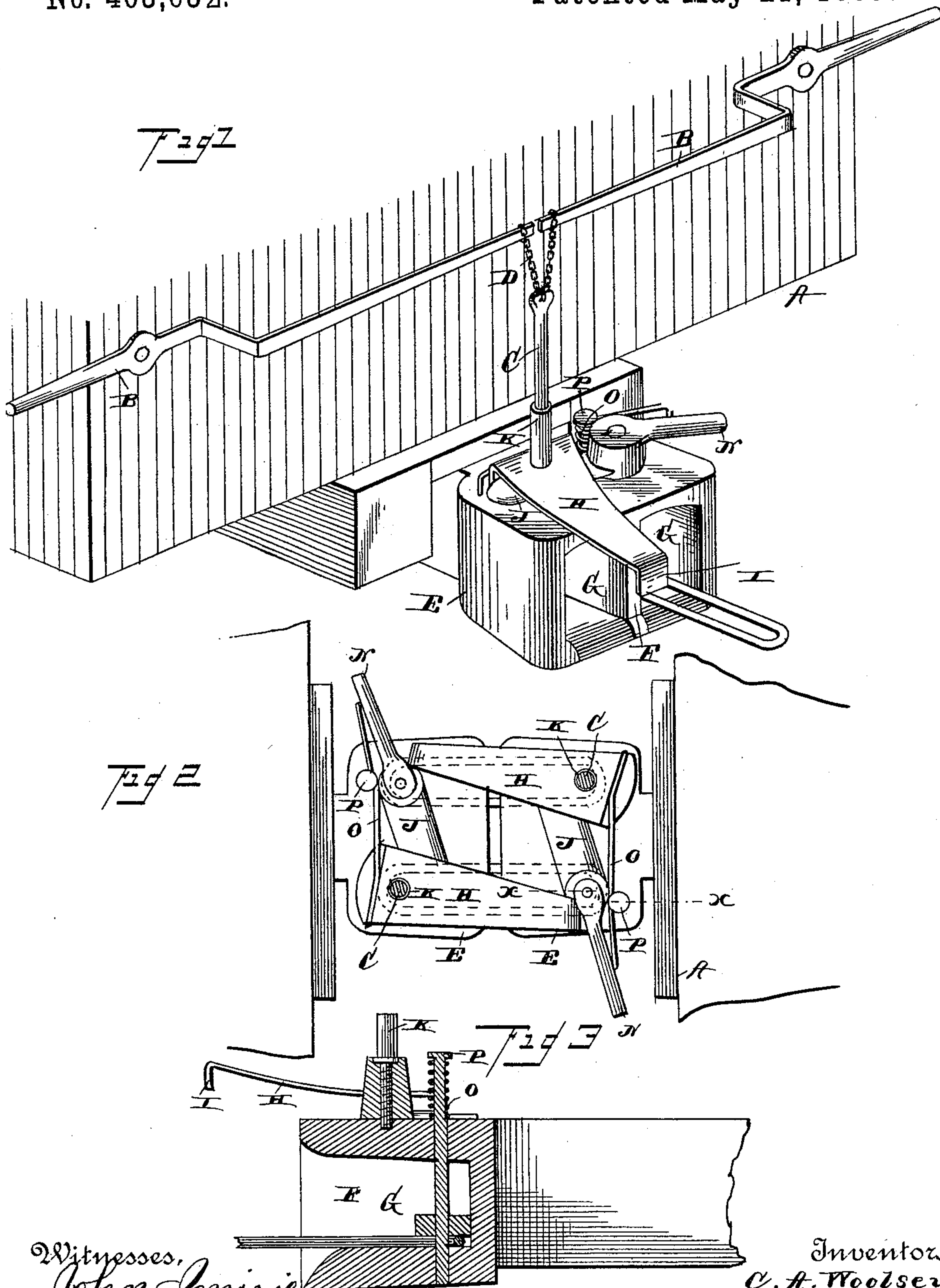


(No Model.)

C. A. & W. W. WOOLSEY.  
CAR COUPLING.

No. 403,632.

Patented May 21, 1889.



Witnesses,  
*John Amirie*  
*R. H. Bishop.*

Inventors,  
*C. A. Woolsey*  
*And,*  
*W. W. Woolsey.*  
By their Attorneys  
*C. A. Snow*



# UNITED STATES PATENT OFFICE.

CHARLES ALEXANDER WOOLSEY AND WILLIAM WESLEY WOOLSEY, OF  
OHIO, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 403,632, dated May 21, 1889.

Application filed December 18, 1888. Serial No. 293,997. (No model.)

*To all whom it may concern:*

Be it known that we, CHARLES ALEXANDER WOOLSEY and WILLIAM WESLEY WOOLSEY, citizens of the United States, residing at Ohio, in the county of Hamilton and State of Texas, have invented new and useful Improvements in Car-Couplings, of which the following is a specification.

Our invention relates to improvements in car-couplings; and it consists in certain novel features, hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the end of a car provided with our improved coupling. Fig. 2 is a plan view showing two draw-heads coupled together. Fig. 3 is a vertical section on the line *x x* of Fig. 2.

Referring to the drawings by letter, A designates the end of the car, upon which we pivot the uncoupling-levers B B, the ends of which project beyond the sides of the car to form operating-handles. The coupling-pin C is connected to the inner ends of these levers by ropes or chains D, as clearly shown.

E designates the draw-head, which is secured to the end of the car in the usual or any preferred manner, and is provided at its front end and about its center with a longitudinal vertical partition, F, by which it is divided into two chambers, G G, as shown.

On the upper side of the draw-head we secure a trigger, H, which projects forward beyond the end of the draw-head, and has its front end bent downward to form a striking-surface, I, as shown. The rear end of this trigger is secured rigidly to the upper side of the draw-head, and its central portion is bent upward a slight distance, so as to allow room for the arm of the swinging trip-block J, and a sleeve, K, rises from the said trigger near its rear end. The coupling-pin normally is held in a vertical position by the sleeve, and its lower end rests upon the arm of the swinging trip-block, so as to be prevented from descending into the draw-head.

The trip-block is pivoted on the upper side of the draw-head at one side of the trigger and has a flat arm, which normally projects under the trigger and over the pin-holes in the draw-head to support the coupling-pin in

an elevated position. The trip-block is further provided with an outwardly-projecting arm, N, which is adapted to be struck by the front end of the trigger on the opposing draw-head and be thereby swung backward, consequently swinging the other arm of the trip-block forward and allowing the coupling-pin to descend of its own weight and pass through the link held in the said opposing draw-head.

The trip-block is normally held in position with its flat arm supporting the coupling-pin by means of a spring, O, bearing against the arm N and arranged around a pin, P, which extends through the draw-head, and is provided near its lower end with a weight, which is adapted to rest upon the inner end of the coupling-link, and thereby permanently secure the said link within the draw-head.

From the foregoing description it will be seen that we have provided a very efficient coupling. Two links are used, one being held permanently in each draw-head. As the draw-heads come together, the trigger on each draw-head will strike against the outer arm of the trip-block on the opposing draw-head, and thereby operate the said trip-block to release the coupling-pin and thereby complete the coupling.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination of the draw-head, the trip-block pivoted on the upper side of the same, the trigger secured to the upper side of the draw-head, and the spring bearing on the trip-block, as set forth.

2. The combination of the draw-heads having two compartments, the coupling-link held permanently in one of said compartments, the trip-blocks on the upper sides of the draw-heads and supporting the coupling-pins, the triggers guiding the coupling-pins and adapted to operate the trip-block, and the spring bearing on the trip-block, as set forth.

3. The improved coupling herein described and shown, comprising the draw-head having a central vertical partition, the weighted pin arranged in one of said partitions, the link secured by said pin, the trip-block pivoted on the upper side of the draw-head and having

arms projecting therefrom in opposite directions, a spring bearing on one of said arms, a trigger secured to the draw-head projecting over the other of said arms and provided with  
5 a sleeve on its upper side and having its front end bent downward, and a coupling-pin supported in said sleeve, as set forth.

In testimony that we claim the foregoing as

our own we have hereto affixed our signatures in presence of witnesses.

CHARLES ALEXANDER WOOLSEY.

WILLIAM WESLEY WOOLSEY.

Witnesses:

I. A. SHANNON,

J. M. STIDHAM,

C. B. WADE.