

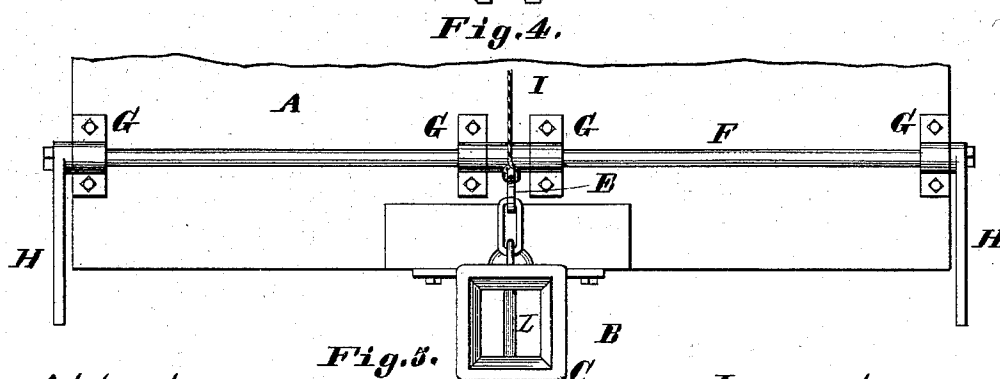
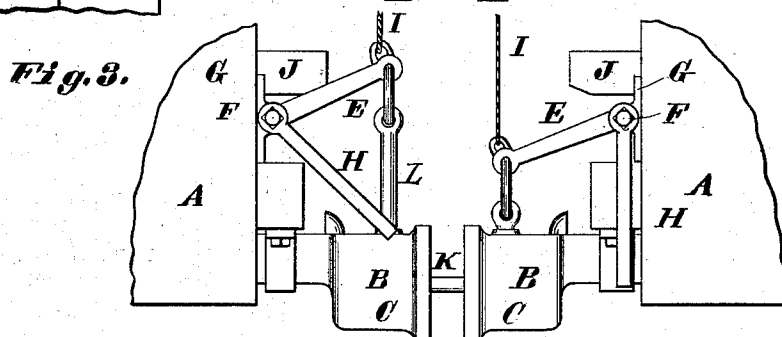
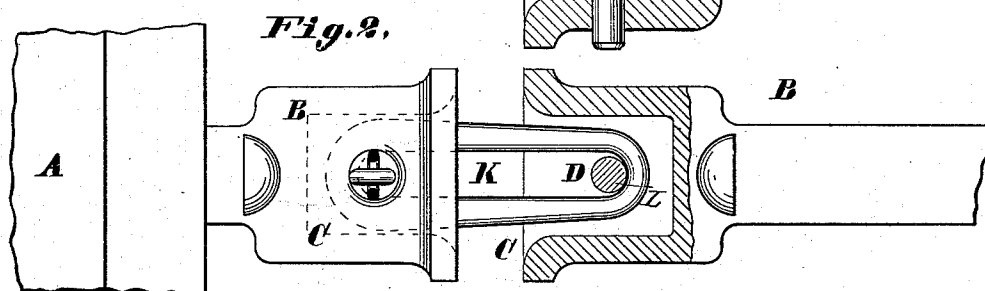
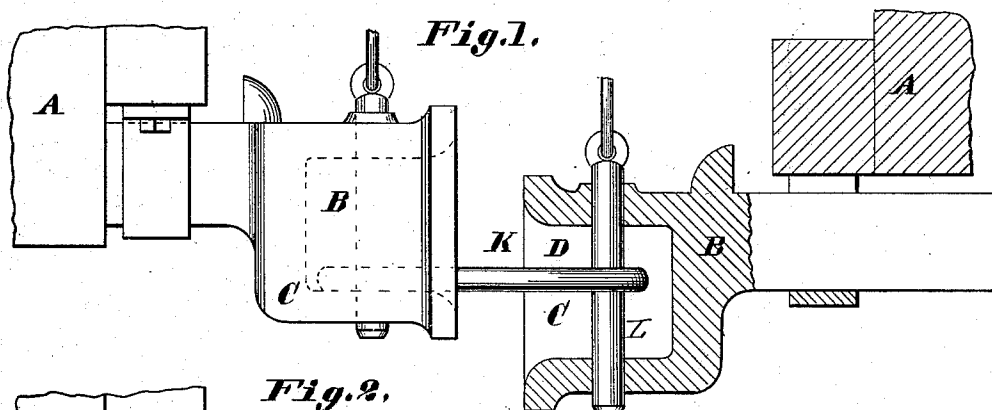
(No Model.)

C. A. SMITH.

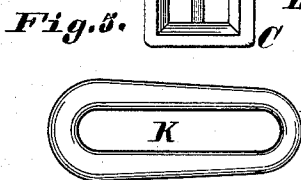
CAR COUPLING.

No. 263,604.

Patented Aug. 29, 1882.



*Attest:*  
Charles Pickles  
Wm. S. Lagers



*Inventor:*  
Chas. A. Smith  
By Knight Bros  
Atty.

# UNITED STATES PATENT OFFICE.

CHARLES A. SMITH, OF ST. LOUIS, MISSOURI.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 263,604, dated August 29, 1882.

Application filed June 28, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. SMITH, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a side elevation of one draw-head and a section of the other, the one in section being depressed by a loaded car. Fig. 2 is a top view of one of the draw-heads and a horizontal section of the other. Fig. 3 is a side elevation, showing the device for withdrawing the coupling-pins in coupling and uncoupling the cars. Fig. 4 is an end view of one of the cars, showing the pin-raising device; and Fig. 5 is a view of my coupling-link, showing its formation.

A A represent parts of two car-bodies, and B B are the draw-heads. The forward ends of the draw-heads are formed with lower enlargements, C C, so that their mouths D may be made oblong of considerable depth. The object of thus forming the mouths is to insure the entrance of the link K into the mouth of the other draw-head when either head is depressed by its car being loaded. (See Fig. 1.) In order that the link will occupy a horizontal position when in one draw-head only, I make

one end considerably larger than the other. The large end being inserted into the draw-head, its preponderance of weight will support the other end.

The coupling pins L are connected by arms E to rock-shafts F, secured to the ends of the car-bodies by suitable boxes, G. On the opposite ends of the rock-shafts are cranks H, by which the shafts can be turned to raise the links. The links may also be raised from the top of the cars by cords I, connected to the outer ends of the arms E.

J J are stops secured to the ends of the cars directly above the arms E. The arms come against these stops when they are raised, which prevents the pins being withdrawn completely from their holes, when they would be liable not to enter again.

I claim as my invention—

The improved car-coupling, consisting of draw-heads B B, having downwardly-extending portions, forming lower enlargements, C C, to the mouths D D, link K, weighted at one end, coupling-pins L L, rock-shafts F F, having arms E E, and stops J J for limiting the upward movement of the arms and pin; as set forth.

CHARLES A. SMITH.

Witnesses:

SAML. KNIGHT,  
GEO. H. KNIGHT.