No. 609,056. Patented Aug. 16, 1898.

F. SISSON.

REACH COUPLING FOR VEHICLES.

(Application filed Apr. 8, 1898.)

(No Model.)

Fig - 1 -

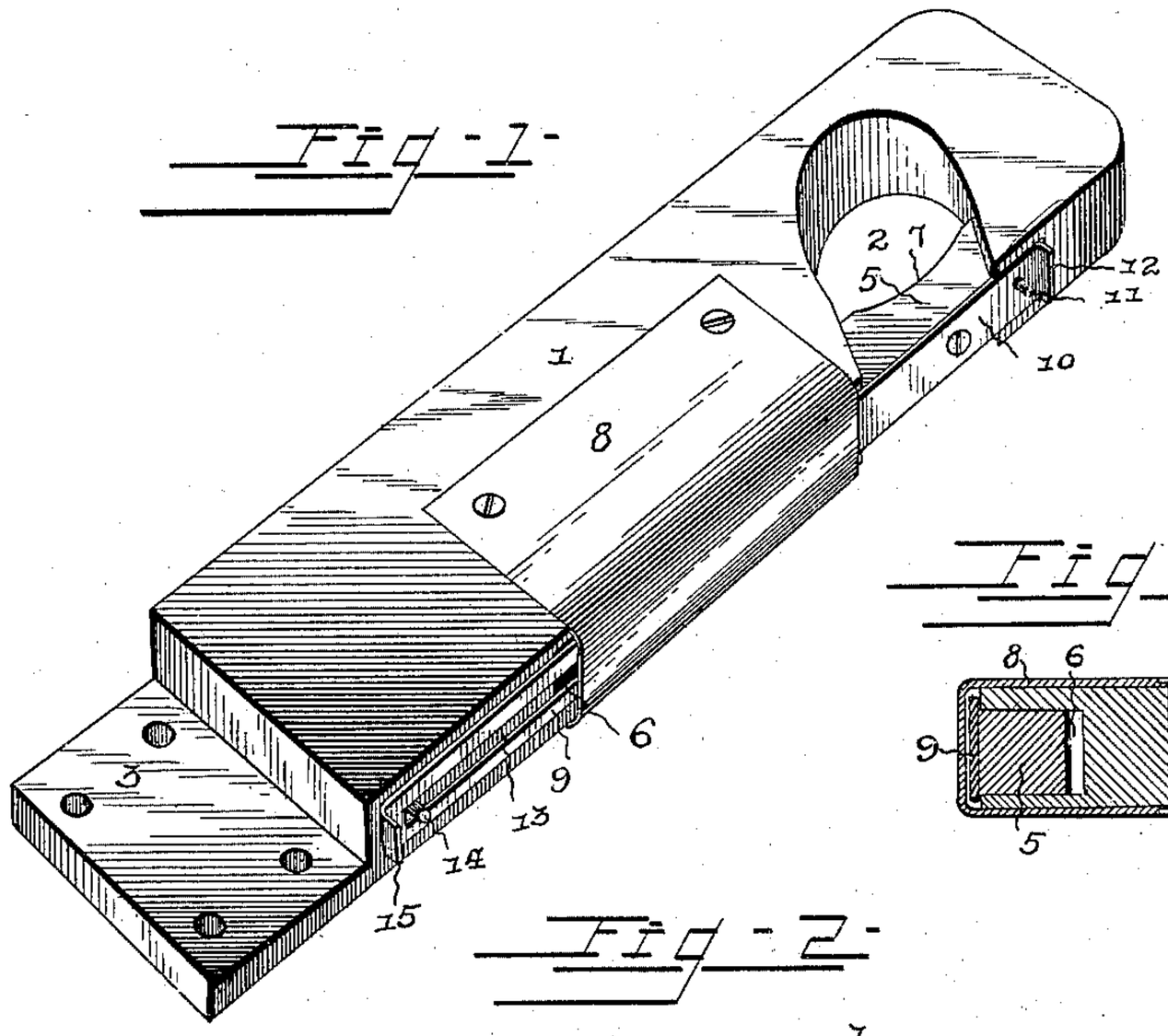


Fig - 4 -

Fig - 2 -

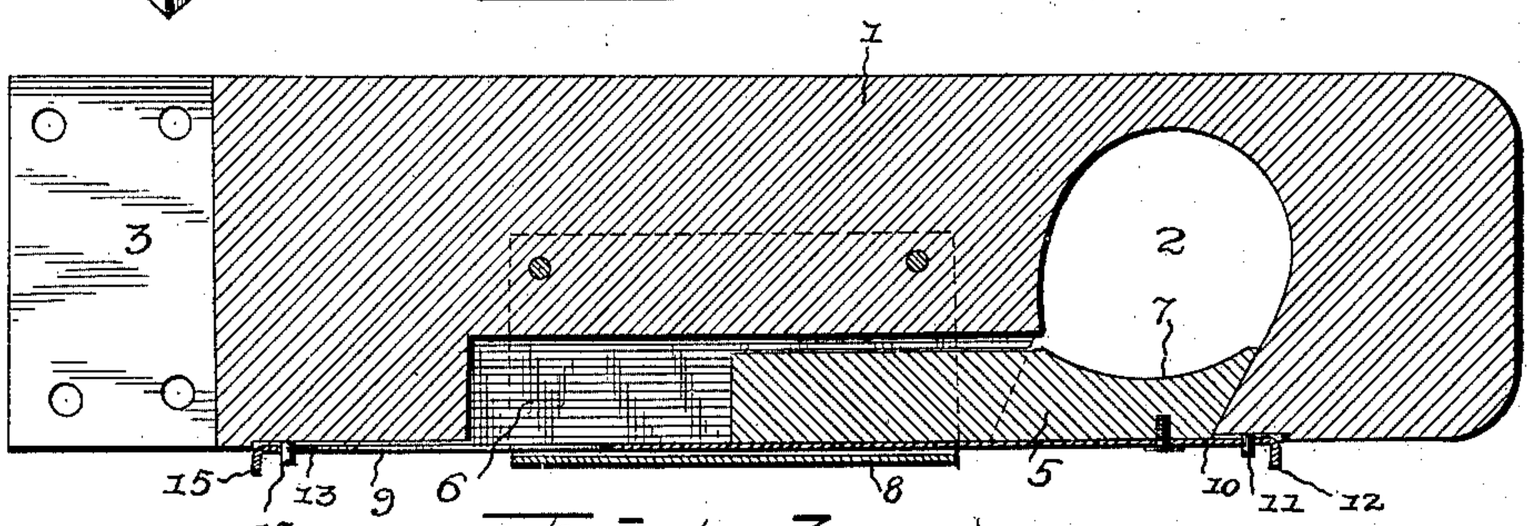


Fig - 3 -

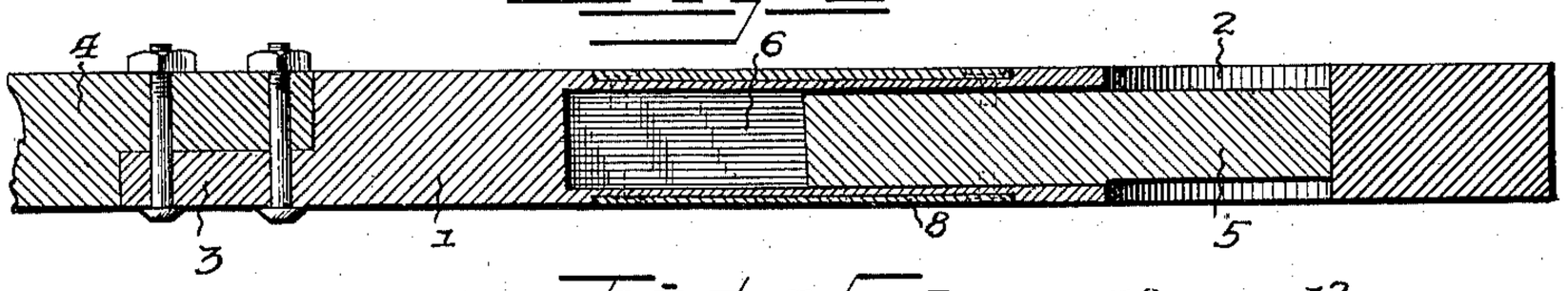
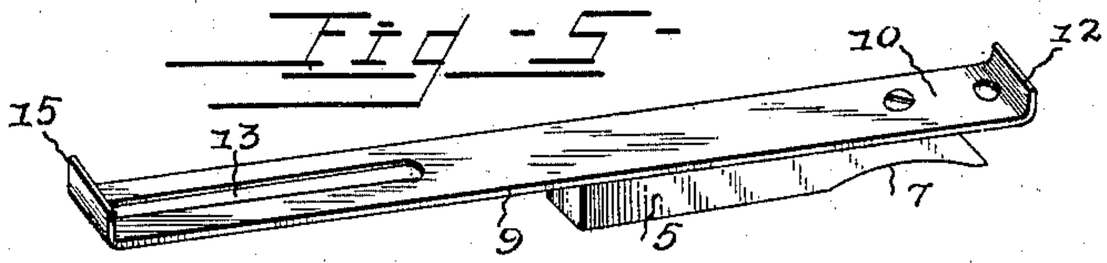


Fig - 5 -



Witnesses:-
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Fred Sisson, Inventor:-
By his Attorneys,
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UNITED STATES PATENT OFFICE.

FRED SISSON, OF PARIS, ILLINOIS, ASSIGNOR OF ONE-HALF TO J. W. CUMMINS, OF SAME PLACE.

REACH-COUPLING FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 609,056, dated August 16, 1898.

Application filed April 8, 1898. Serial No. 676,946. (No model.)

To all whom it may concern:

Be it known that I, FRED SISSON, a citizen of the United States, residing at Paris, in the county of Edgar and State of Illinois, have invented a new and useful Coupling for Vehicles, of which the following is a specification.

The invention relates to improvements in couplings for vehicles.

The object of the present invention is to provide for coupling-poles or reaches a simple, inexpensive, and efficient device adapted to be readily applied to them and capable of enabling a reach to be readily detached or uncoupled from the front axle without removing the king-bolt and without disconnecting the bolster or the wagon-bed.

A further object of the invention is to provide a device which in event of the breakage of the reach of a loaded vehicle will enable the break to be readily repaired without removing the load or disconnecting any part other than that broken.

Another object of the invention is to enable the front and rear axles of a vehicle to be quickly coupled and uncoupled with less work and greater ease than heretofore.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a coupling constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a similar view taken at right angles to Fig. 2 and showing the device applied to a coupling-pole or reach. Fig. 4 is a transverse sectional view. Fig. 5 is a detail perspective view of the sliding catch or bolt with its spring.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a coupling constructed of suitable metal, preferably steel, and provided with an opening 2 for the reception of a king-bolt, and having its rear end reduced to form a recess and to provide a projecting flange or tenon 3, adapted to fit in a corresponding recess or mortise of a coupling-pole or reach 4 and secured to the same by bolts or other suitable fastening devices preferably arranged in pairs at each side of the flange or tenon 3. The opening 2 for the reception of the king-bolt of a vehicle extends inward from one side of the coupling, as shown, and the king-bolt is confined in the opening 2 of the body portion of the coupling by a sliding catch or bolt 5, which is mounted in a longitudinal recess 6 at one of the side edges of the body portion 1. The opening 2 is arranged at an angle to the body portion 1 and extends rearward, its outer end being located in rear of its inner end, and the front end of the sliding bolt or catch 5 is beveled to fit the front wall of the opening 2.

The sliding bolt or catch is provided with a curved inner face 7 to complete the bearing for the king-bolt, and it is retained in the longitudinal recess of the body portion 1 by a casing 8, constructed of sheet metal or other suitable material and composed of parallel sides and a connecting portion, the sides being arranged on the upper and lower faces of the body portion 1 and the connecting portion of the casing fitting against one of the side edges of the coupling. The sides of the casing are perforated for the reception of suitable fastening devices which secure the casing to the coupling.

In order to retain the sliding bolt or catch in its locked position and prevent it from opening accidentally, a longitudinal spring 9 is employed and is secured to the outer face or back of the sliding bolt or catch. The spring 9, which is constructed of spring metal, consists of a strip of the same, and its front end 10 extends beyond the sliding catch or bolt and is perforated to engage a projection or stud 11 of the body portion of the coupling, whereby the sliding bolt or catch is positively held against rearward movement. The front edge of the spring is bent outward to form a projecting portion or flange 12 to enable it to be readily grasped to spring it out of engagement with the projection or stud. The side edge of the body portion 1 is recessed in advance of the opening 2 to receive the front end of the spring and to enable it to be flush with the adjacent surface.

The rear portion of the longitudinal spring

is provided with a longitudinal slot 13, which receives a projection or stud 14 and forms a guide for the spring and the sliding bolt or catch. The rear edge of the spring is bent outward to form a flange 15, similar to that at the front edge of the spring, to facilitate the operation of the device.

When it is desired to couple or uncouple the front and rear axles of a vehicle, the sliding bolt or catch is moved rearward and the coupling may be readily engaged with or disengaged from a king-bolt, and when it is moved forward it is adapted to confine securely a king-bolt in the opening 2 of the body of the device.

The invention has the following advantages: The device, which is simple and comparatively inexpensive in construction, is adapted to be readily applied to a coupling-pole or reach, and as the coupling overlaps the front end of a coupling-pole or reach a strong joint is provided and there is no liability of the parts breaking at this point. It is adapted to enable a reach or coupling-pole to be readily connected with and disconnected from a king-bolt without necessitating the removal of the wagon body or bolster, and if a coupling-pole or reach should break when a vehicle is loaded the break may be readily repaired without removing the load.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

1. A coupling for vehicles comprising a body provided with an opening extending inward from one side and adapted to receive a king-bolt, and a reciprocating catch extending across the entrance of the opening and adapted to confine the king-bolt therein, substantially as described.

2. A coupling for vehicles comprising a body portion provided with an opening extending inward from one edge of the body and adapted to receive a king-bolt, a reciprocating catch extending across the entrance of the opening and adapted to confine a king-bolt therein, and a resilient locking device mounted on the catch and engaging the body portion of the coupling, whereby the catch is held against accidental movement, substantially as described.

3. A coupling for vehicles comprising a body portion having an opening extending transversely of it, said body portion being provided in rear of the opening with a longitudinal recess, a reciprocating catch mounted in the recess and extending across the opening, a projection or stud mounted on the body in advance of the opening, and a spring secured to the catch and projecting in advance of the same and adapted to engage the stud or projection, substantially as described.

4. A coupling for vehicles comprising a body having a transverse opening and provided with a longitudinal recess extending from one side of the opening, a catch mounted in the recess and extending across the opening, a spring secured to the catch and extending beyond the ends of the same, the front end of the spring being provided with a perforation and the rear portion of the spring having a longitudinal slot, and projections or studs mounted on the body, one of the projections or studs being arranged to engage the perforation of the front end of the spring, and the other projection or stud fitting in the slot of the rear portion of the spring, substantially as described.

5. A coupling for vehicles comprising a body adapted to be secured to a coupling-pole or reach and having a transverse opening and provided at one edge with a longitudinal recess, a sliding catch mounted in the recess and extending across the transverse opening, a spring carried by the catch and extending in advance and in rear of the same, one end of the spring being slidingly connected with the body portion and the other end of the spring detachably engaging the same when the coupling is closed, and a casing arranged on the body portion at the recessed edge thereof, and confining the catch in the recess, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRED SISSON.

Witnesses:
W. H. CLINTON,
J. W. CUMMINS.