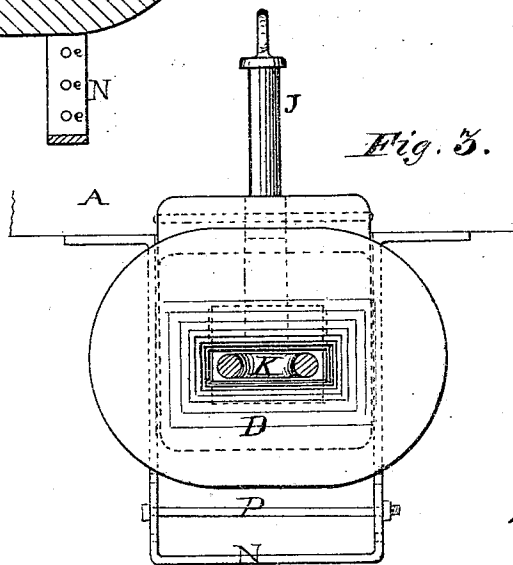
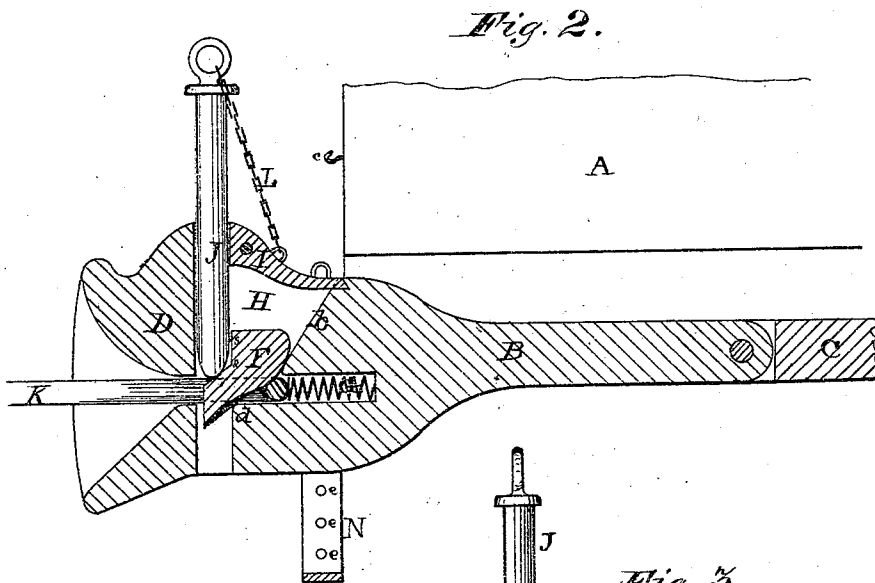
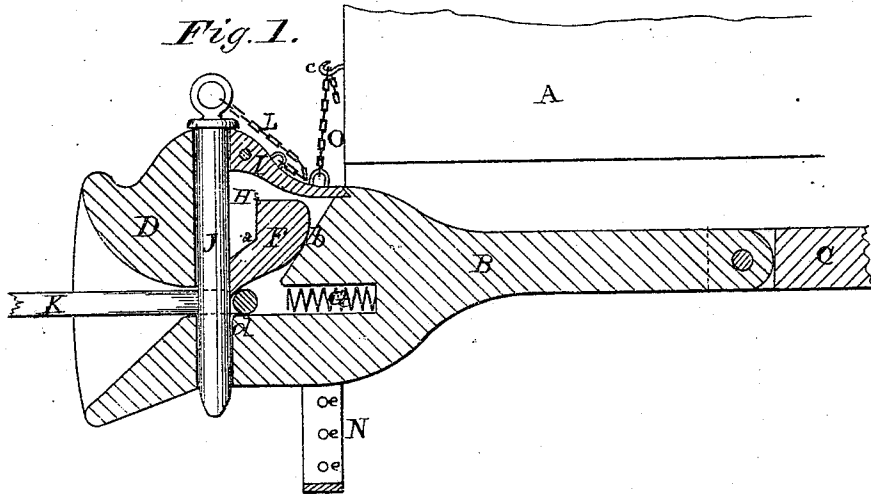


HENRY C. SWAN.

Improvement in Car Coupling.

No. 123,207.

Patented Jan. 30, 1872.



Witnesses:

B. F. Gray.
H. C. Swan.

Inventor:

Henry C. Swan.

UNITED STATES PATENT OFFICE.

HENRY C. SWAN, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO
HIMSELF AND B. F. GRAY, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 123,207, dated January 30, 1872.

Specification of certain Improvements in Car-Couplers, invented by HENRY C. SWAN, of Washington city, District of Columbia.

My invention relates to the peculiar construction of a sliding dog, which acts upon an inclined plane in the interior of the coupling-bar by reason of its own form and weight, in combination with the coupling-pin, in such a manner that the coupling-pin may be conveniently set with its point above and out of the path of the coupling-link, where it will remain and continue to remain until the coupling-link is inserted. No motion of the cars themselves, whether vertical, lateral, or longitudinal, will unset the pin.

One or more other couplers have been invented having a sliding dog and inclined plane in the interior of the bar; but in the use of such one great inconvenience was met with, namely, that when adjoining cars were jammed together so that if the link could not be withdrawn as soon as the pin was raised, or if the link remains undrawn, the pin would have to be taken entirely out, and kept out until such time as the cars could be forced asunder, and in the mean time it might be lost or mislaid, whereas by the use of my invention it might be set and remain so, though the link should not actually be withdrawn for weeks afterward, or otherwise the link may be withdrawn, the cars uncoupled, and the pin set, and remain so for any length of time until the end of a link is inserted, when the dog will yield and the point of the pin fall through the link, and thus effect the coupling.

In the accompanying drawing, Figure 1 represents a vertical longitudinal and central section of a coupler in which my improvements are shown. In that figure the coupling-pin is down, and the adjoining cars are coupled together. Fig. 2 represents a similar view of the same when the pin has been set and the link inserted without the link being withdrawn. Fig. 3 represents a front view of the same.

H indicates the open space inside the coupling-bar or buffer; F, the sliding-dog; *b*, inclined plane; J, the coupling-pin; K, the coupling-link; and G, a spring of India rubber, or other suitable material, to break the force of the blow of the link when entering. In Fig. 2, where the coupling-pin is in position when set, the dog F rests with its upper end upon the inclined plane *b*, and its lower end upon the point *d* of the body of the buffer B, and is held from sliding down lower by the shoulder *s* resting upon the pin.

It is obvious that when the dog is set, as shown, it must remain so until the link K is impelled against its lower end, when it will retreat up the inclined plane, and from under the point of the pin, and then the latter by its own weight will drop through the link and complete the act of coupling. When the cars have not been drawn asunder, but the pin has been raised and set, as shown, the lower end of the dog is directly in the path of the link in the act of withdrawal; but as the lower surface of the dog is an inclined plane it yields upward, (and pushes the pin up also,) and allows the link to pass out, and then falls back into the position shown in Fig. 2, the pin still remaining set.

No claim is made herein for the process of manufacture of the coupler, or for the material of which it is made, and therefore nothing need be said on these points in this specification.

Claim.

What I claim as my invention is—

The sliding-dog F, in combination with the inclined plane *b*, constructed and operating substantially as and for the purpose described.

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

Witnesses: HENRY C. SWAN.

V. S. SWAN,
B. F. GRAY.