M. GOOLAVEN.

Car-Couplings.

No. 138,748. Patented May 13, 1873.

Fig. 1

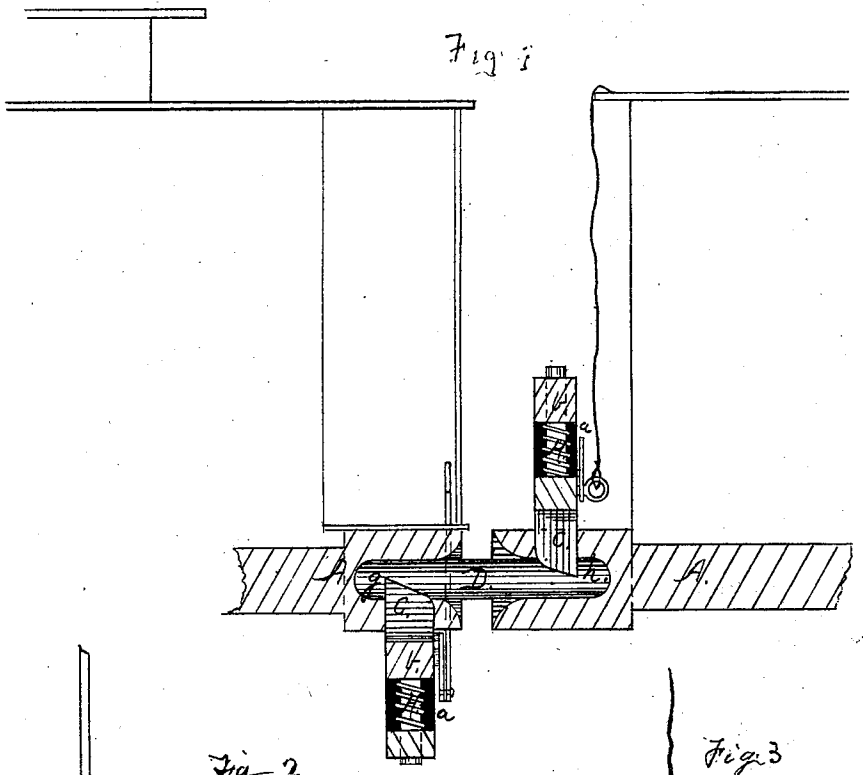


Fig. 2

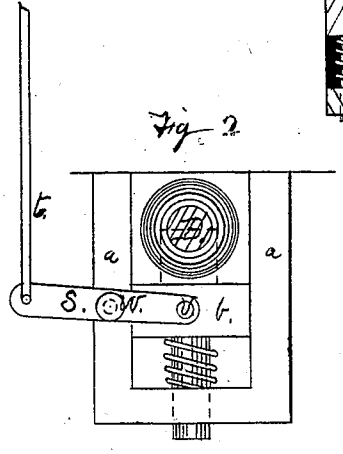
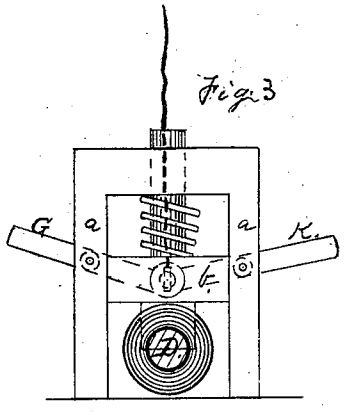


Fig. 3



Witnesses

Geo. E. Brown

F. M. Paul,

Inventor

Martin Goolaven

By his Atty

J. B. Gardiner

UNITED STATES PATENT OFFICE.

MARTIN GOOLAVEN, OF TAUNTON, MASSACHUSETTS.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **138,748**, dated May 13, 1873; application filed August 15, 1872.

To all whom it may concern:

Be it known that I, MARTIN GOOLAVEN, of Taunton, county of Bristol, State of Massachusetts, have invented an Improved Self-Acting Car-Coupling, of which the following is a specification:

My invention relates to an improved self-acting coupling for railway and other cars; and consists in an improved self-acting catch or lock, which is adapted to passenger or freight cars, and may be operated to release the shackle in various ways.

In the drawing, Figure 1 shows a side view and partial section of two forms of my improved catch or lock connected by my improved shackle. Figs. 2 and 3 are end views of two forms of my improved catch.

A is the draw-bar of a car, into the head of which the shackle or link enters, in the ordinary manner. Either above or below the head of this draw-bar I arrange guides *a a*, between which I arrange the cross-head *b*. This cross-head is provided with a projection, *c*, which enters the head of the draw-bar and holds the shackle, as will be hereafter described. Opposite this projection the cross-head is formed into a pin or spindle, which passes through a guide in the frame containing the cross-head. Around this spindle is wound a spiral spring, H, which presses the cross-head toward the shackle. The shackle consists of a single bar, D, provided with notches *g h* at each end to receive the projections *c c*. These projections *c c* present to the entering shackle a rounded or beveled surface, so that they may be lifted by pushing in the shackle, and when it is forced in far enough, the spring H causes the projection *c* to enter the notch *g h*, thus holding the shackle in place. The shackle is also provided with rounded ends, to assist in the lifting of the catch *c*.

In order to release the shackle, it is only necessary to remove the projection *c* from the notch *g h* by lifting the cross-head *b* against the spring H. This I accomplish in various ways, as shown. When the catch is applied to passenger-cars, and is arranged with its frame below the draw-bar, a lever, S, may be used, pivoted to the cross-head and to the frame at *v w*, and provided with a rod, *t*, which extends upward through the platform of the car, and is provided with a handle for operating it at that point.

When attached to box or house freight cars the catch and its frame may be arranged upon the upper side of the draw-head, and may be operated by levers G K from below; or may be lifted by a cord attached to the cross-head, and extending above and to the top of the car, to operate the catch from that point.

By this description it will be seen that I obtain a simple and effective self-acting car-coupling, and, besides the numerous self-evident advantages, it has one important advantage over others now in use, namely, the catch may be lifted and cars detached without the necessity of braking up the forward cars, as the catch can be readily pulled up or forced downward while the train is moving, and without applying brakes.

I claim—

In combination with the draw-bar of a car the spring catch C H, to operate by means of the lever or levers S K or G, substantially as and for the purpose specified.

MARTIN GOOLAVEN.

Witnesses:

J. B. GARDNIER,

F. M. PAUL.