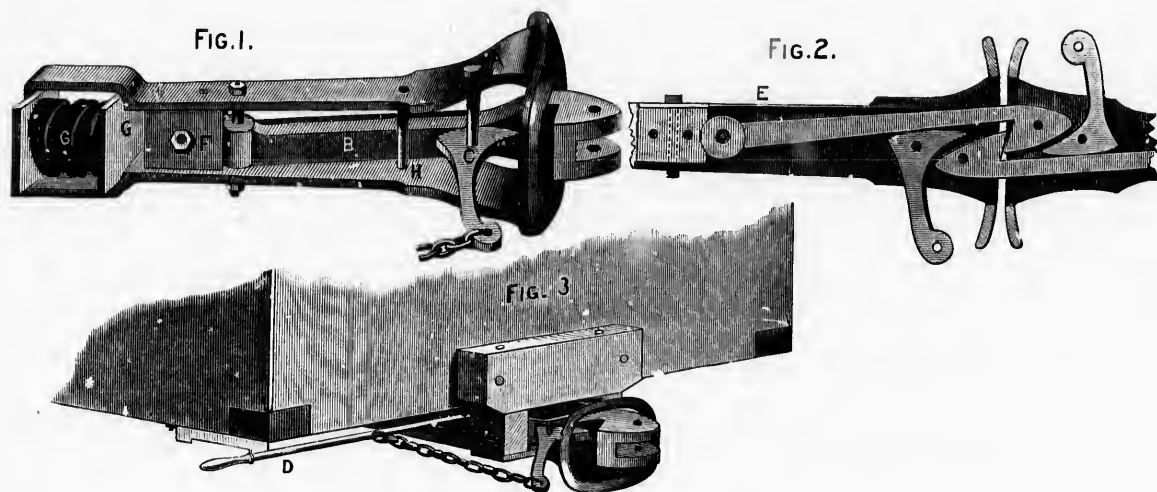


The following illustrations show the Coupler as it is now applied to ordinary Merchandise Cars, and require little explanation :

Fig. 1 is a perspective view, showing the form and relation of the several parts.

Fig. 2 is a plan view, showing the position of the two hooks when coupled, and the levers for *latching back*, or *uncoupling* the hooks, either *ONE* of which, worked from *EITHER* *SIDE* of a train, unlocks both hooks *simultaneously*.

Fig. 3 shows the lever attachments on body of Car for working the hooks or couplers. If found desirable to uncouple from *top of Car*, as well as at the side, as here proposed, a second chain from small bunter lever could be attached to an ordinary brake-mast and barrel, and worked by a crank handle and ratchet-wheel on top.



A is an ordinary wrought iron frame, sufficiently *deep* in the mouth to admit cars of irregular heights coupling with safe .

B, Wrought iron or cast steel bar and hook, slotted and drilled at nose for link and pin when these are necessary. These hooks may be made *much smaller*, when the Coupler can be adopted exclusively on any road.

C, an eccentric, or lever, for uncoupling, and *also for latching back the hook* when not *wanted to couple* in shunting. *ONE* lever thus set back effectually prevents another car from coupling.

D, Hand-lever for operating Coupler at side of Car.

E, Double-leaf Spring, bearing on back of Hook.

F, Cast iron Distance-Piece supporting back end of Hook, and to which Leaf-Spring is attached.

G G, Buffer-Spring and Followers.

H, Wrought Iron Pin to strengthen frame, and keep hooks to centre line.