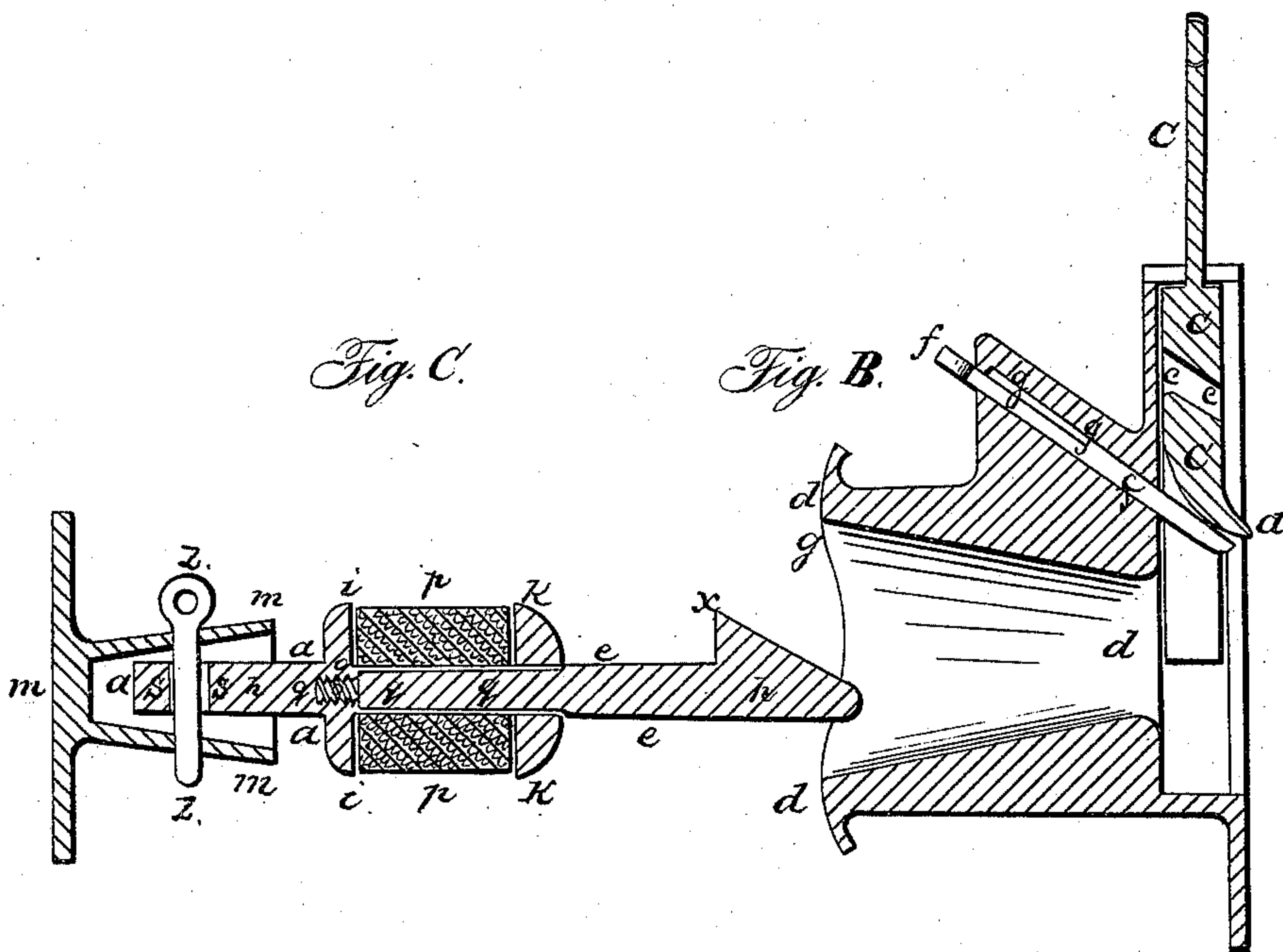
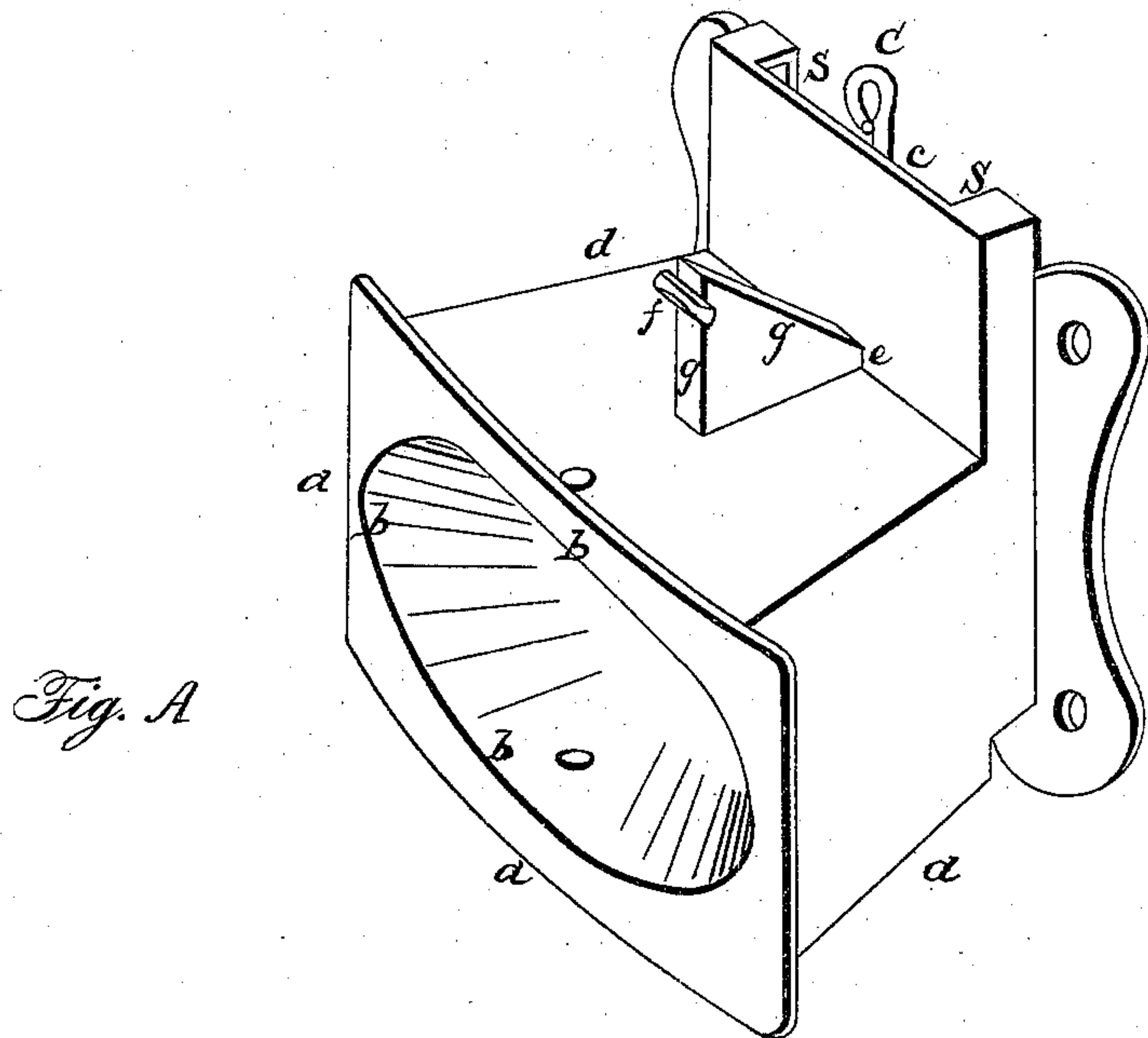


G. AULICK.
Car Coupling.

No. 10,787.

Patented Apr. 18, 1854.



Inventor:

George Aulick.

UNITED STATES PATENT OFFICE.

GEO. AULICK, OF WINCHESTER, VIRGINIA.

CAR-COUPLING.

Specification of Letters Patent No. 10,787, dated April 18, 1854.

To all whom it may concern:

Be it known that I, GEORGE AULICK, of Winchester, in the county of Frederick and State of Virginia, have invented and made
5 certain new and useful Improvements in Apparatus for the Coupling or Attaching of Cars; and I do hereby declare that the following is a full, clear, and exact description of the method of construction and mode
10 of operating the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure A is a geometrical perspective view of the coupler complete; *a, a, a, a*, the box
15 part; *b, b, b, b*, the compressed funnel like arrangement; *c, c*, the valve like catch, or fastener; *s, s, s* Figs. A, B, the grooves into which the valve like catch plays up and down; *e, e*, the hole or opening, into which
20 fits the self acting or gravitating bolt, *f, f, f*, arranged, and working in the gutter, or trough Figs. A. B.; *h, h*, the coupler or connecting rod, Fig. C. Fig. B. sectional view of the valve like catch and bolt—*c, c*,—*f, f*,;
25 *e, e*, the bolt hole; *d, d, d*, the funnel like arrangement. Fig. C, the coupler bar, or connecting rod, showing the same detached; *a, a*, the butt end part, with the female screw part *o, o*, and the male screw part *q, q*, with
30 the collars *i, i, k, k*, and barblike end *x*; *p, p* the spring of the coupler bar; *z, z* the coupler bolt; *m, m, m*, the coupler holder.

To enable others to be skilled in the use and application of my invention and im-
35 provements I will proceed to describe the construction and operation thereof, the nature and principles of which, consist in constructing railroad car couplers, or apparatus for attaching cars, of wrought and cast iron;
40 forming a metallic box *a, a, a, a*, with a compressed, or elliptical, funnel like arrangement, and opening *b, b, b, b*, as shown in Fig. A, so as to admit of an easy entrance of the connecting rod, or coupling-bar,
45 should said bar not be in a direct line, or relative position to the opening, *b, b*, which opening is beveled on the opposite side, so that, in the detaching of the cars, the barb like end *x* will not hang against the sliding
50 valve like catch *c, c*, but cause it to slip out readily in detaching.

In the box *a, a, a, a*, is arranged a vertically acting valve like catch *c, c*, working up and down in grooves *s, s, s*, Figs. A, B.
55 This valvelike catch, has an aperture or hole through it, at *e*, into which is made, to

be inserted a gravitating latch, or sliding bolt, *f, f*, working in a groove or gutter, *g, g*, at an angle of 45 degrees, or at an inclination sufficiently sloping to cause the latch or
60 sliding bolt, to be self acting by its own weight, or specific gravity, thereby sliding into the aperture *e*, in order, to hold down the valvelike catch *c, c*, thus preventing the coupler, or connecting bar *h, h*, Fig. C, from
65 becoming detached by the jolting or irregular motion of the cars. This coupler or connecting bar, has a barb-like point or end, Fig. C, formed obliquely, or straight, to hold up or press against the bevel part of the
70 catch *c, c*. This coupler bar, or connecting rod, Fig. C, is made of wrought or forged metal, of the desired form, in two or more pieces, termed the butt end, and rod end, the butt end having a female screw, *o*, formed
75 in it, into which is screwed the male screw part, *q*, Fig. C. In the butt end part *a, a*, Fig. C, is a bolt, or pin hole, *s, s*, Fig. C, for the purpose of uniting and holding the coupler, or connecting rod, Fig. C, to the
80 bumper, or platform of the car. The coupler, or connecting rod, being connected by a bolt or pin *z, z*, Fig. C, inserted in any desired manner, but allowing sufficient play or movement of the butt end of the bar or rod,
85 (right and left) so as to prevent any strain or unequal draft, in turning curves, or in passing over inequalities of the road or track. It must be observed that the connecting rod or coupler bar, Fig. C, has two
90 circular disks, or collars, *i, i, k, k*, the one *i, i*, being forged on, or screwed to the butt end of the coupler bar, permanently, and the one *k, k*, made with a hole in its center, large enough to admit of its moving, or playing
95 along the length of the coupler bar. In the space between the two collars *i, i, k, k*, Fig. C, is arranged an india rubber, or, a spiral or other spring *P, P* for the purpose of preventing the usual concussion or jarring gen-
100 erally attending the attaching of cars, in backing up against each other for the purpose of connection. By the application of said spring, the difficulty cited above is entirely obviated, and thus forming a spring
105 coupler, by easing off the momentum, and concussion alluded to, and presenting said advantages not found existing in the car couplers heretofore used.

Another feature also presented in my im-
110 provements, is, that, a whole train of cars, can be readily and most expeditiously at-

tached or connected, by simply backing up the engine, or cars, without the necessity of exerting and applying manual power and agency, other than in merely lifting and setting the bolts and catches, thus too, entirely avoiding the too frequent endangerment of limb and life, by attaching and coupling of cars by "hand-bolting."

The whole apparatus or coupler, being formed as described, can be readily attached to the bumper, or platform part of the cars, by casting on to the box, a flange or lip part, with screw or bolt holes, for the fastening thereof; or a bevel dovetail plate may be cast to a box, which may be inserted into a corresponding female dovetail formed or cut into the platform or bumper part of the cars.

Having fully described the construction,

use and operation of my improved railroad car coupler or attachment, what I claim as new and original and desire to secure by Letters Patent of the United States, is—

I claim constructing a metallic box *a, a*, with vertical grooves *s, s*, and an inclined trough, or slide chamber *g, g*, Fig. A, and using in combination therewith, a vertically operating valve-like catch *c, c*, formed with a convex or oval side, and a bevel-like lip, or projection *a*, Fig. B, together with a gravitating or self-acting bolt, or sliding latch *f, f*, Fig. B, specifically as described and represented by diagrams, A, B.

GEO. AULICK.

Witnesses:

JNO S. GALLAHER, Jr.,
R. H. GALLAHER.