

No. 32,540.

PATENTED JUNE 11, 1861.

A. STROH.  
CAR COUPLING.

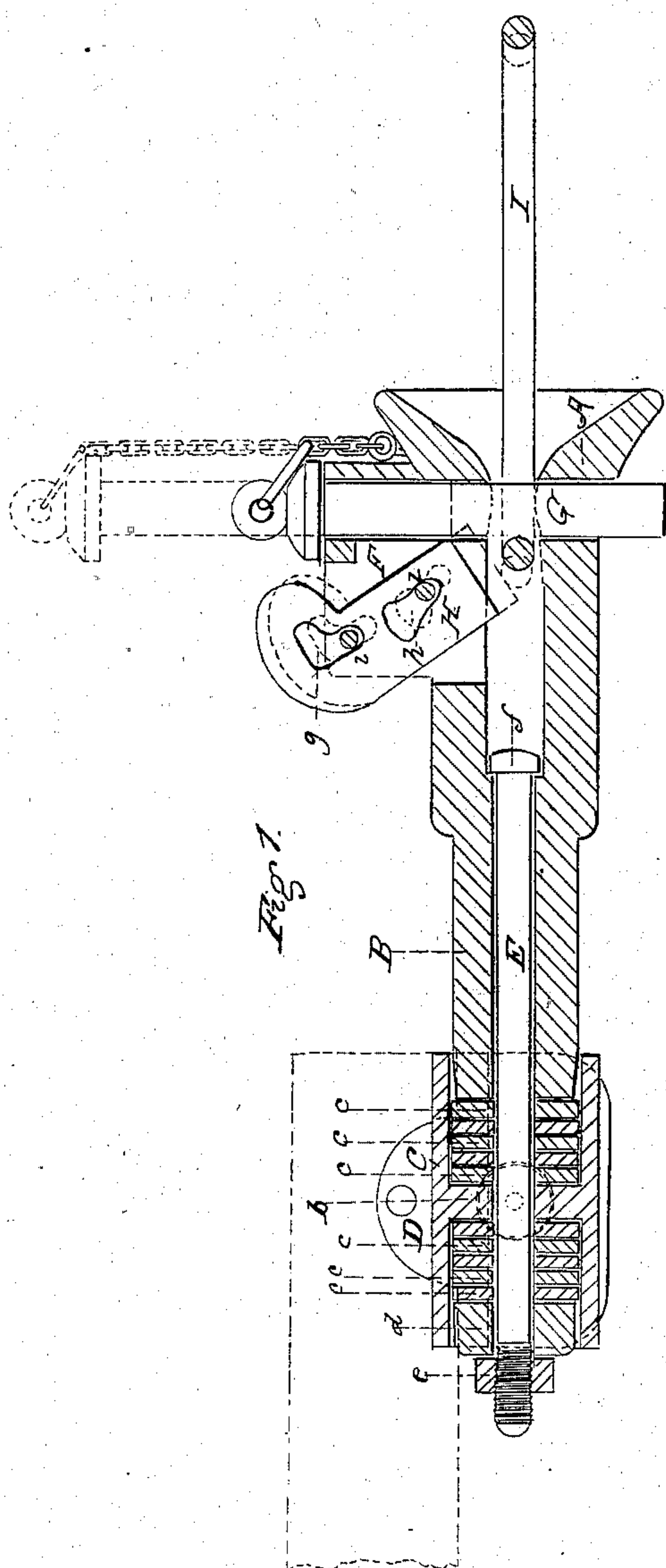


Fig. 1.

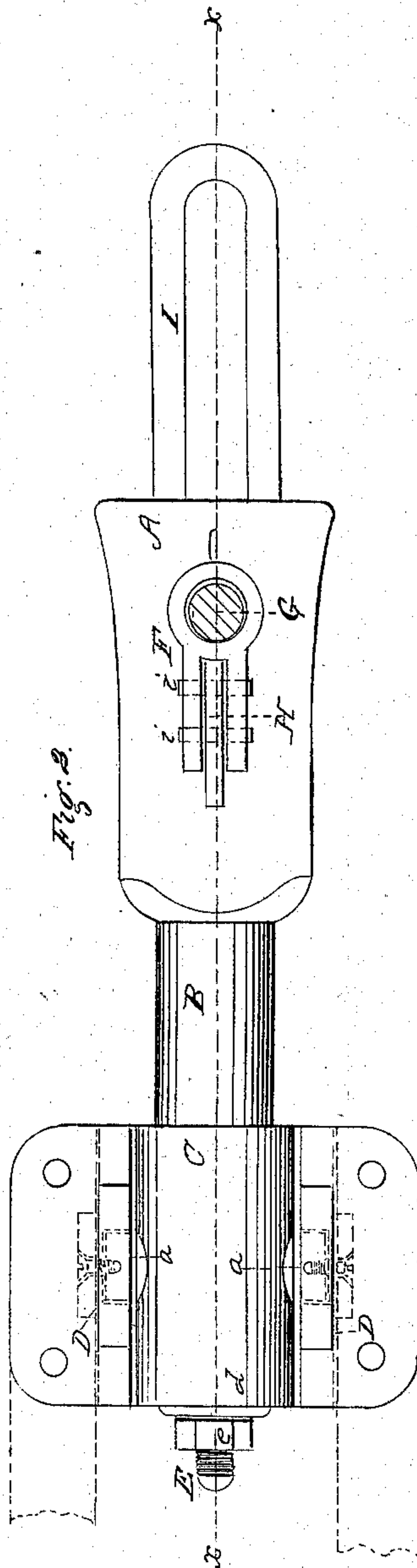


Fig. 2.

Witnesses  
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# UNITED STATES PATENT OFFICE.

ABRAHAM STROH, OF PORT JERVIS, NEW YORK.

## CAR-COUPLING.

Specification of Letters Patent No. 32,540, dated June 11, 1861.

*To all whom it may concern:*

Be it known that I, ABRAHAM STROH, of Port Jervis, in the county of Orange and State of New York, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal central section of my invention, taken in the line *x, x*, Fig. 2. Fig. 2 a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to obtain a coupling for railroad cars that will admit of cars having platforms of different heights being connected together, the coupling also admitting of a perfectly free vibration of the cars both laterally and vertically.

Another object of the invention is that it may couple itself and the parts be so arranged that in uncoupling or disconnecting the cars the pin need not be withdrawn from the draw-head but merely elevated a certain distance to clear or free the shackle, and be at that point supported by a drop.

The invention has further for its object the applying of springs in such a manner as to insure durability and a perfect action thereof.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A represents a draw-head which may be of cast or wrought iron and of the usual form, the draw-head is at the front end of a cylinder B, the back end of which is fitted in a cylindrical box C, said box being connected to ears D, D, by trunnions or pivots *a, a*, and these ears are attached to the bumper rods, shown in red, by proper bolts or screws.

The cylindrical box C is divided into two compartments by a transverse partition *b*, and into each compartment a series of india rubber disks *c*, are placed which serve as springs, see Fig. 1.

E is a bolt which passes longitudinally through the cylinder B, india-rubber disks *c*, and has a washer *d*, and nut *e*, on its back end. The front end of the bolt E, has a head *f*, which bears against the inner end of the draw-head as shown clearly in Fig. 1, and by screwing up the nut *e*, the india-rubber

disks *c*, will be snugly fitted and secured in the cylindrical box C, and the washer *d*, and cylinder B, secured in the ends thereof.

On the upper part of the draw-head A, there is a flanch or socket F, in which a shackle bolt G, is fitted, said bolt passing vertically through the draw-head when the coupling is in use.

H, is a drop slide which is fitted in the flanch or socket F, directly back of the shackle bolt G. The drop H, has two slots *g, h*, made through it, the upper slot *g*, being of right angular form as shown in Fig. 1, and the lower one *h*, being, what may be termed, of pear shape. Through the slots *g, h*, pins *i, i*, pass, said pins passing transversely through the flanch or socket F, and serving as guides for the drop.

When the shackle bolt G, is elevated the lower end of the drop H, will pass or drop by its own gravity beneath the bolt G, and sustain the latter, as shown in red in Fig. 1, and in order therefore to disconnect the coupling the shackle bolt G, is simply raised until the lower end of the drop passes beneath the bolt. The slots *g, h*, admit of this movement of the drop which is an exceeding simple device for the purpose intended and operates surely.

I, is a shackle or link which may be of the usual form, see Fig. 2. This link when shoved into the draw-head forces back the drop H, and allows the shackle bolt G, to drop through the link, as shown in Fig. 1. The device therefore is self-coupling and the shackle bolt G, it will be seen, in consequence of being held up by the drop H, does not require to be withdrawn from the draw-head A, and the work of uncoupling is not only greatly facilitated, but the bolt is not liable to be lost or mislaid and is always ready for coupling.

The india-rubber disks *c*, in the back chamber or part of the box C, are the portion of the spring which is acted upon by the "draw" or "pull," while the disks *c*, in the front chamber of the box C, are acted upon by the back action of the cars. This dividing of the spring into two parts insures its durability, and the boxing up or inclosing of the india-rubber disks *c*, protects them from the weather and adds greatly to their efficiency.

The hanging or pivoting of the cylindrical box C, between the ears D, D, admits of the draw-head A, rising or falling to suit



platforms of different heights and also admits of any vertical play or vibration of the cars, the link I, of course admitting of the lateral movement of the cars.

5 Having thus described my invention what I claim as new and desire to secure by Letters Patent is,

The combination and arrangement of the

slotted gravitating drop H, bolt G, box C, springs c, draw head pipe B, bolt E and 10 draw head A, all in the manner and for the purposes herein shown and described.

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Witnesses:

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