

# J. W. Gillam. Car Coupling.

117067

Fig. 1.

PATENTED JUL 18 1871

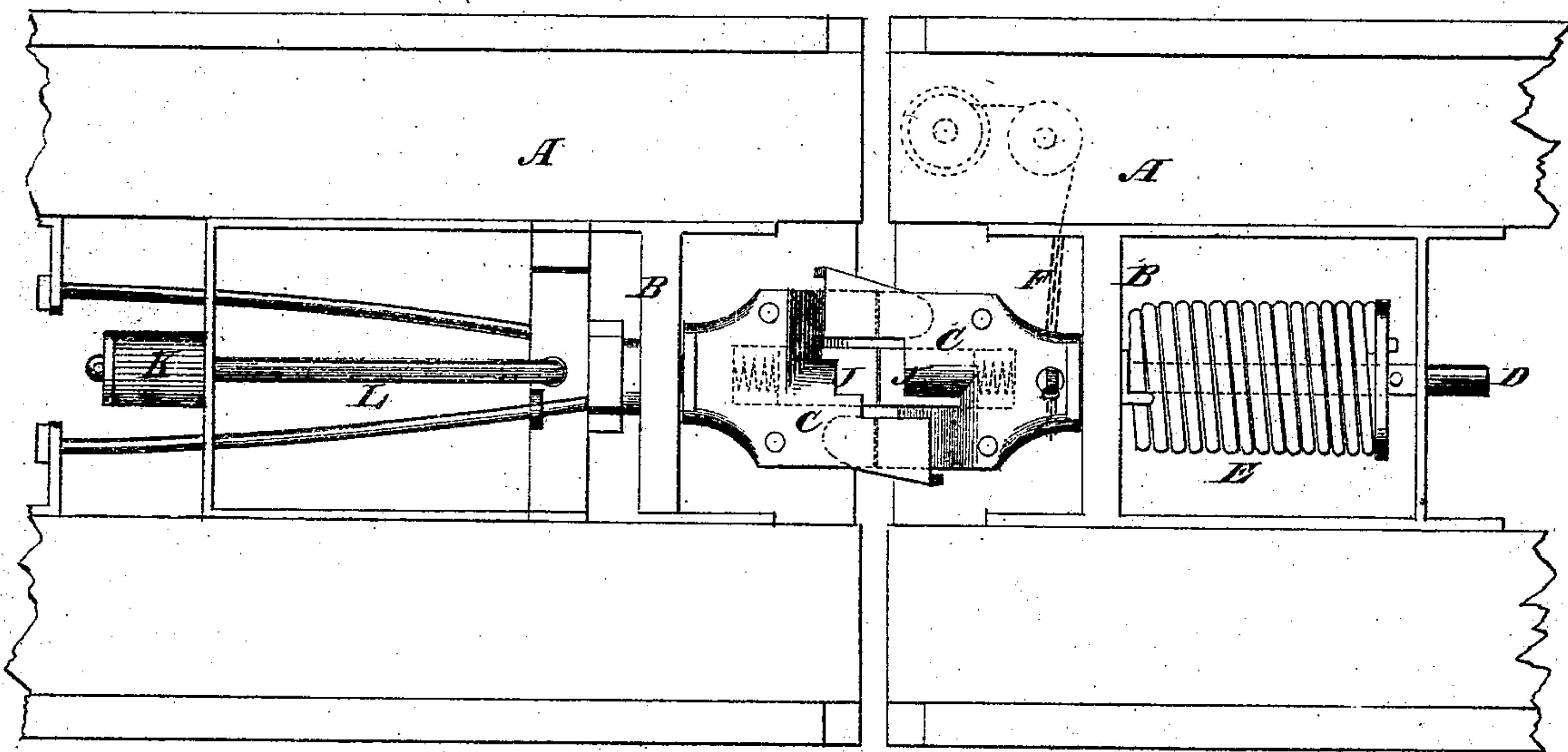


Fig. 2.

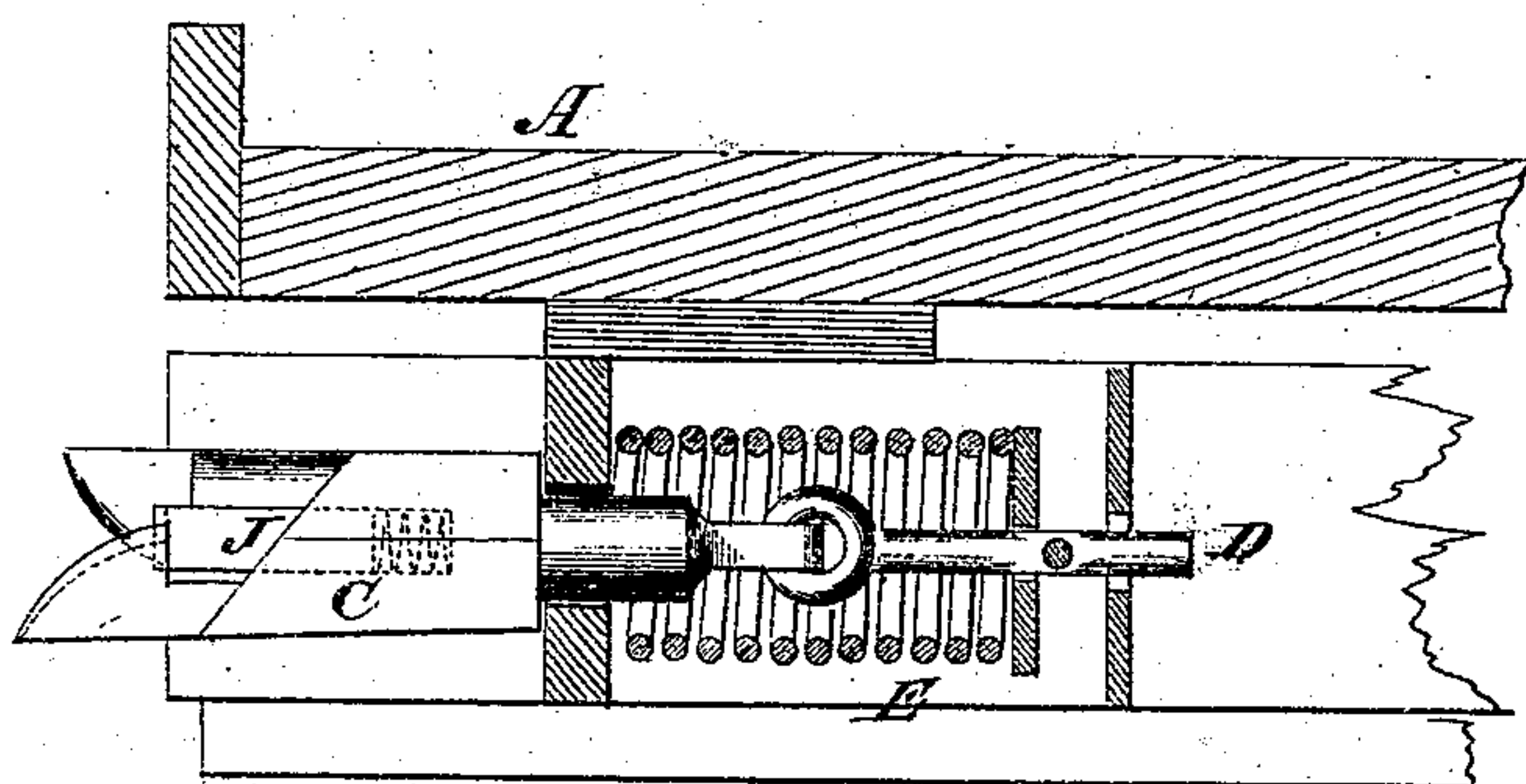
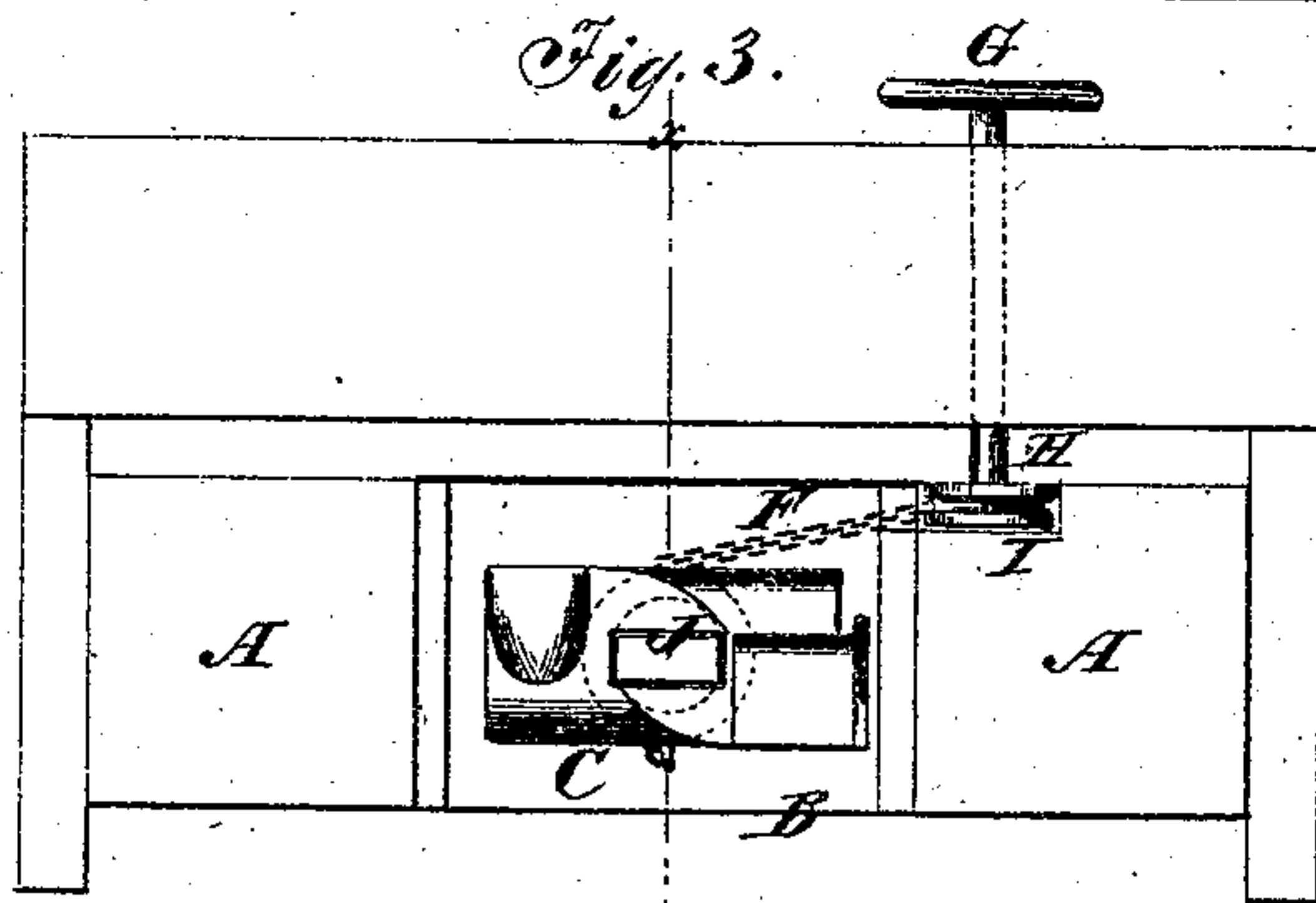


Fig. 3.



Witnesses:  
*Iustave Dieterich*  
*Wm. H. C. Smith.*

Inventor:  
*J. W. Gillam.*  
 PER *Wm. H. C. Smith.*  
 Attorneys.



# UNITED STATES PATENT OFFICE.

JOHN W. GILLAM, OF NEWTON, ASSIGNOR TO HIMSELF AND H. C. KELSEY, OF TRENTON, NEW JERSEY.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 117,067, dated July 18, 1871.

*To all whom it may concern:*

Be it known that I, JOHN W. GILLAM, of Newton, in the county of Sussex and State of New Jersey, have invented a new and useful Improvement in Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention consists in improving car-couplings, as hereinafter fully described and subsequently pointed out in the claim.

In the accompanying drawing, Figure 1 represents an under-side view of two draw-heads coupled together according to my invention. Fig. 2 is a section of Fig. 3 taken on the line *x x*. Fig. 3 is an end view.

Similar letters of reference indicate corresponding parts.

A is the draw-head, which is recessed out to receive the boxing B. C is the clutch or coupler. D is the shank, which passes through and is supported by the boxing B. E is a spring connected with the shank of the coupler, the object of which is to partially revolve the coupler or to throw the coupler back to its original position when it has turned for uncoupling the cars.

I do not confine myself to any particular description of spring for this purpose. Two kinds are shown in the drawing, either of which produces the desired effect.

As seen in Fig. 1, two draw-heads are coupled together. The couples or clutches engage with each other and couple automatically when the cars come together.

For uncoupling, one of the couplers is partially

revolved or turned a quarter of a revolution by means of the chain F, which is attached to the coupler, as seen in Figs. 1 and 3.

G is a hand-wheel on the shaft H, and I is the chain-pulley. By revolving the pulley the chain is wound around it and the coupler is turned about one-fourth of a revolution, or sufficient to disengage the coupler. When the hand-wheel is released the coupler is thrown back by the recoil of the spring to its former position, ready to couple or engage with the opposing coupler whenever the cars come together. J is a spring-bumper inclosed in the coupler, the spring by which it is actuated being seen in dotted lines. This bumper may turn with the coupler, as seen in the drawing, or the bumper may be wound so that the coupler will turn or revolve on it. K is a rubber spring on the rod L, outside of the boxing B. The rod is attached to the coupler. This allows a degree of flexibility to the coupler which allows it to conform to the motion of the cars. The spiral spring E accomplishes the same purpose.

It will be seen that the coupler is a double clutch, and that when two are locked together the connection is safe and complete.

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

The spring-bumper J, vibrating clutch C D, and spring E, when constructed, arranged, and operating together in a car-coupling, as and for the purpose specified.

The above specification of my invention signed by me this 27th day of March, 1871.

JOHN W. GILLAM.

Witnesses:

GEO. W. MABEE,  
ALEX. F. ROBERTS.