J. C. GENTRY.

CAR-COUPLING.

No. 174,072. Patented Feb. 29, 1876.

Fig. 1.

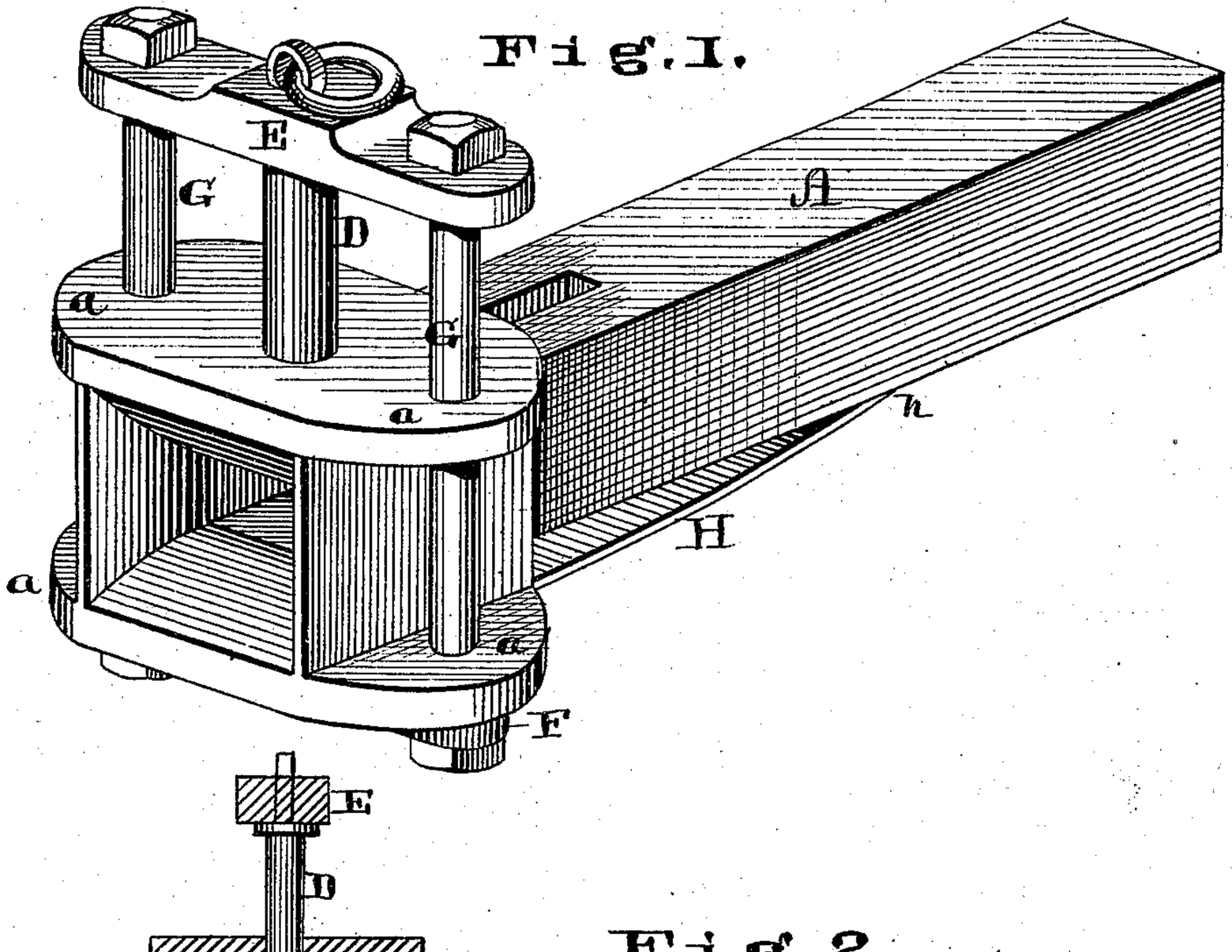


Fig. 2.

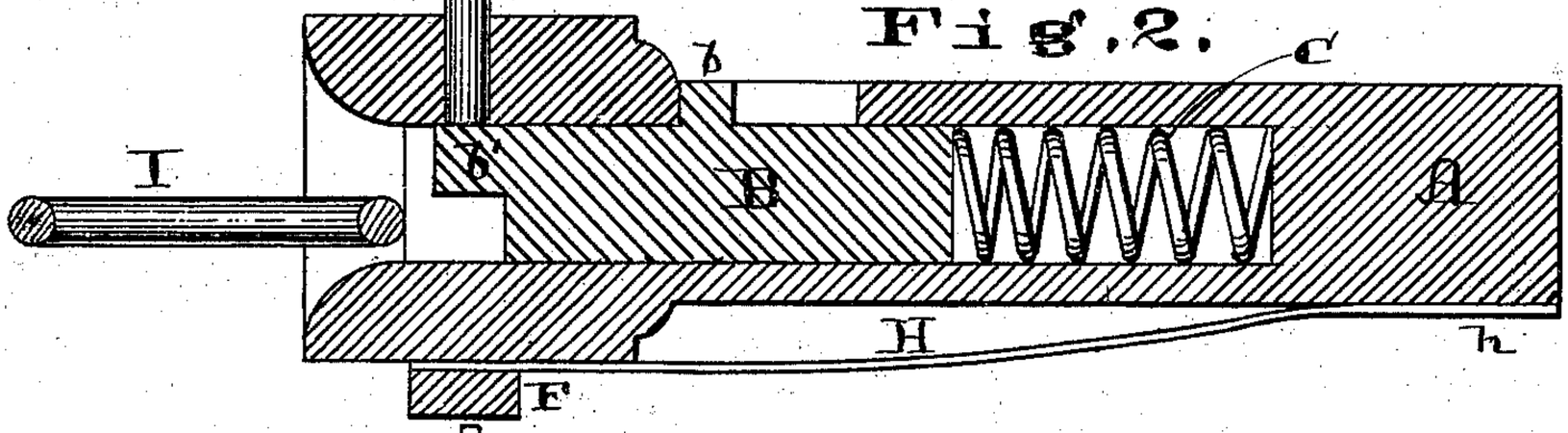
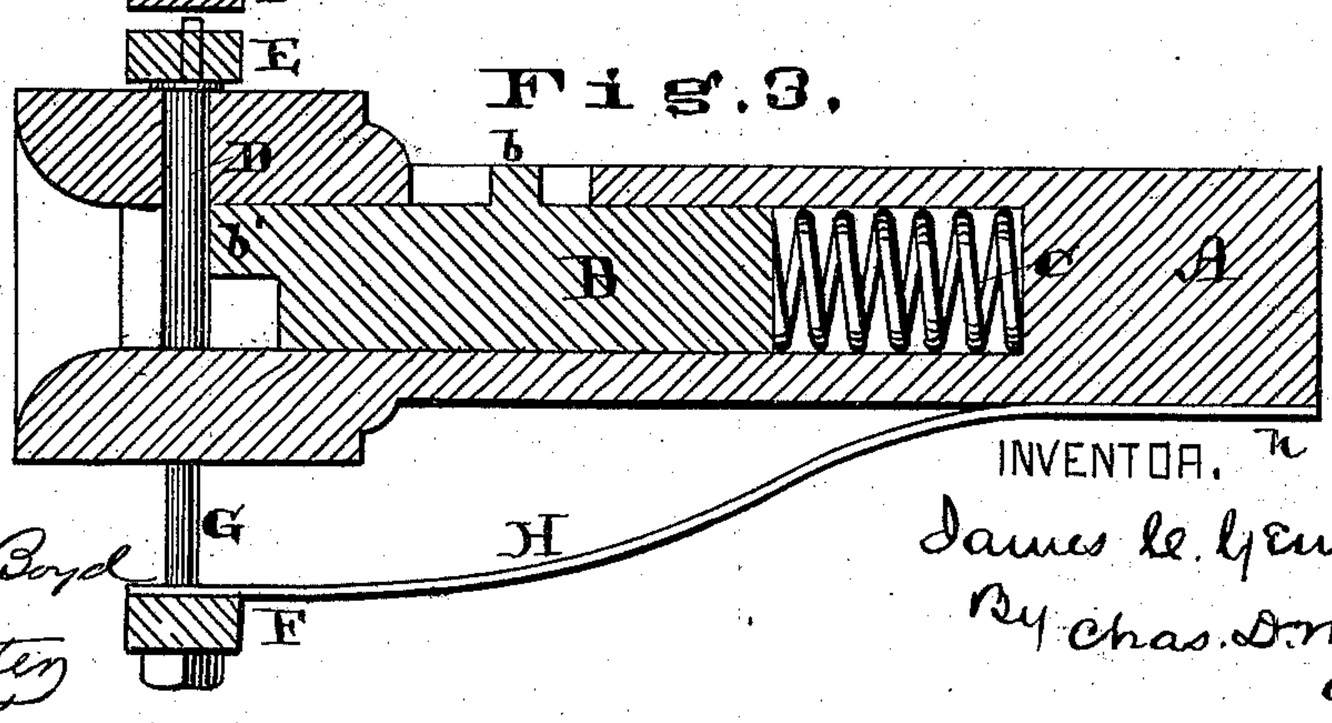


Fig. 3.



WITNESSES.

Frank S. Boyd

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INVENTOR.

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UNITED STATES PATENT OFFICE.

JAMES C. GENTRY, OF RALLS COUNTY, MISSOURI.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **174,072**, dated February 29, 1876; application filed January 11, 1876.

To all whom it may concern:

Be it known that I, JAMES C. GENTRY, a resident of Ralls county, State of Missouri, have invented a new and useful Improvement in Automatic Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 represents, in perspective, a draw-head embodying my invention. Fig. 2 is a central vertical longitudinal section, showing the position of the parts before coupling; and Fig. 3, a similar section, showing the position of the parts after coupling.

Similar letters refer to similar parts.

This invention relates to that class of couplings wherein the operation of coupling is automatic.

Referring to the accompanying drawing, A represents one of two similar draw-heads, the other draw-head not being shown. In its outward form it may be of the ordinary form, but within it, and moving longitudinally therein, is a sliding bolt, B. The bolt is moved outward by the action of the spring C. D represents the coupling-pin. Its upper end is held in a yoke, E. Beneath the draw-head is a plate, F, which is connected with the yoke E above by means of the bolts G G, which pass down on either side of the mouth of the draw-head, and, preferably, through the lips *a a*, &c., which serve as guides. H represents a spring, the inner end of which is fastened to the draw-head at *h*. The other outer end bears upon the plate F.

The operation of the invention is as follows: Let the parts be in the position shown in Fig. 2, in which the sliding bolt B, by means of the spring C, is pushed out far enough to come under the pin D, and hold the latter high enough for the coupling-link I to come beneath it. The coupling-link, held in the opposing draw-head, is brought, as the draw-heads come together, against the bolt B, driving it in sufficiently for the pin D to drop through the link. As soon as the sliding bolt B has cleared the pin the latter, being acted on by the spring H, acting through the plate F, bolts G G, and yoke E, is drawn sharply down into position. To uncouple, the pin D is drawn upward by any suitable means, preferably actuated from the top of the car. As the pin is raised the spring C acts on the sliding bolt B, driving it out and underneath the pin. To prevent the bolt from going too far the stop *b* is employed. The projection *b'* on the outer end of the bolt B serves to keep the link horizontal, thus insuring its proper entrance into the opposing draw-head.

I am aware that a sliding bolt actuated by a spring has been used heretofore to uphold the coupling-pin, and, also, that a system of leverage, in combination with a yoke, has been employed to raise the coupling-pin to enable the link to pass beneath; but, in both of the constructions referred to, the pin drops from gravity alone, which method would not answer my purpose, which is to employ positive means of such a character as to insure the descent of the pin. I therefore disclaim them.

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

1. The combination of the draw-head A, sliding bolt B, spring C, pin D, yoke E, plate F, bolts G G, and spring H, substantially as described.

2. The combination of the pin D, yoke E, bolts G G, plate F, and spring H, substantially as described.

JAMES C. GENTRY.

Witnesses:

JOSHUA H. GENTRY,
JAMES W. LEAR.