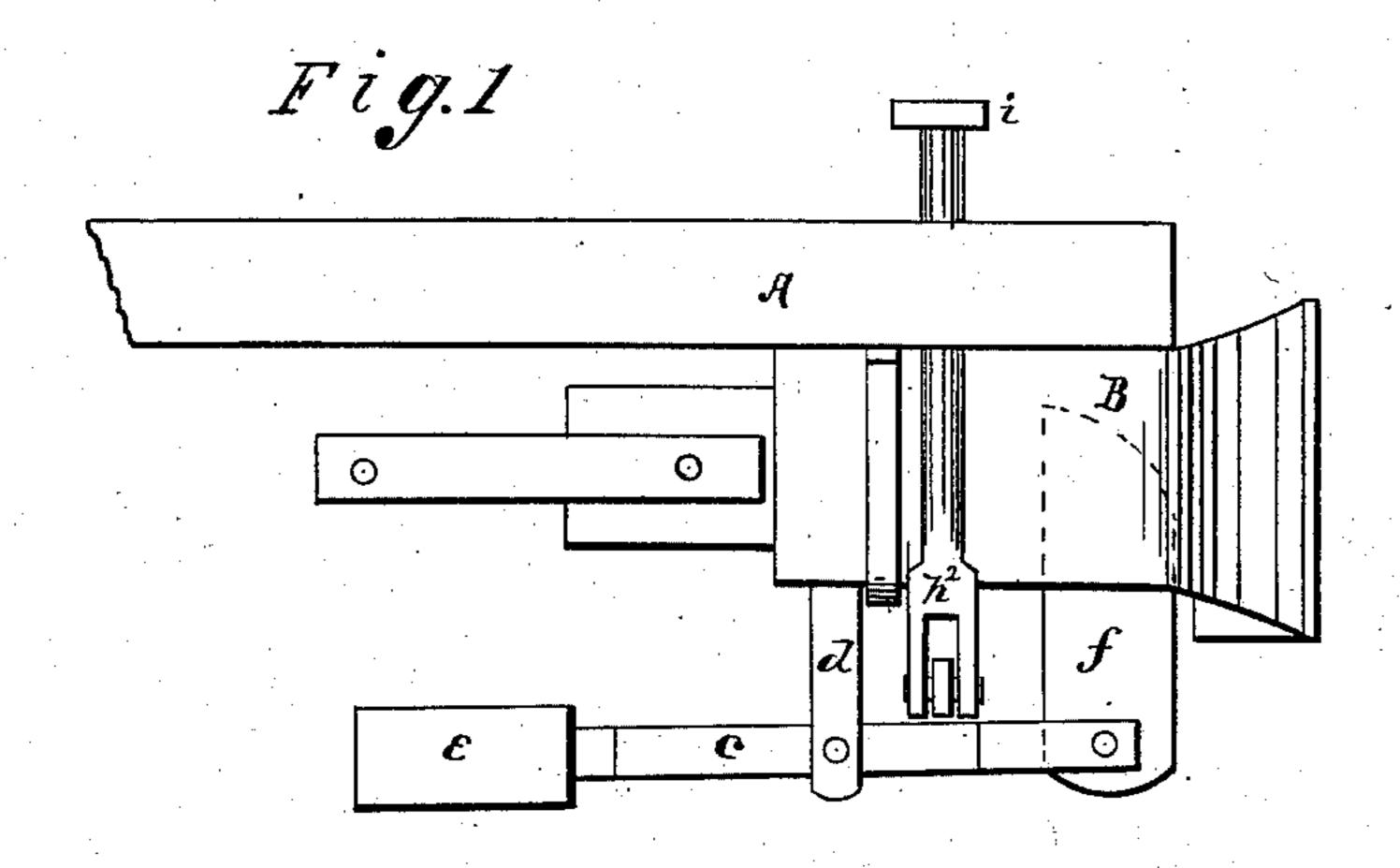
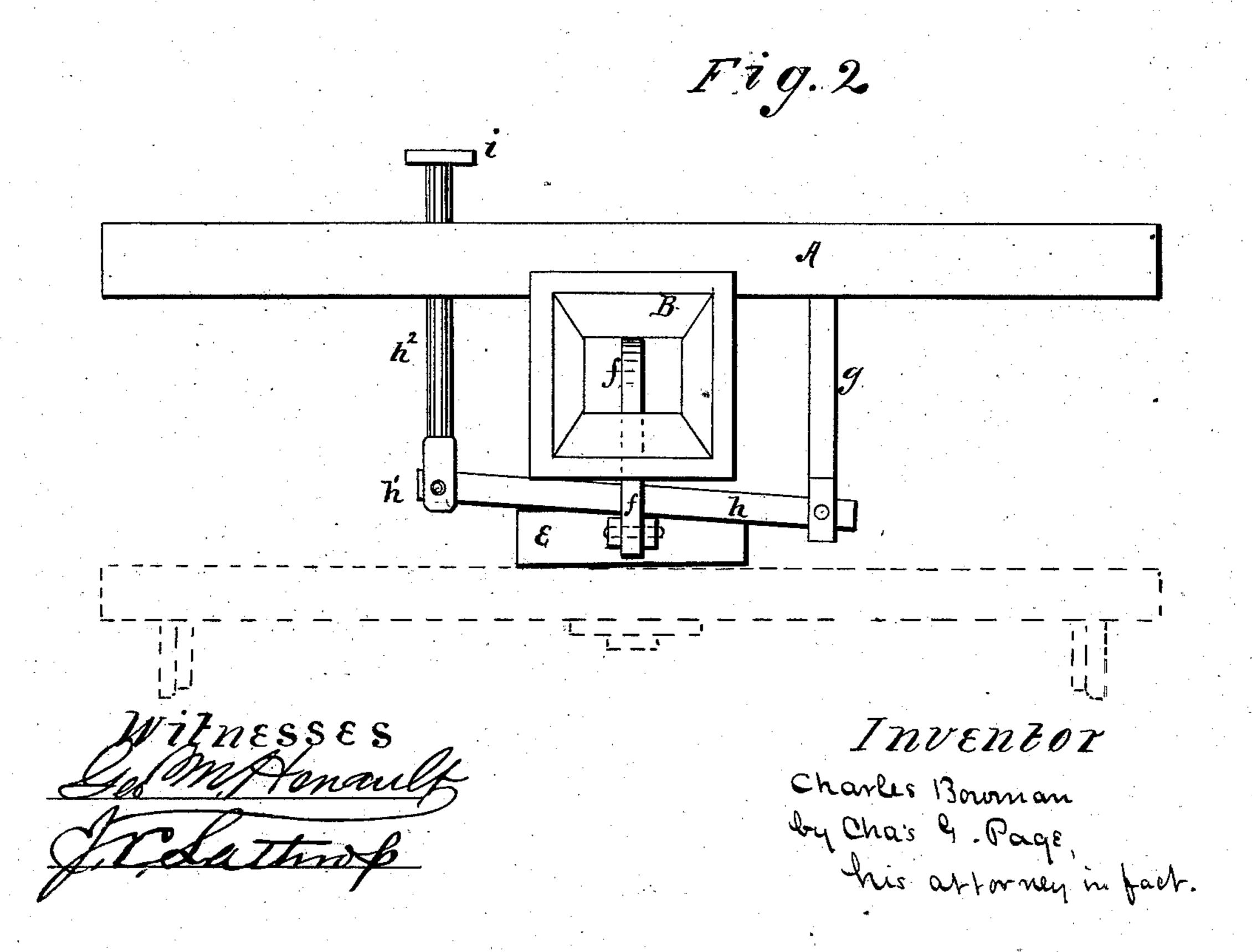
## C. BOWMAN. Car-Coupling.

No. 164,671.

Patented June 22, 1875.





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## UNITED STATES PATENT OFFICE.

CHARLES BOWMAN, OF HANOVER, PENNSYLVANIA.

## IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 161,671, dated June 2', 1875; application filed May 10, 1875.

To all whom it may concern:

Be it known that I, CHARLES BOWMAN, of Hanover, in the county of York and State of Pennsylvania, have invented a certain new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, in which—

Figure 1 is a side view of a car-platform and draw-head having my improvement applied thereto, and Fig. 2 is an end view of the same.

My invention relates to an improvement in self car-couplings, and consists in the combination of a locking-key, weighted lever-bar, arranged to rest upon the truck-frame, and suitable arms or levers, whereby the gravity of the weight will cause the key to interlock with the coupling-link, from which it will be disconnected either by pressure upon one end of the jointed lever-arm above the car-platform, or by an unusual motion of the car-truck frame upon which the weight rests, should said car and truck run off the track.

Referring to the drawings, A represents the car-platform, and B the draw-head secured thereto in the usual way. The bar c, which is pivoted in a forked arm, d, carries at one end the weight e, and at the other a pivoted key, f, which enters the draw-head through a slot in the under side thereof. This key, which is depressed by the action of the coupling-link against its outer beveled edge, will, after the link has passed over it, be forced into connection therewith by reason of the weight e, which, when it has reached its lowest limit, rests on the truck-frame, as shown by dotted lines in Fig. 2. To the lower end of rod g, which is located at one side of the draw-head,

is pivoted a bar, h, which operates upon the lever c just back of its locking-key, and is jointed at  $h^1$  with a vertical arm,  $h^2$ , which passes up through the platform and terminates in a knob or handle, i. Under ordinary circumstances the cars may be uncoupled by simply depressing the lever-arms  $h^2 h$ , whereby the weight e will be elevated and the key f withdrawn from the coupling-link. Should, however, the car and truck jump the track, the unusual jolting or tilting of the truckframe will raise the weight resting thereon a sufficient distance to perform the same function. By this arrangement of devices a simple and effective self-coupler and self-uncoupler is produced, and the danger of accidents greatly lessened.

I am aware that a self car-coupling operated by a spring is not new, but I am not aware that a weighted lever, constructed as described, and arranged to rest upon the truck-frame, has ever been constructed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The herein-described self-coupling and self-uncoupling device, constructed with a leverbar, c, carrying at one end the key f, and at the other a weight, arranged to rest upon the truck-frame, as described, whereby the said lever may be operated for the purpose of uncoupling-cars either by arms  $h \ h^2$  or by an upward tilt of the truck-frame, substantially as shown and specified.

In testimony whereof, I have hereunto set my hand this 26th day of April, 1875.

CHAS. BOWMAN.

Witnesses:

DAVIS GARBER, A. D. KOHLER.