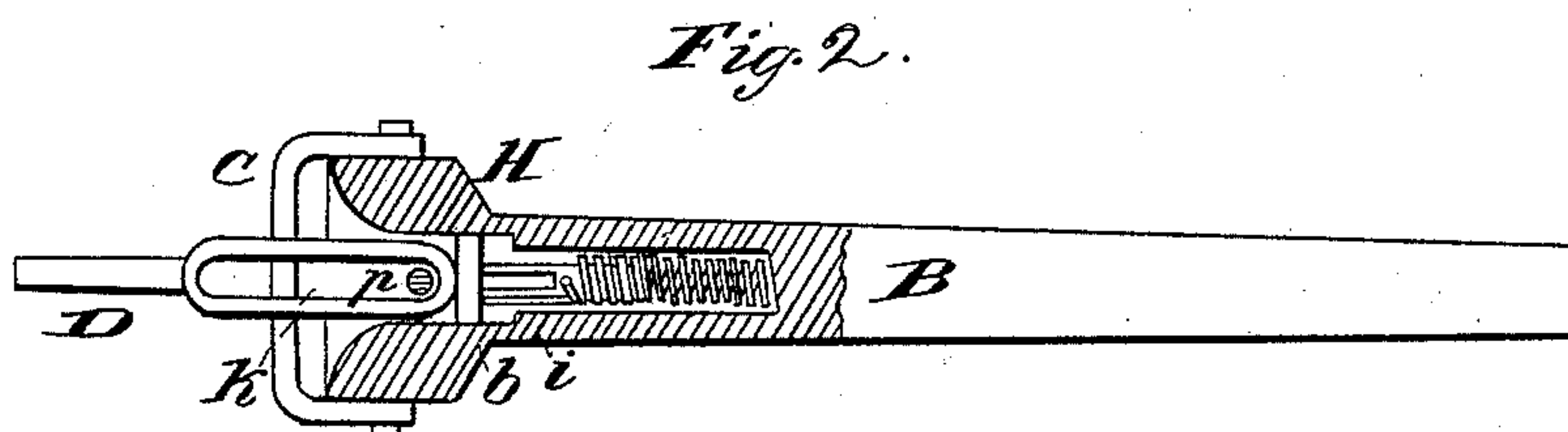
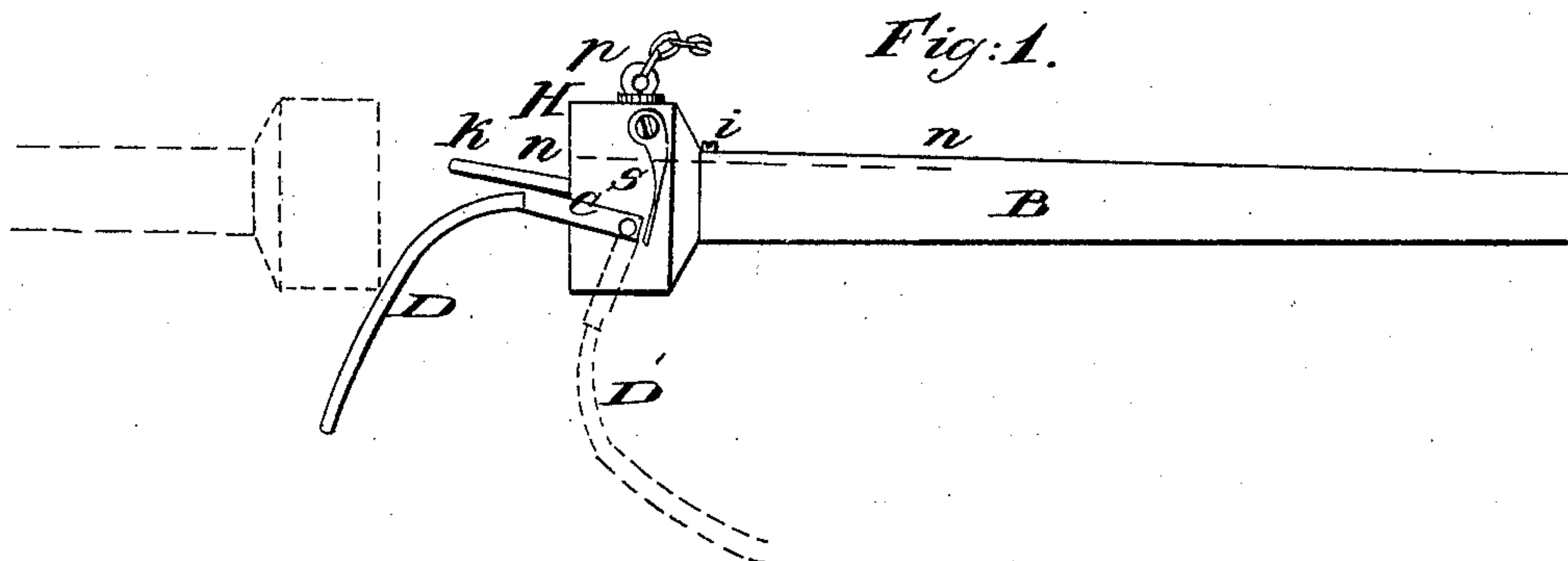


M. F. GIBBS.

Car Coupling.

No. 65,373.

Patented June 4, 1867.



Witnesses

A. H. Billings
P. J. Turner

Inventor

M. F. Gibbs
By J. M. S. Loughborough
Att'y

United States Patent Office.

M. F. GIBBS, OF LIVONIA, NEW YORK.

Letters Patent No. 65,373, dated June 4, 1867.

IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, M. F. GIBBS, of Livonia, in the county of Livingston, and State of New York, have invented certain new and useful "Improvements in Automatic Car-Couplings;" and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a side elevation of my invention applied to an ordinary draw-bar head.

Figure 2 is a top view of the same, a portion of the head H, and draw-bar B, as indicated by the red line *n* in fig. 1, being removed so as to expose the dropping device of the coupling-pin *p*.

Like letters indicate corresponding parts.

This invention relates to that class of car-couplings called automatic or self-acting, and it consists in providing a spring-bail or latch in such a manner as to sustain the link in the proper position to enter the approaching head, and as the heads meet the latch is thrown back under the head out of the way. It may be used in connection with any suitable self-acting "pin-dropper" or trap.

To enable others to make and use my invention, I will describe its construction and operation.

The bail C is hinged to the sides of the head H, as shown, and is provided with a central cam-shaped latch D. There is a spring, *s*, in one side of the head H, (fig. 1,) which is made to press firmly against the flattened end of the bail, which should be broad enough to permit the pressure of the spring to keep the latch in its present position when thrown upward, and yet allow it to be forced down to the position of the dotted lines D' by the approaching head of the opposite car. Probably a bail applied to one draw-head of each car would be sufficient, but if it should be desired to have one at each end the latch should be placed to the right-hand side from the centre of the bail, instead of being central, as represented in fig. 2, in which case the latches would strike each other and allow the link to drop before the opposite head approached so as to receive it. When the opposite head is higher it approaches nearer before striking the latch, and if lower it strikes sooner, thus keeping the end of the link properly elevated, or sufficiently depressed to enter the approaching head, whether it is above or below the line. There may be a spring sliding bolt, *b*, used with my invention, as shown in fig. 2; or there may be a convolute spring in one side of the head provided with a projecting wing to reach under the point of the pin *p*, to be swung back by the introduction of the link *k*; or, if desired, there may be a double strap or V-shaped spring hung at its apex to the pin *i*, and be so arranged as to catch and hold the pin until pressed aside by the insertion of the link *k*. There are various other plans for automatic "pin-droppers," to any of which my invention is applicable.

The attendant inserts the link in the head, and swings the bail up in the position shown in fig. 1. The pin is then inserted in the opposite head, and when the link is driven in by the meeting of the draw-heads the pin becomes released and drops through the link.

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

1. The hinged bail C, with its projecting cam or latch D, in connection with the spring *s*, substantially as and for the purposes shown and described.

2. The combination of the said spring-bail C, and the latch, with the automatic "pin-dropper," substantially as and for the purposes set forth.

M. F. GIBBS.

Witnesses:

W. S. CHAPIN,
PETER E. HOLT.