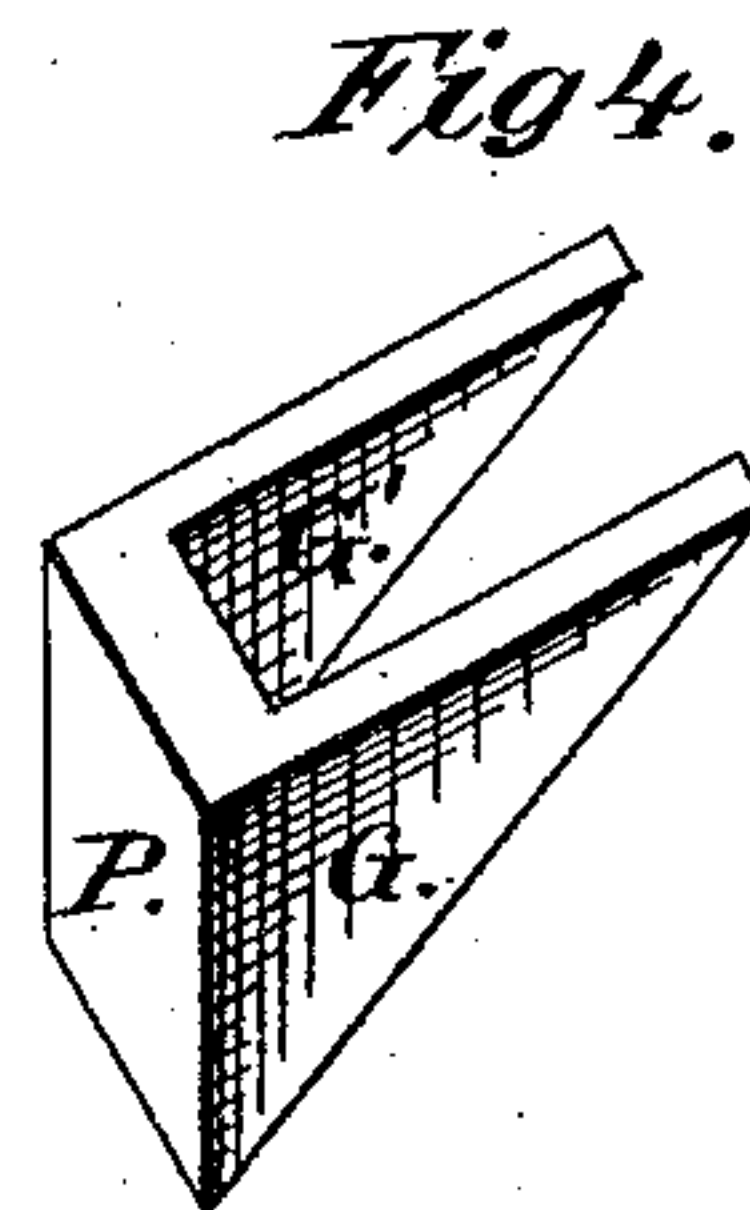
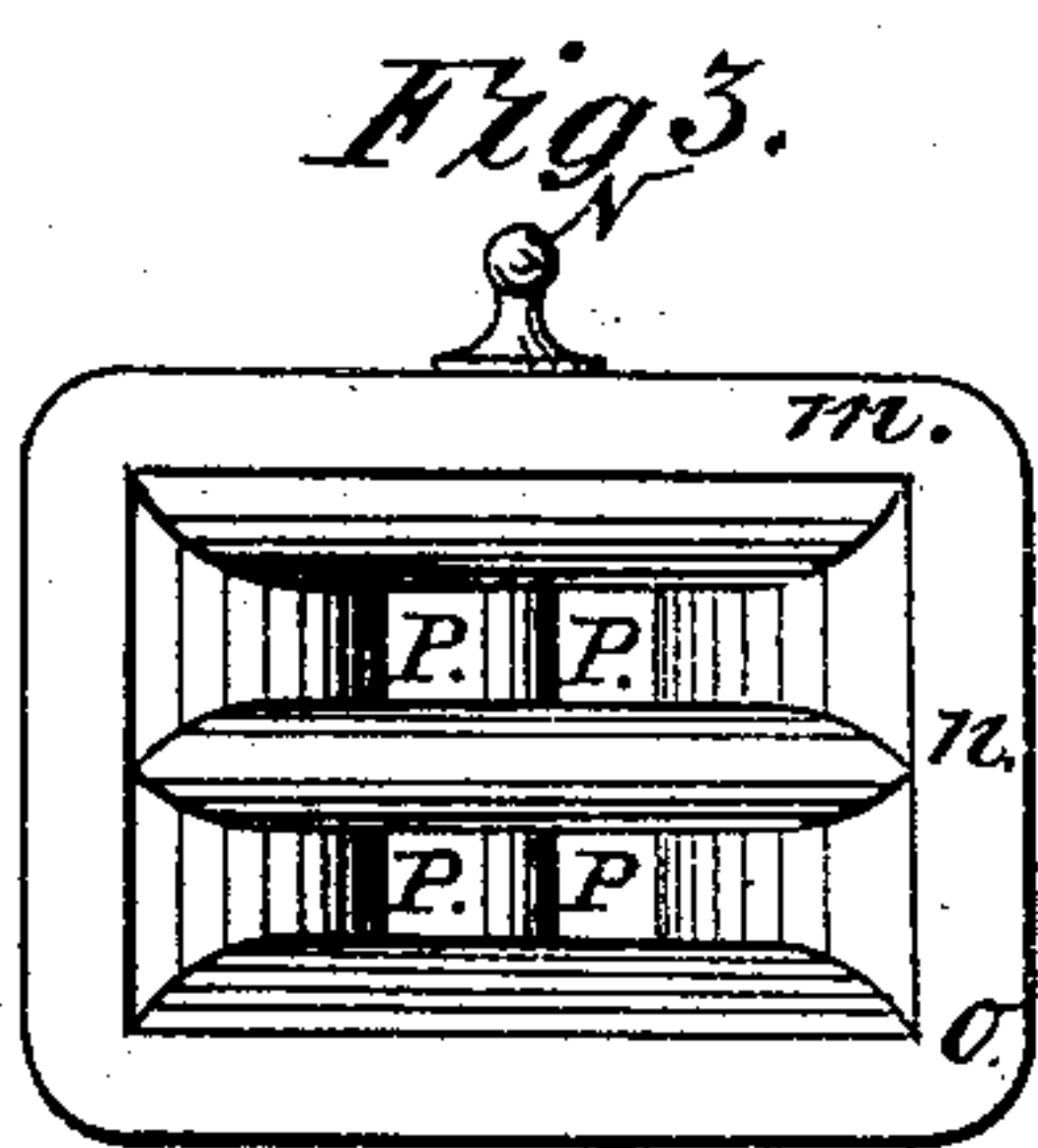
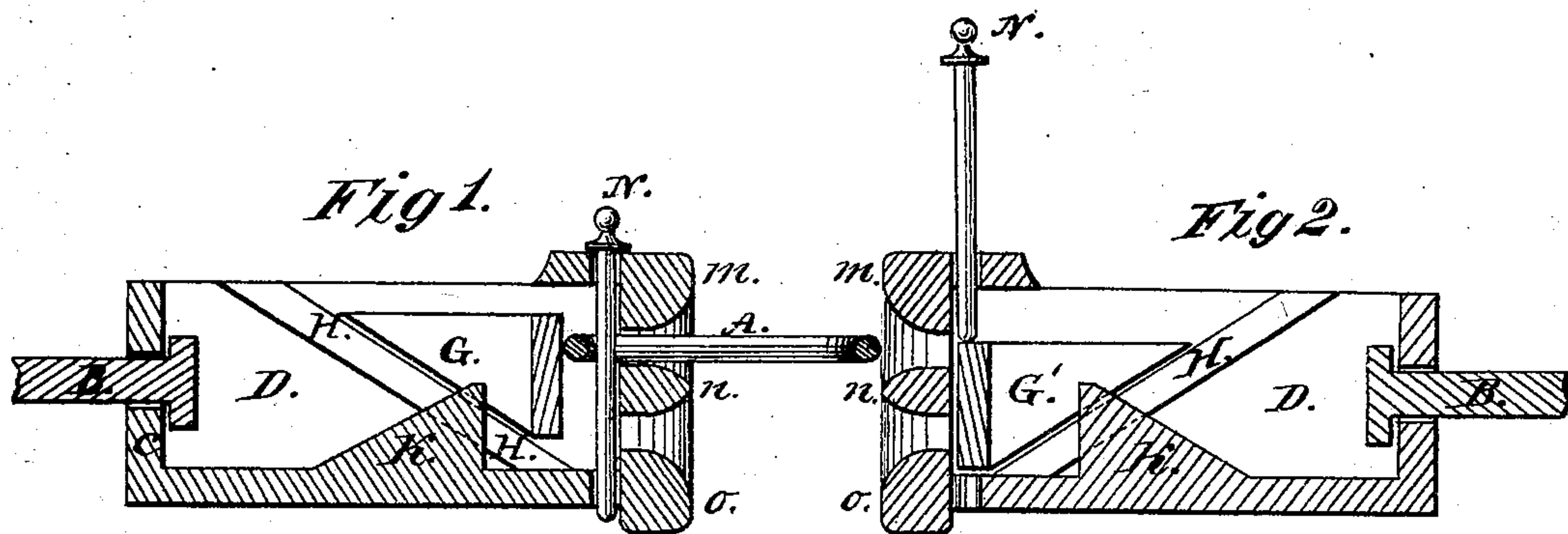


J. SINGER.
Car-Couplings.

No. 151,724.

Patented June 9, 1874.



Witnesses:

Theophilus Weaver
Peter Stucker,

Inventor:

Jacob Singer.

UNITED STATES PATENT OFFICE.

JACOB SINGER, OF HARRISBURG, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **151,724**, dated June 9, 1874; application filed April 10, 1874.

To all whom it may concern:

Be it known that I, JACOB SINGER, of the city of Harrisburg, county of Dauphin, and State of Pennsylvania, have invented certain Improvements on Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the annexed drawings making a part of this specification, in which—

Figure 1 represents my coupling with the ordinary link and pin in coupled position. Fig. 2 represents the same with the pin elevated to receive and couple the link automatically. Fig. 3 is a front view of the draw-head, and Fig. 4 is a perspective view of the inclined follower employed as the pin-detent.

My invention relates to that class of self-couplers in which the common closed link and round pin are employed; and it consists, essentially, of an inclined way arranged in the rear part of the draw-head frame, and of an inclined follower or beveled block adapted to travel up and down said inclined way in such manner that its front end may be presented forwardly square, and far enough to hold the pin poised on its top, and which, when pushed backward by the link, will allow the pin to drop to automatically couple the link, a stop being also employed to limit the throw of the follower.

The purpose of car-couplings being well known, I proceed to describe the construction of mine.

In any ordinary coupling draw-head, made either of wrought or cast iron, I insert an inclined way, H, in position, as shown in Figs. 1 and 2, by cleating the insides of the side plates thereof. On this inclined way I mount a follower, P G G', in form as shown in Fig. 4, having a square front, P, and beveled sides G G' cut beneath in manner to correspond with the pitch of said inclined way, that when the follower is in position thereon, its top may be horizontal, as shown in Figs. 1 and 2. The front end of the draw-head is chambered between the parts *m n o*, to allow the link A to be inserted in a chamber suitable to match the height of the opposing draw-head to be coupled. The said chambered parts end squarely a short way in the draw-head, and

allow the pin N or N' to drop freely in the rear thereof, that it may bear against the rear end of the portion *n* when draft is on the head to insure the life of the pin. The follower P G G' is of proper length, and the inclined way H is properly distanced in relation to the place where the pin N or N' is inserted, that when said pin is elevated, as shown in Fig. 2, the follower may fall, by the action of gravity, to place under the point of the pin as a detent to hold it poised. The instant the link A pushes back the follower, the pin, being no longer supported, falls through the link and couples it, while the follower, after reaction is spent, falls down the inclined way and hugs the link with its square front end P, as shown in Fig. 1. A stop, K, is inserted in position, as shown in Figs. 1 and 2, to limit the rearward thrust of the follower, which it stops on the rear side of the part P, the parts G G' passing beside said stop. The object of limiting the follower thus is to prevent its being driven up too far on the inclined way and being pinched fast against the top plate of the draw-head or the under side of the platform-timbers.

Ordinarily the top plate of the draw-head is omitted, and it is evident that only a limited bottom plate is needed to erect the said post thereon, and that transverse stops may be employed where no bottom plate is used, which may be supported on the side plates.

I am aware that a block sliding on an incline for the purpose of sustaining the pin until the entrance of the link is not new, and such I do not claim broadly; but

What I do claim as new and useful, and what I desire to secure by Letters Patent, is—

The draw-head *m n o D*, having superimposed chambers P, the straight inclined way H, and stop K, in combination with the follower P G G', all constructed to operate as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have hereunto set my hand and seal this 7th day of April, 1874.

JACOB SINGER. [L. S.]

Witnesses:

THEOPHILUS WEAVER,
PETER STUCKER.