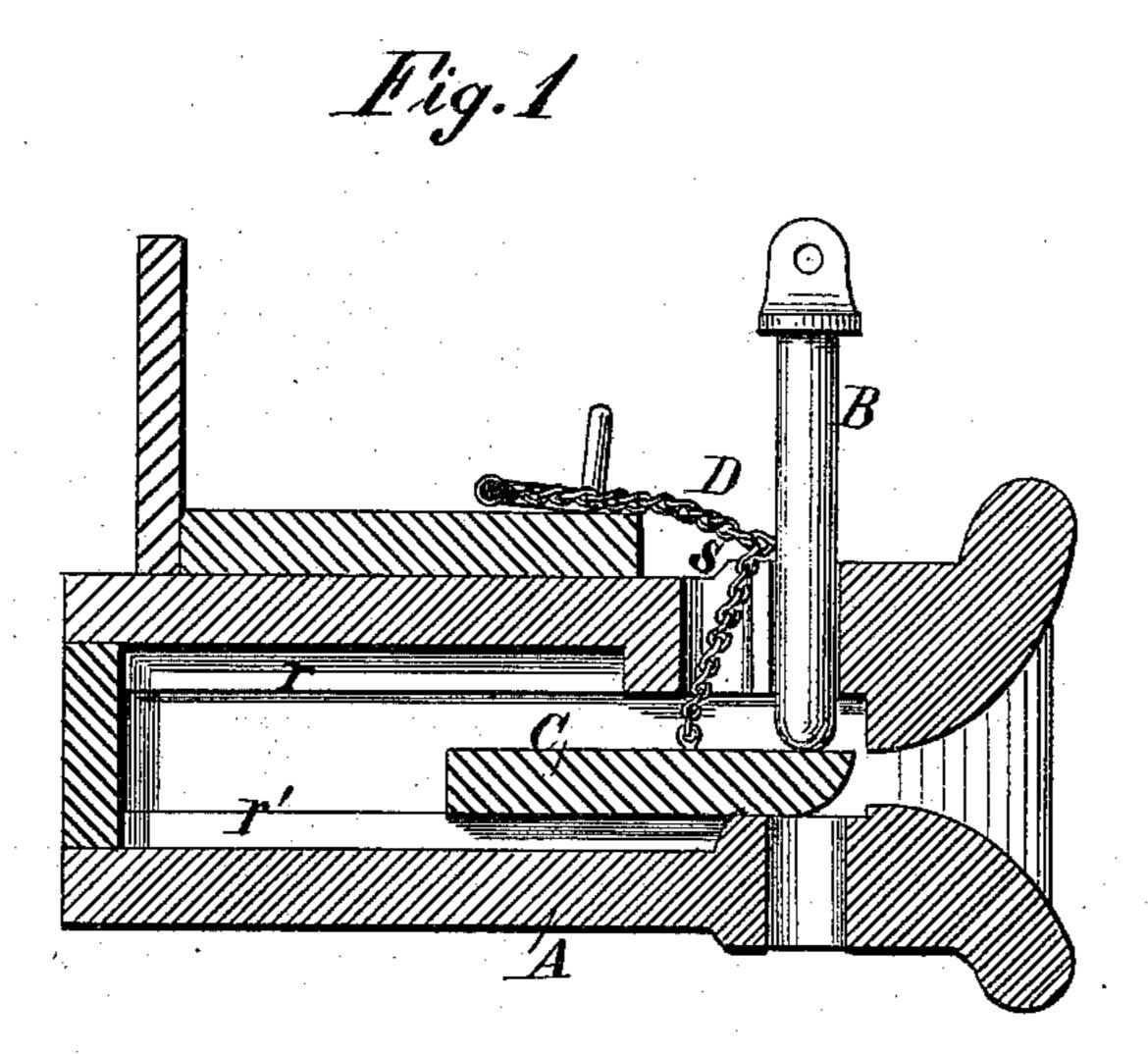
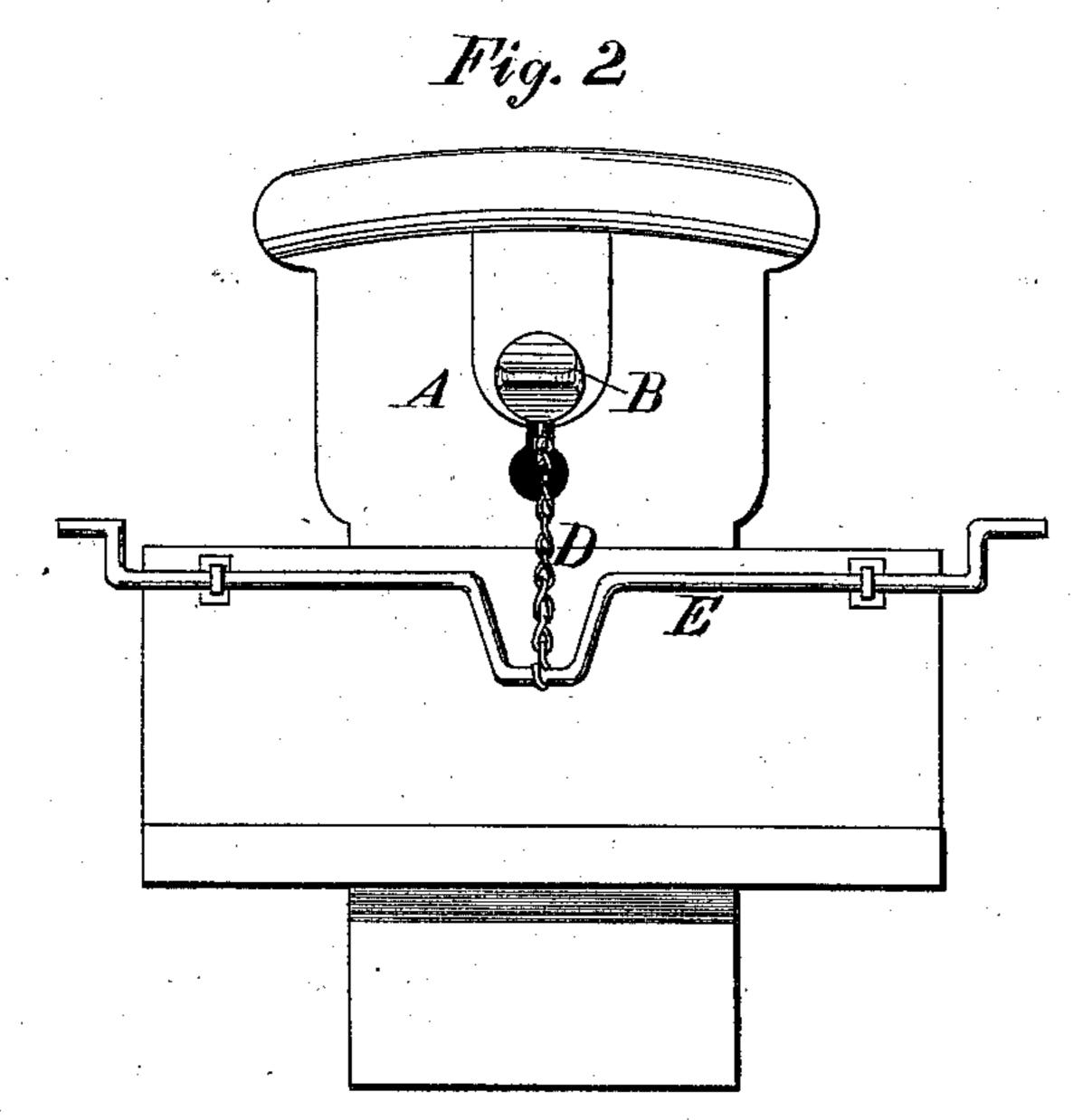
F. S. PENNYBACKER.

CAR-COUPLING.

No. 176,888.

Patented May 2, 1876.





Witnesses; Greneille Lewis MM. Grany

Inventor;
Francis S. Pennybacker
By Hill VEllsworth
His Attys

UNITED STATES PATENT OFFICE.

FRANCIS S. PENNYBACKER, OF SIOUX CITY, IOWA, ASSIGNOR OF ONE-HALF HIS RIGHT TO FRANCIS L. SMITH, JR., OF ALEXANDRIA, VIRGINIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 176,888, dated May 2, 1876; application filed January 27, 1876.

To all whom it may concern:

Be it known that I, Francis S. Penny-Backer, of Sioux City, in the county of Woodbury and State of Iowa, have invented a new and Improved Car-Coupling; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section,

and Fig. 2 a top-plan view.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention relates to that class of carcouplings in which a sliding block is employed within the draw-head to support the couplingpin until the link of an approaching car forces it backward sufficiently far to release said pin and allow it to drop through the link, and thus effect the coupling.

The invention consists in certain improved details of construction, which I will now pro-

ceed to describe.

In the drawings, A represents a draw-head, provided with a flaring mouth, and the usual longitudinal cavity, as shown. B is the coupling-pin; C. the sliding block or pin-support, connected to the pin at or near the center thereof by a short chain, D; and E, a crank-shaft connected by a continuation of the chain D to the coupling-pin, and serving as a means for uncoupling the cars without the necessity of going between the same for that purpose. The draw-head is suitably slotted, to allow of the passage of the chain, as seen at s.

By operating the crank-shaft the chain D elevates the pin, and at the same time slides the block C under the latter. The coupling is then set. As the link of the approaching car enters the draw-head it slides the block C from under the pin, and the latter is caused by a positive movement to fall within the link. The block C rests upon the inner end of the link, and holds it in a proper horizontal position.

In order that the link may have sufficient play to accommodate itself to cars of different height, the upper and lower inner faces of the cavity in the draw-head are recessed, as seen at r r'.

The setting of the coupling and the uncoupling of the cars can be accomplished from the side of the track by means of the crank shaft E without danger to the operator; and, by connecting the chain at or near the center of the pin, a positive motion is imparted to the parts, and the friction and binding of the pin are reduced to a minimum.

I claim as my invention—

The sliding stop for the pin, with the chain connected to the pin and to the crank, in such a manner that the movement of the crank may raise the pin and draw forward the block at the same time, as set forth.

F. S. PENNYBACKER.

Witnesses:

C. J. HACKETT,

B. A. GUYTON.