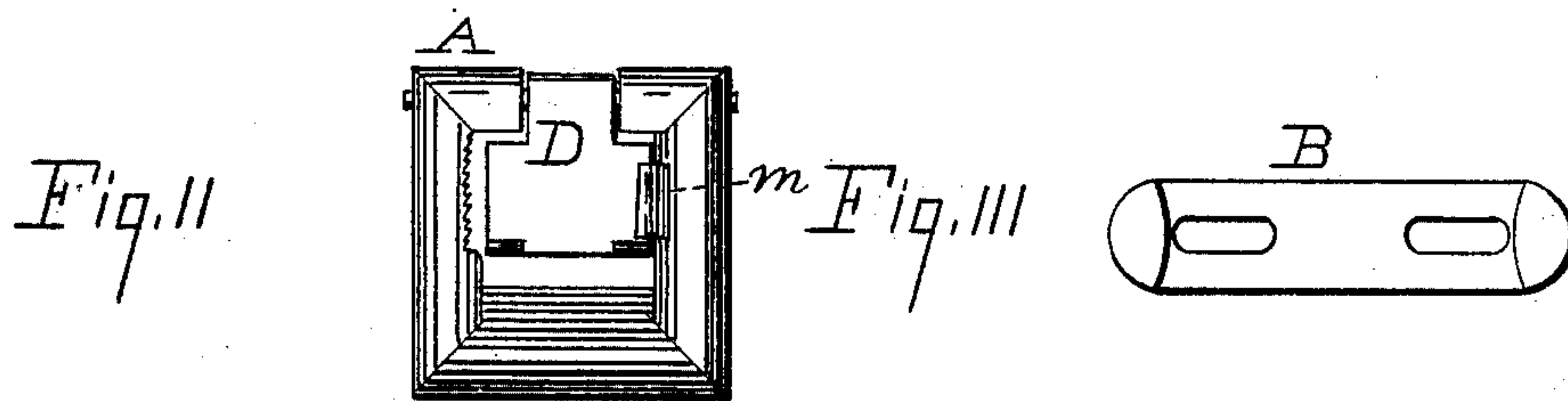
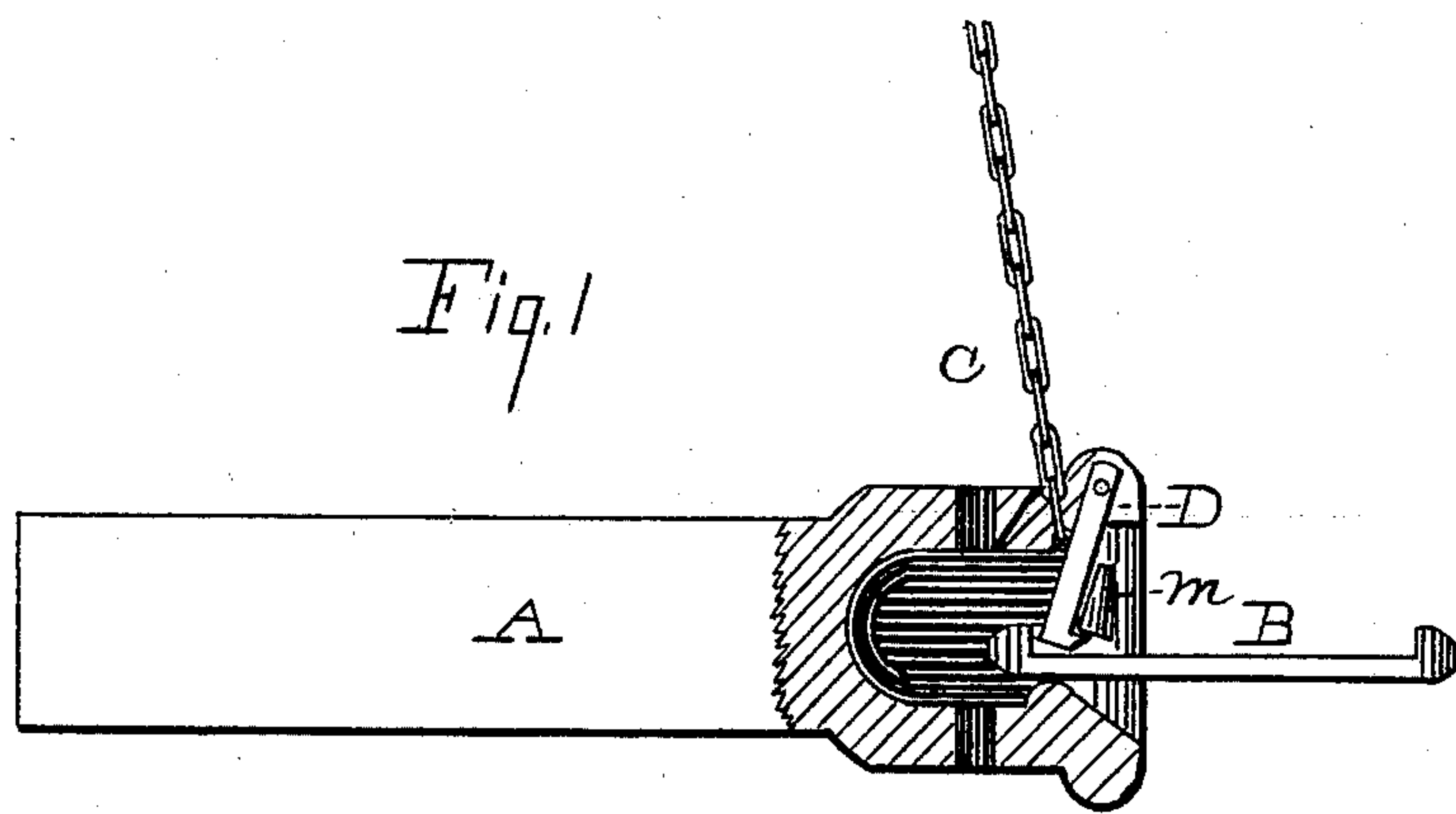


(No Model.)

E. J. BURNS.
CAR COUPLING.

No. 257,208.

Patented May 2, 1882.



WITNESSES:

Leopold Leibold
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INVENTOR

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UNITED STATES PATENT OFFICE.

EDWARD J. BURNS, OF DAYTON, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 257,208, dated May 2, 1882.

Application filed March 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BURNS, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention relates to an improved car-coupling in which a detent engages a projection of the bar, serving as a link to unite the cars, and is capable of being coupled to the ordinary draw-bar.

The mechanism is fully illustrated in the accompanying drawings, in which Figure I is a side elevation with the head of the draw-bar in section. Fig. II is an end view of the draw-bar; Fig. III, top view of the connecting-plate.

Similar letters refer to similar parts throughout the several views.

A represents a draw-bar, which is constructed in the usual manner, with the exception that it is notched above to receive the detent and to provide space for the movement of the same, and the projection *m* on both sides of the interior space. These projections serve as a bearing for the detent when draft is made on the connecting or coupling plate. The detent *D* is supported on a pin in the head of the draw-bar. It is of the form illustrated in the drawings, it being a plate of uniform thickness with two anterior projections at the bottom. When draft is made these projections pass beneath the projections *m*, and thereby relieve the pin from any strain. By the projections of the draw-bar and the de-

tent the latter is locked in position, and the pin thereby only serves to sustain the detent when there is no draft on it.

To the back of the detent is attached a chain, *C*, the upper end being attached to the car-body, and is used to raise the detent to effect the uncoupling of the cars.

The coupling-plate *B* has projections at both ends to engage the detent, and has oblong slots, that an ordinary pin may be used in coupling with the common draw-bar.

The operation has already been sufficiently explained, and it is only necessary to add I do not regard as my invention the detent without the specified projections and the connecting-plate; but these projections with those of the side projections of the draw-bar I regard as mine.

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

1. The detent having projections, as set forth, to engage the lower surface of the projection *m* of the draw-bar to relieve the pin against vertical strain substantially as set forth.

2. The projection *m* of the draw-bar to receive the longitudinal strain made by the draft of the engine, and thereby relieving the pin from strain, in combination with the coupling-bar, substantially as set forth.

EDWARD J. BURNS.

Witnesses:

B. PICKERING,
JOHN HANITCH.