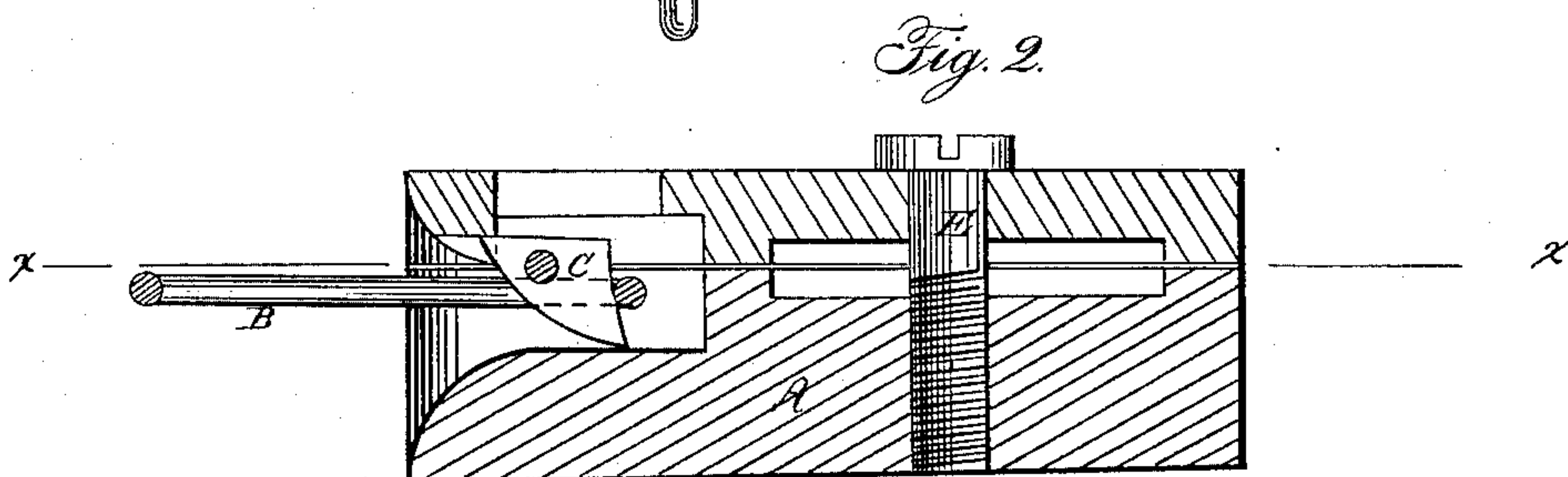
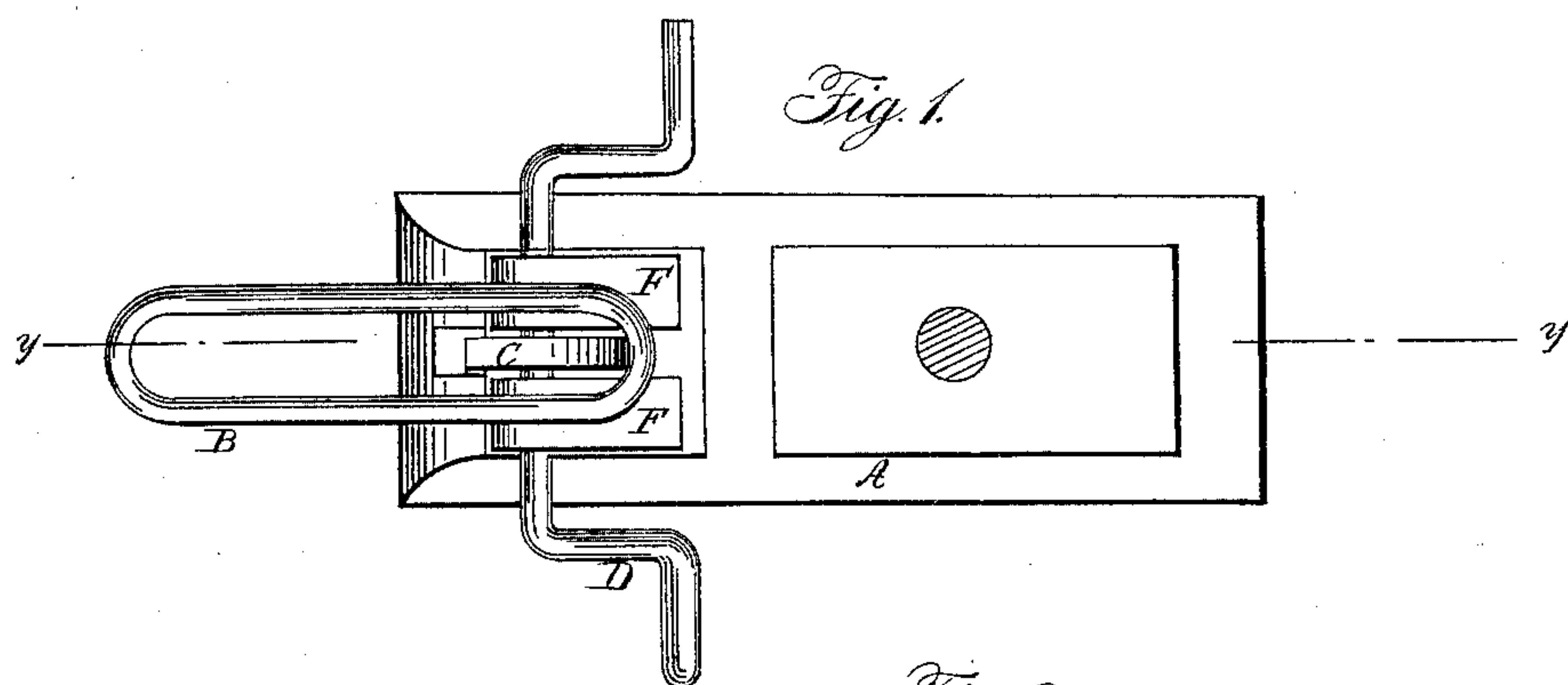


S. H. SMITH.

Car Coupling.

No. 69,266.

Patented Sept. 24, 1867.



Witnesses:

Thos. Trusck
Wm. Frewen

Inventor:

Seth H. Smith
Per Munroe
Attorneys

UNITED STATES PATENT OFFICE.

SETH H. SMITH, OF VENICE CENTRE, NEW YORK.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. **69,266**, dated September 24, 1867.

To all whom it may concern:

Be it known that I, SETH H. SMITH, of Venice Centre, in the county of Cayuga and State of New York, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention consists in constructing a car-coupling so that the coupling-link shall be self-sustaining, and so that the cars to which it is attached shall be self-coupling, as will be hereinafter described.

Figure 1 represents a horizontal section of the draw-head embracing my improvement, it being through the line *x x* of Fig. 2. The view is the top portion turned over. Fig. 2 is a vertical section of the same through the line *y y*.

Similar letters of reference indicate like parts.

A is the draw-head. B is the coupling-link. C is the coupling-lock, which takes the place of the common coupling-pin. D is a crank-shaft, to which the lock C is attached. The draw-head is made in two parts, which are fastened together by the screw E, as seen in the drawings. The crank-shaft D passes through the draw-head, with a crank upon each end. In the center is fixed the lock-piece C. This is a triangular-shaped piece, so attached to the shaft that one corner drops down to the bottom of the recess in the draw-head by its own gravity.

On the crank-shaft, and on each side of the

lock-piece C, there is a piece marked F, through the end of which the shaft passes. These pieces hang loosely upon the shaft, the inner end dropping down upon the bottom of the recess in the draw-head. These pieces F have considerable weight, and their function is to hold down the engaged end of the link, so that the link will maintain a horizontal position, and the disengaged end be ready at all times to enter the draw-head of the car to which it is to be coupled without being held up or guided.

Most of the accidents which occur in the coupling of cars in the old way arises from the fact that the link has to be held up and guided into the draw-head of the approaching car, which necessarily places the operator in a very dangerous position. By my coupling this difficulty is entirely overcome. The link passes under the lock-piece C by striking its inclined side and raising it, when the lock-piece drops down within the link, and the cars are securely coupled.

The cars are uncoupled by raising the lock piece by the crank from either side of the car, where the operator is entirely out of danger.

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

The lock-piece C, the weight-pieces F F, and the crank-shaft D, arranged and combined substantially as described, in combination with the link B and the draw-head of a railroad-car, for the purposes set forth.

SETH H. SMITH.

Witnesses:

JAMES B. HOFF,
LEONARD H. CARR.