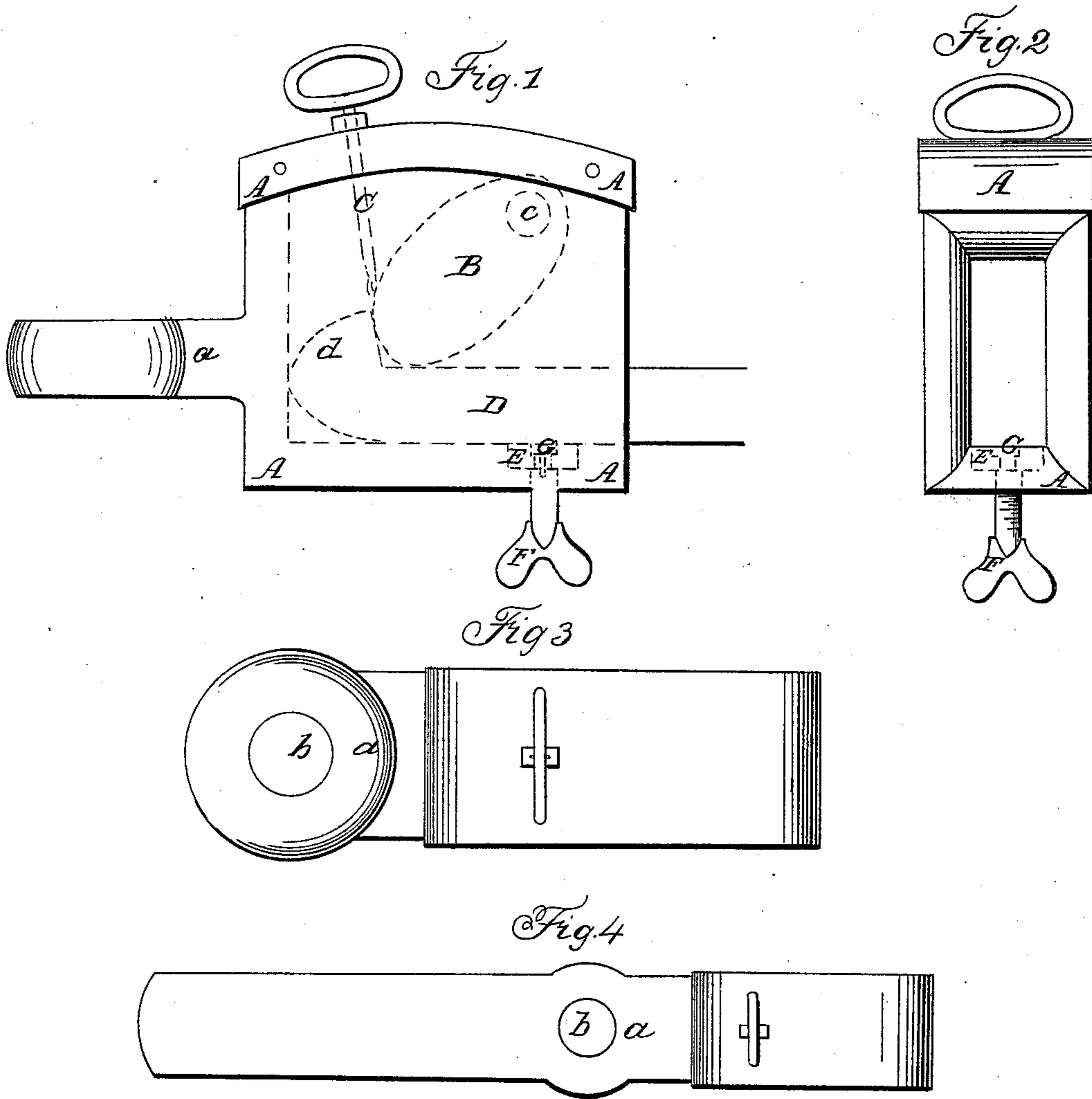


COLLYER & PATTERSON.

Car Coupling.

No. 29,142.

Patented July 17, 1860.



Witnesses;
Williams Agle
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Geo Collyer
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UNITED STATES PATENT OFFICE.

GEORGE COLLYER AND A. HAMILTON PATTERSON, OF PHILADELPHIA, PENNSYLVANIA.

COUPLING FOR CITY RAILROAD-CARS.

Specification of Letters Patent No. 29,142, dated July 17, 1860.

To all whom it may concern:

Be it known that we, GEORGE COLLYER and A. HAMILTON PATTERSON, both of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Coupling for City Passenger Railway-Cars and for Carriages; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view: showing the inside parts of the box in dotted lines and showing the positions of the several parts when the operation of coupling is effected; Fig. 2 is a front view; Fig. 3 is a top view; Fig. 4 is a top view, in which the projection (*a*) is lengthened.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and mode of operation.

The drawings are on a scale of about two-thirds of an inch to an inch in the working coupling.

A is a cast-iron box, the front of which is left open to receive the end of the pole of the car or carriage; it is cast with the top open so that the uncoupling rod (C) may be connected with the tumbler B in arranging these parts in the box: it is covered with a lid of sheet-iron, through a small hole in which, the uncoupling rod projects. The lid protects the inside of the box from dirt and moisture. The box has a projection, *a*, with an eye, *b*, through which the coupling is firmly fastened to the car or carriage by means of a bolt upon which the coupling freely turns.

B is a tumbler or latch of cast-iron, working loosely on the strong bolt, *c*, which passes through holes in the sides of the box. It is rounded at the end where it comes in contact with the beveled face of the enlargement (*d*) of the pole, to facilitate the operation of uncoupling.

C is the uncoupling rod; it is connected to the tumbler by a pivot or hook.

D is a part of the pole of a car or carriage having at the end an enlargement, *d*, the face of which forms a bevel angle with the pole, as shown in the drawings.

E, is an adjustable rest; it may be raised or lowered by the thumb-screw, F, for the purpose of keeping the pole at any desired elevation. F screws through the bottom of the box and is fastened to the rest, E, by another small screw, G, working into the end of F.

To give the coupling increased support, when an unusually heavy pole is intended to be used the projection, *a*, may be lengthened, as shown in Fig. 4, so that its end may slide upon a flat bar of iron secured to the under side of the frame of the car.

The projection, *a*, may be made separately of wrought iron, with arms to clasp the sides of the box to which said arms may be fastened in any substantial manner.

The operation of coupling is effected, by pressing the pole into the box. The pole is uncoupled and may be removed without obstruction, when the tumbler is drawn up above the enlargement, *d*.

What we claim and desire to secure by Letters Patent, is

1. Constructing the enlargement (*d*) of the pole, with a beveled face in the manner and for the purpose substantially as set forth.

2. Giving the tumbler, B, a rounded form at the end in the manner and for the purpose substantially as set forth.

3. The extension (*a*) having an eye (*b*) for joining the box to the car.

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Witnesses:

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