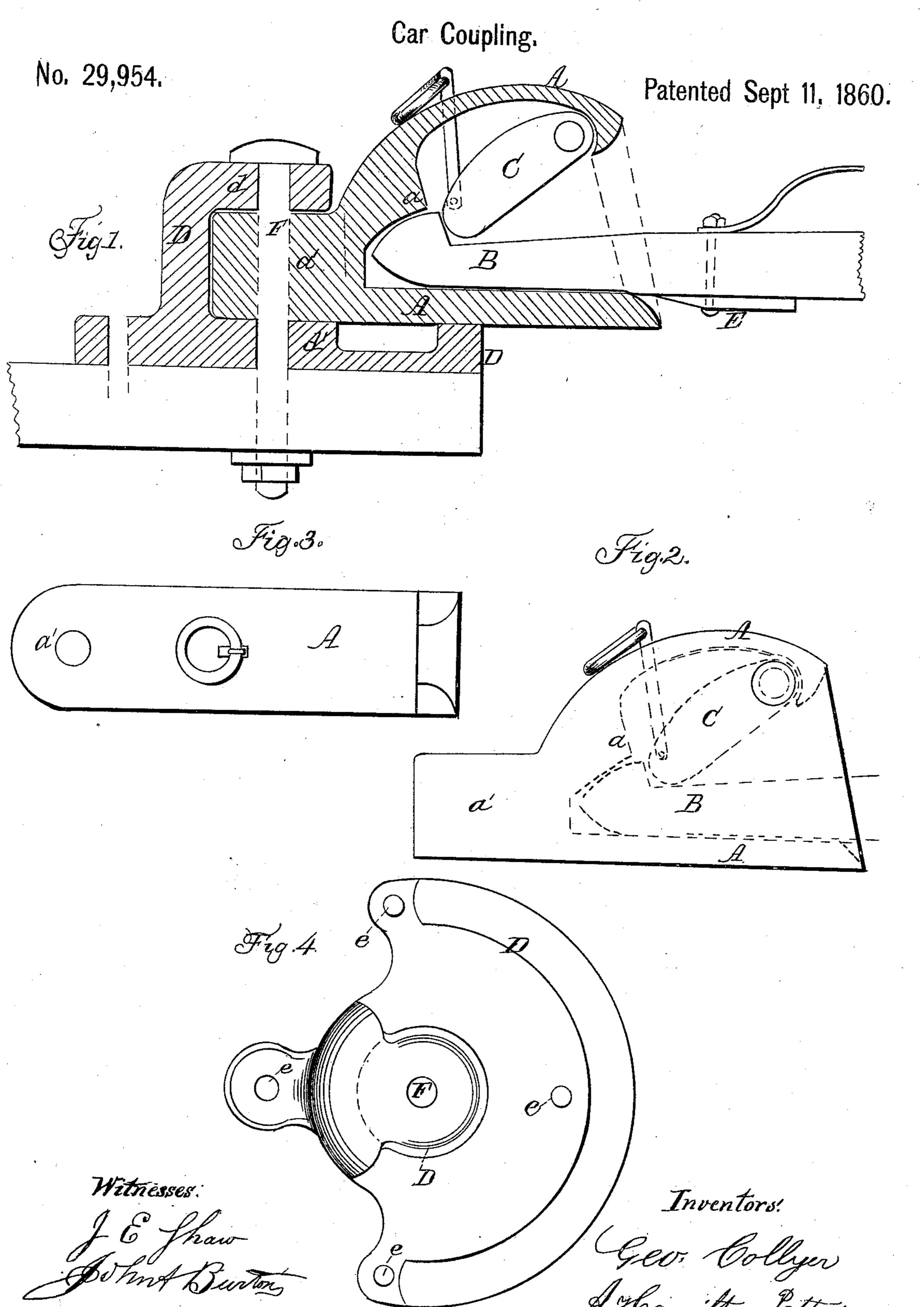
COLLYER & PATTERSON.



UNITED STATES PATENT OFFICE.

GEO. COLLYER, OF APPOQUINIMINK HUNDRED, DELAWARE, AND A. H. PATTERSON, OF PHILADELPHIA, PENNSYLVANIA.

COUPLING FOR CITY RAILWAYS.

Specification of Letters Patent No. 29,954, dated September 11, 1860.

To all whom it may concern:

Be it known that we, George Collyer, of Appoquinimink Hundred, Newcastle county, State of Delaware, and A. Hamilton Patterson, of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in the City-Railway Car-Coupling for which Letters Patent were issued to us July 19, 1860; 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 longitudinal vertical section of the box, with all its parts, and the attachment; Fig. 2 a similar view of the box detached; Fig. 3 a top view of the box, and Fig. 4 a similar view of the attachment.

The improvements consist 1st, in the employment of the shoulder (a); 2d, in the attachment (D), or device for joining the box to the car.

In Fig. 1, (A) represents the box; (B) a part of the car pole; (C) the tumbler with the rod by which it is raised; (D) the attachment, a top view of which is seen in Fig. 4; (E) a beveled slide adjusted by a set screw which works through the pole and a longitudinal slot in the slide, and used if required to elevate the pole.

The iron box (A) is cast with the shoulder (a), which is employed for a double pursone. When the pole is coupled, the upper surface of its inserted end bears against the shoulder (a), which prevents the end from

striking against the back of the box and thereby saves the end from being worn off and from acquiring too much play. By confining the inserted end of the pole the shoulder (a) assists in supporting the pole at the required elevation and at the same time does not interfere with the free upward motion of the outer end of the pole.

The attachment (D) is of cast-iron so made that the overhanging part (d) and the bed plate or bottom part (d') shall form a socket for the projection (a') of the box; it is secured firmly by means of bolts (e) Fig. 50 4 to the top of the platform of the car at the edge of the platform, which is rounded so as to conform to the shape of the bedplate. A strong bolt (F) passing through perforations in the part (d), the projection 55 (a'), the bed-plate (d') and the platform of the car, is secured by a nut, or key, or equivalent device, applied to its projecting end; it assists in securing the attachment to the platform and forms a pivot, upon which 60 the box turns horizontally.

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

1. The shoulder (a) constructed and arranged in the manner and for the purpose 65 substantially as herein set forth.

2. The attachment (D), for joining the box to the car, constructed and arranged substantially as herein set forth.

GEO. COLLYER. A. HAMILTON PATTERSON.

Witnesses:

J. E. Shaw, John A. Burton.