

G. EDMONDS.  
Car-Couplings.

No. 143,680.

Patented Oct. 14, 1873.

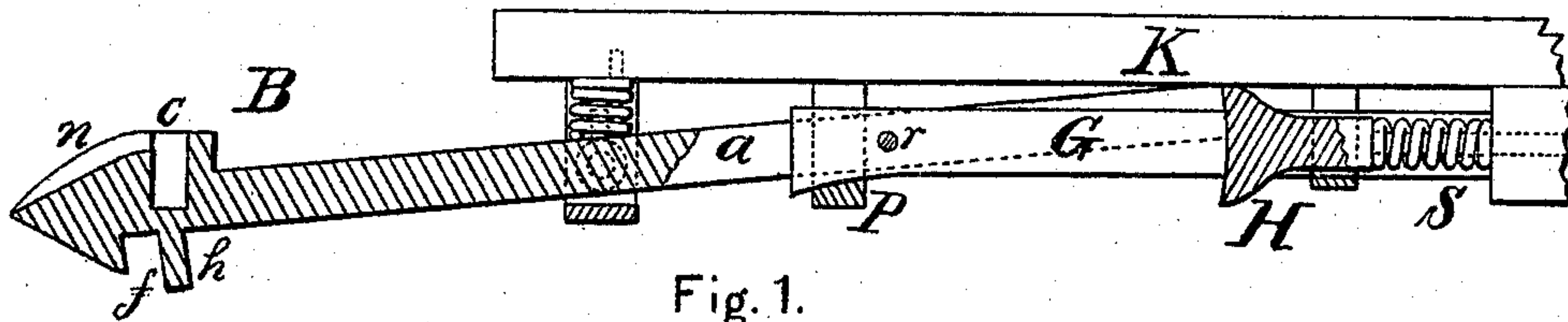


Fig. 1.

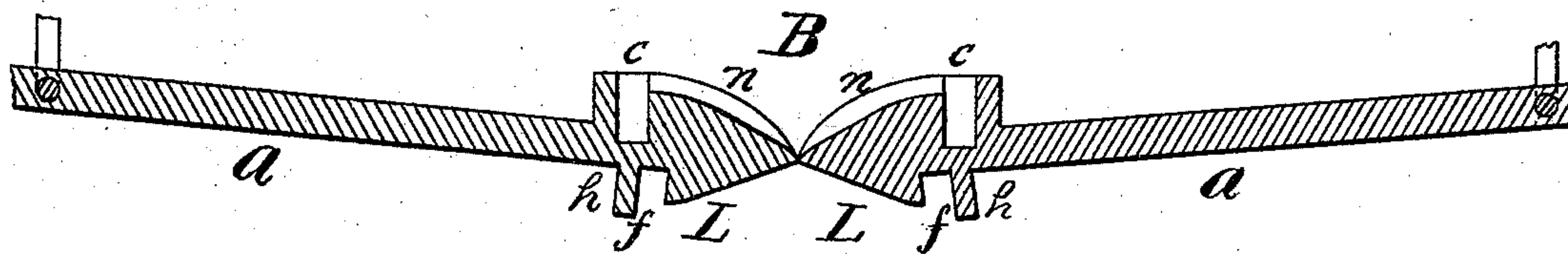


Fig. 2.

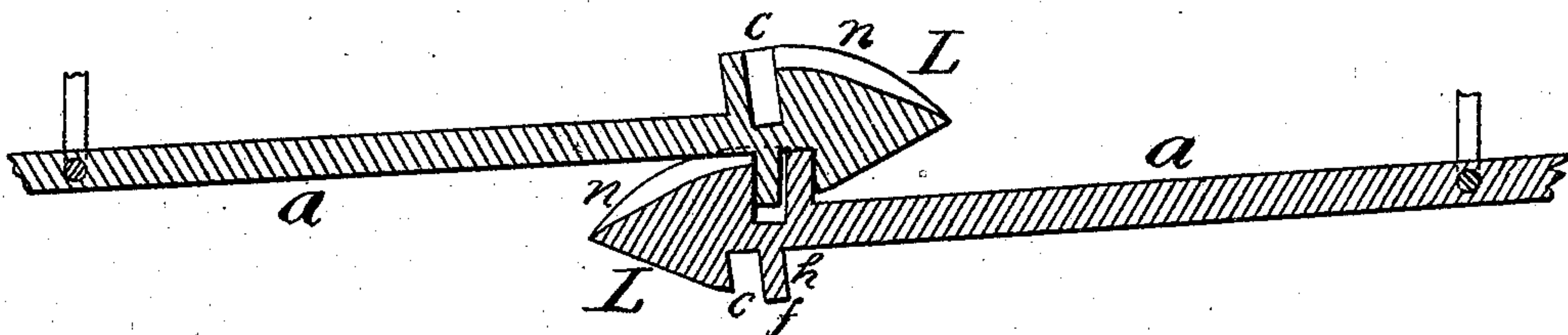


Fig. 3.

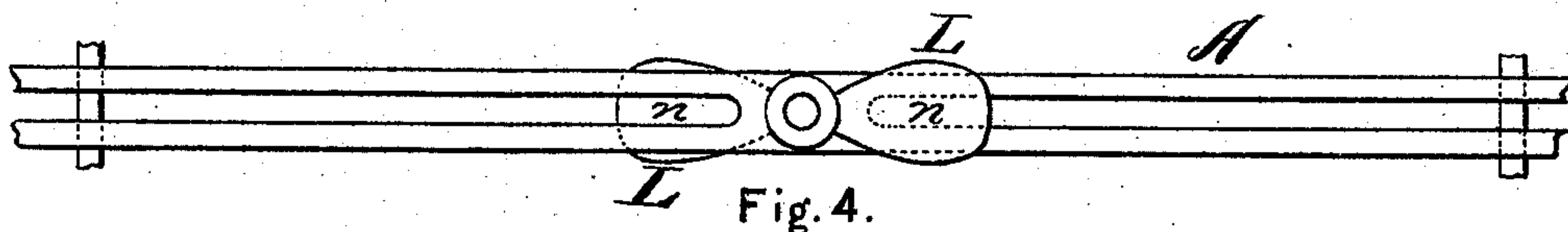


Fig. 4.

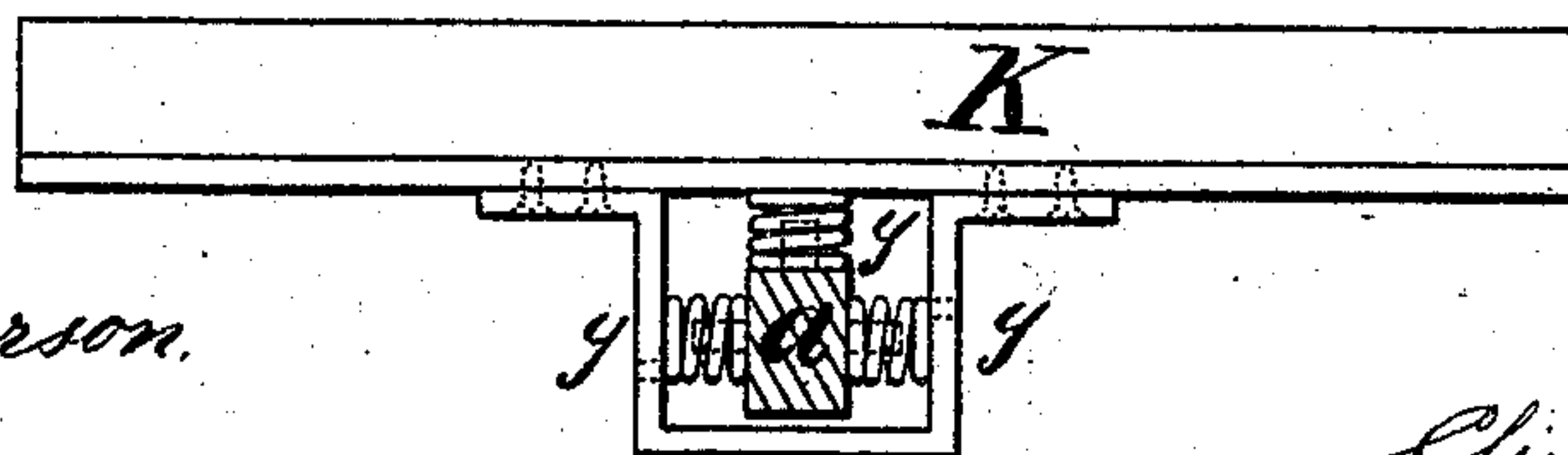


Fig. 5.

WITNESSES

Villette Anderson.

Philip Heasi

INVENTOR.

George Edmonds,  
Clerk of the Court  
atty



# UNITED STATES PATENT OFFICE

GEORGE EDMONDS, OF NEW ORLEANS, LOUISIANA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 143,680, dated October 14, 1873; application filed June 30, 1873.

*To all whom it may concern:*

Be it known that I, GEORGE EDMONDS, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and valuable Improvement in Car-Couplings; and I 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, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a vertical section of my car-coupling. Fig. 2 is a vertical section of the couplers in the act of coupling. Fig. 3 is a vertical section of the links coupled. Fig. 4 is a top view of my coupling. Fig. 5 is a transverse section of same.

My invention has relation to car-couplings; and consists in the novel construction and arrangement of the combined coupling and draw bar hereinafter described, together with novel means operating the same in conjunction with the draw-head, so as to dispense with the bumper in common use.

A of the drawings represents a slotted beam, in which my bar is pivoted. This beam is attached to a railway-car, or other carriage which it is desirable to connect or disconnect with others of a similar character, usually under the platform thereof. The letter B of the drawings represents my combined draw and coupling bar. It consists of the main bar *a*, upon the front end of which is formed or attached a head of the following description—that is to say, the letter *c* represents a recess for the coupling-pin; *f*, the jaw; and *h*, the circular rear part of the head, adapted to receive the jaw of a duplicate bar. This rear portion of the head may be grooved or channeled for the reception of the jaw, if desirable; but for ordinary use I find that a circular form without a groove answers all the purposes required. The latter *n* represents the beveled and grooved upper surface of my bar-head. The groove extends from the extreme front of the head to the recess for the coupling-pin, and forms a curved and concave guideway for a duplicate head, the object being to guide the coupling-pin of a duplicate bar with unerring certainty to the recess *c*. It will be observed that the lower side of this head is beveled upward, and that the front part of the recess *c* is cut away. Figs. 2 and 3 illustrate these

points with sufficient clearness. Each car or carriage intended for connection with another is provided with one of these bars, and they may be attached thereto by any proper means. I find it desirable, however, to arrange springs *y* both above them and at their sides within a pendent holding-iron, (shown on Fig. 5;) but my device is susceptible of use without either of said springs. The letter G represents the draw-head of a railway-car, the rear end of which is formed with a stop, H, having a concave head, as shown, to the rear of which is attached the coiled spring S. The front end of this draw-bar, together with the bar *a*, passes through and rests in a staple, P, which is connected with the platform of the car, marked K, in the manner shown on Fig. 1. The bar *a* and the draw-bar are pivoted together by a suitable pin, as shown at *r*, and the rear end of said bar abuts against and moves up and down in the concave head of the stop H. By the means last described, provision is made for relieving the coupling-bar from too great rigidity, and from danger of breakage while the coupling-process is being carried on, and also for dispensing with the bumper in common use.

The cars are disconnected by raising the top coupling-bar, and thereby releasing the coupling-pin from its recess. For this purpose I advise that a cord be attached to each bar, with its upper end secured to the platform or the car.

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

1. A coupling-bar having the head L, with the recess *c*, pin *f*, jaw *h*, and grooved and beveled upper surface *n*, substantially as and for the purpose specified.

2. The arrangement of the bar *a*, pivoted and supported in a stirrup having the vertical spring, as shown, and connected with the draw-head by the stirrup P and pin *r*, said draw-head having the stop H, against which the rear end of the bar *a* oscillates, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE EDMONDS.

Witnesses:

PHIL. C. MASI,  
JNO. D. PATTEN.