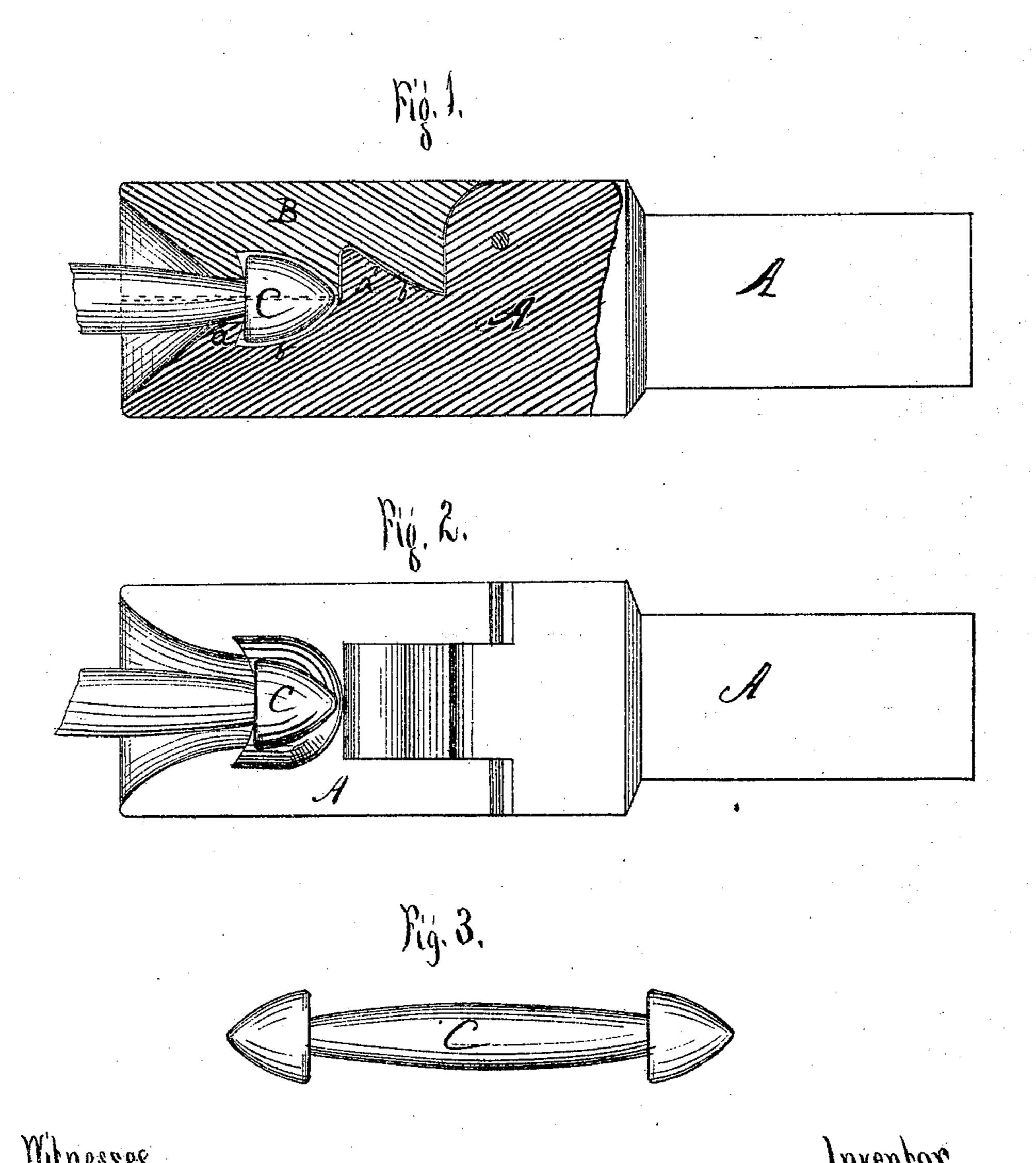
## SEABRED DODGE PRATT.

Improvement in Railway Car Coupling.

No. 119,475.

Patented Oct. 3, 1371.



AM PHOTO-LITHOGRAPHIC CO. N.Y. ( OSBORNES PROCESS.)

## UNITED STATES PATENT OFFICE.

SEABRED DODGE PRATT, OF PENN YAN, NEW YORK.

## IMPROVEMENT IN RAILWAY-CAR COUPLINGS.

Specification forming part of Letters Patent No. 119,475, dated October 3, 1871.

To all whom it may concern:

Be it known that I, Seabred Dodge Pratt, of Penn Yan, county of Yates, in the State of New York, have invented certain Improvements in Couplers for Railroad Cars, of which the following is a specification:

In the drawing, Figure 1 represents a longitudinal vertical section of the draw-head; Fig. 2, a top view with the lid off; and Fig. 3 is the link.

The contrivance which I wish to secure by Letters Patent consists of a square or oblong box, A, terminating in a smaller oblong or square projection, with a hole in the rear end and side for fastening the cars in the usual way. The box has a lid, B, upon the upper side, arranged with a strong hinge near the back part of the upper surface of the box, so as to prevent it from yielding to the concussion of the cars. The rear of the hinge is so arranged and acts in such a manner as to prevent the lid from rising above an angle of about forty-five degrees. The face of the box is square or oblong, and has a hemispherical or hemi-spheroidal opening, decreasing in size as it recedes, and terminating in an opening for the reception of the pin used in coupling. The face is used as a buffer and may have a flaring oval projection on the outside, giving it an appearance similar to the buffer in common use. In the rear of this opening in the face, adjoining the inner edge of the opening both in the upper and lower sides of the box, there is a cavity, to fit and receive the head or button of the pin used in the coupling, of such a size and form as to allow an easy movement of the head of the pin in all proper positions of the cars. Immediately in the rear of this cavity for receiving the head of the pin there is, on the under part of the box, an uprising shoulder or projection, a', fitting in a cavity in the lid of the box for the purpose of preventing the receding of the pin and supporting and strengthening the lid of the box. In the rear of this shoulder or projection there is another shoulder or projection rising from the body of the box to strengthen and support the hinge, which projection is the central part of the hinge and made to fit accordingly in the lid above.

The pin consists of a bar of iron, steel, or other metal, terminated at each end by a button varying slightly from the conical the better to adapt it to entering the box. The inner side of the button is so slanted as to make less than a right angle with the bar of the pin, and may be left so, or afterward made concave, but in either case it must be properly fitted to the cavity in the box. The pin is of such a length as not to receive the force of the concussion when the box is performing the duty of buffer. The object of this construction is to make a secure connection and also to support the pin in the act of self-coupling. The cavity for the reception of the pin is so arranged that when the cars are not in proper position they will uncouple. If the car is elevated above its proper position the pin will raise the lid of the box and thus uncouple; if the car is in an undue lateral angle the cavity is of such formation that the pin will draw out of the side of the coupler and thus uncouple; and if the car turns over the lid of the box will drop down and make a detachment. In the top of the lid of the box, extending through to the bottom of the box, is a hole for the purpose of coupling with a link and pin, as in the ordinary way. The lid of the box may be raised by lever and cam in the usual way, or with a chain or any other attachment.

The object of the invention is to prevent the numerous accidents which occur in the coupling and uncoupling of cars, and also to prevent one car from drawing another or a whole train into destruction in cases of collision, or where one car is thrown or forced from its proper position on the track.

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

The draw-head A, having projections a a' and cavities b b, and hinged lid B, having corresponding cavities and projections, in combination with link C, as described, and for the purpose set forth. SEABRED DODGE PRATT.

Witnesses:
John L. Lewis,
Charles Ketchum.