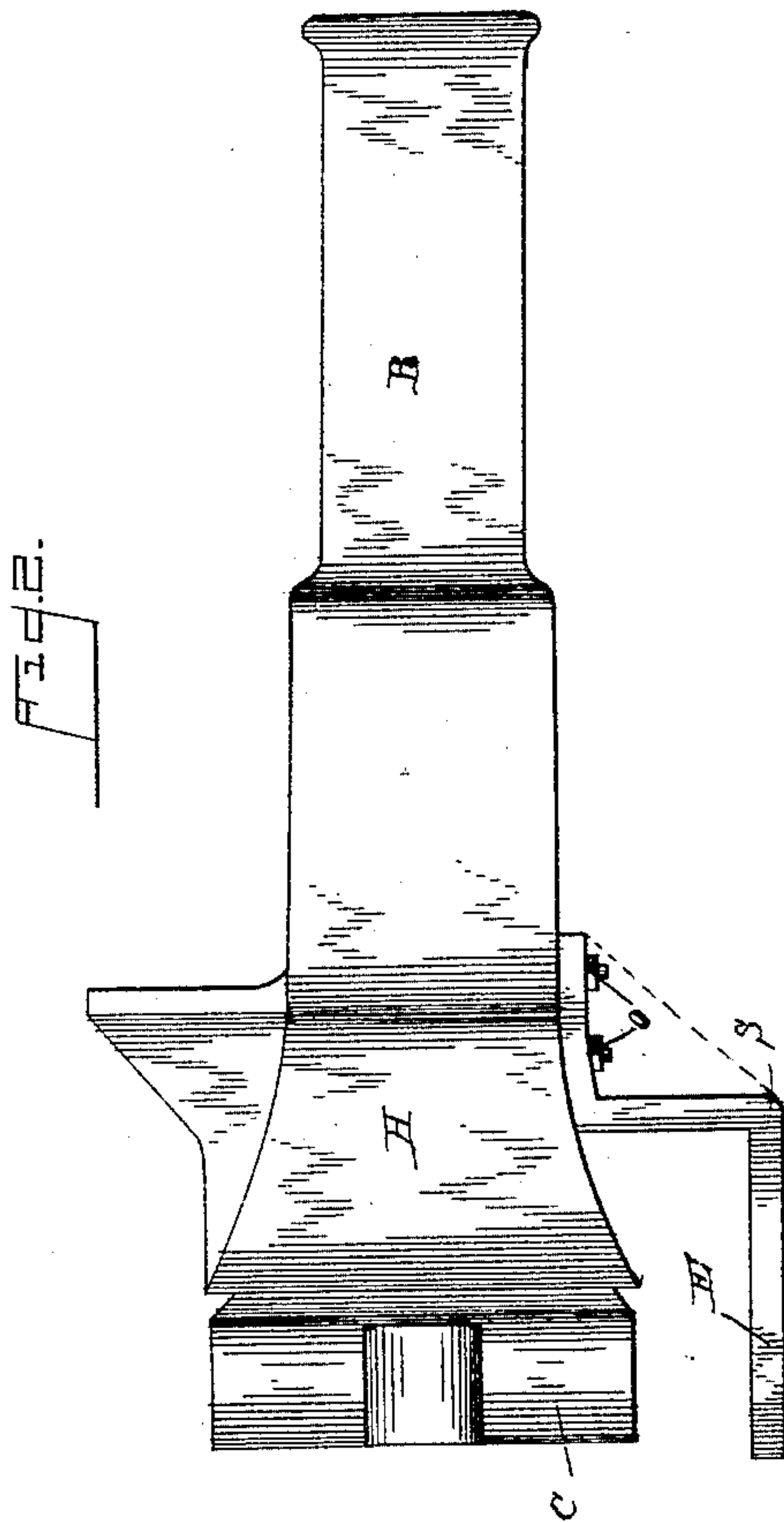
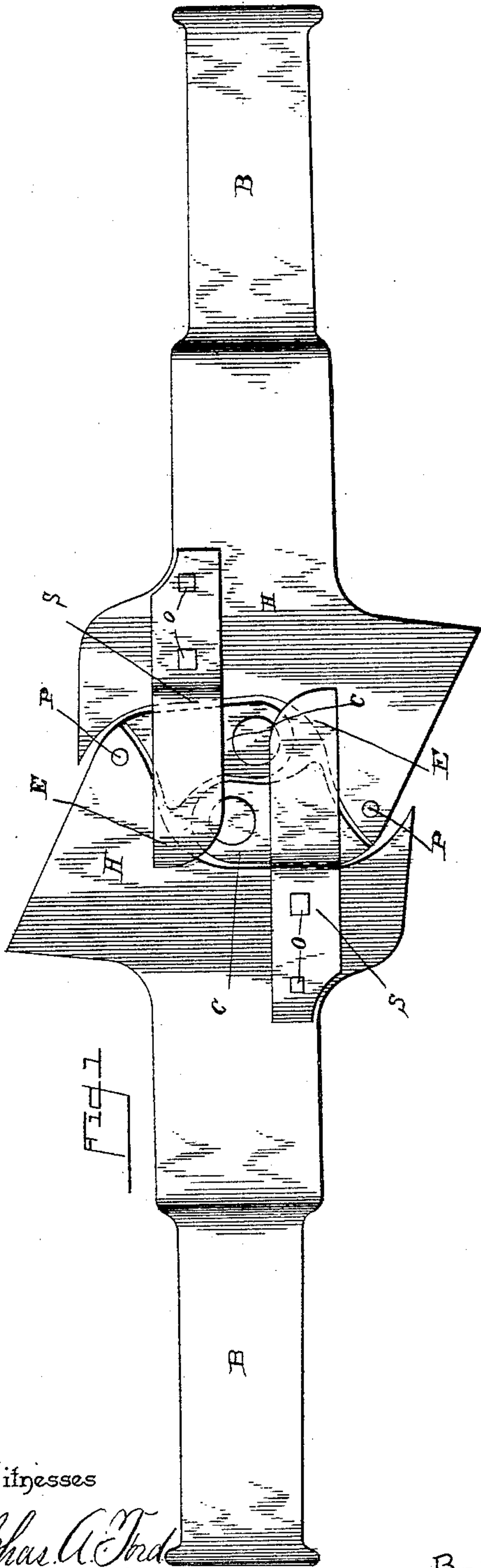


(No Model.)

J. L. WELCH.  
CAR COUPLING ATTACHMENT.

No. 459,187.

Patented Sept. 8, 1891.



Witnesses

Chas. A. Ford

W. L. Collamer.

Inventor

*Jas. L. Welch.*

By his Attorneys,

Chas. Snow & Co.

# UNITED STATES PATENT OFFICE.

JAMES LAWRENCE WELCH, OF BIRMINGHAM, ALABAMA, ASSIGNOR OF TWO-THIRDS TO J. O. WRIGHT AND C. B. GIFFORD, OF SAME PLACE.

## CAR-COUPLING ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 459,187, dated September 8, 1891.

Application filed April 15, 1891. Serial No. 389,057. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES LAWRENCE WELCH, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented a new and useful Car-Coupling Attachment, of which the following is a specification.

This invention relates to car-couplings of that class known as "twin hooks," and is more especially an attachment thereto to prevent the draw-head from falling onto the track in case it should be pulled out, and thereby derailing the following cars.

The object of the invention is to provide a device applicable to any of the well-known forms of car-couplings of this class; to which end it consists of the details of construction hereinafter more fully described and claimed, and one form of which is illustrated in the drawings, wherein—

Figure 1 is a bottom plan view of two draw-heads coupled and provided with my attachment. Fig. 2 is a side elevation of one draw-head and draw-bar with my attachment.

Referring to the said drawings, the letter H designates the draw-head, and B the draw-bar, which in the present case is shown integrally connected with the head.

C is a catch, which is here shown as pivotally mounted on a bolt or pin P through the draw-head, and the catches on two draw-heads are adapted to interlock when the cars are coupled, as shown in Fig. 1 and as will be clearly understood. I desire to here state that the particular construction of the draw-bar and draw-head is not material to the object of the present invention, as any form thereof may be used which is adapted to my device hereinafter described.

Coming now to the said invention, the letter S designates a metallic strap whose rear end is connected to the draw-head by bolts O O, whose body is bent downwardly, as shown, and whose front end E passes above or beneath the interlocking catches and preferably at one side of the central line of the cars, in order that it will not interfere with the strap on the other car. Although I have described this strap as secured to the draw-head, it may be integral therewith; or it may be secured to any other suitable portion of the coupling mechanism or even to the car itself, it being only absolutely necessary that its front end E shall stand beneath the in-

terlocking catches or faces of the draw-heads and nearer their lower faces than their vertical height. The so-called "strap" may be of any suitable material, such as malleable iron, or it may be a cast-iron bracket, in which case it could have a strengthening-web, as shown in dotted lines in Fig. 2.

It is well understood that with the pin-and-link couplings now in use the breaking most often occurs in the pin or link, or when the draw-bar pulls out it hangs by the link; but with the hook or catch form of coupling when one draw-bar pulls out or the draw-head becomes separated from the bar, if they be pivotally connected, it is well known that the draw-head falls upon the track and often derails or at least breaks portions of the following cars. This is due to the fact that the hooks or catches are open at the bottom and top, and there is no support for the broken draw-head when it pulls out. With my improved strap this is impossible, as the broken draw-head falls thereon before it disengages the perfect draw-head, and cannot therefore become disconnected, so that it will fall. Obviously the strap might extend transversely across beneath the mouth of the draw-head or could be arranged in a variety of ways other than that shown, all of which I claim the right to make without departing from the spirit of my invention. This strap can be secured to couplings now in use and will operate successfully in connection therewith, or it may be applied when the coupling is first made.

I claim as the salient features of my invention—

In a car-coupling, the combination, with the draw-head and at the mouth thereof a hook or catch of the "twin" type, of a strap secured at its rear end to a suitable support and standing parallel with the draw-head, with its front end standing beneath said mouth out of the central line of the car and nearer the bottom of the mouth than the vertical height of the head, as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES LAWRENCE WELCH.

Witnesses:

E. F. STALLENWERCK,  
B. M. STARKS.