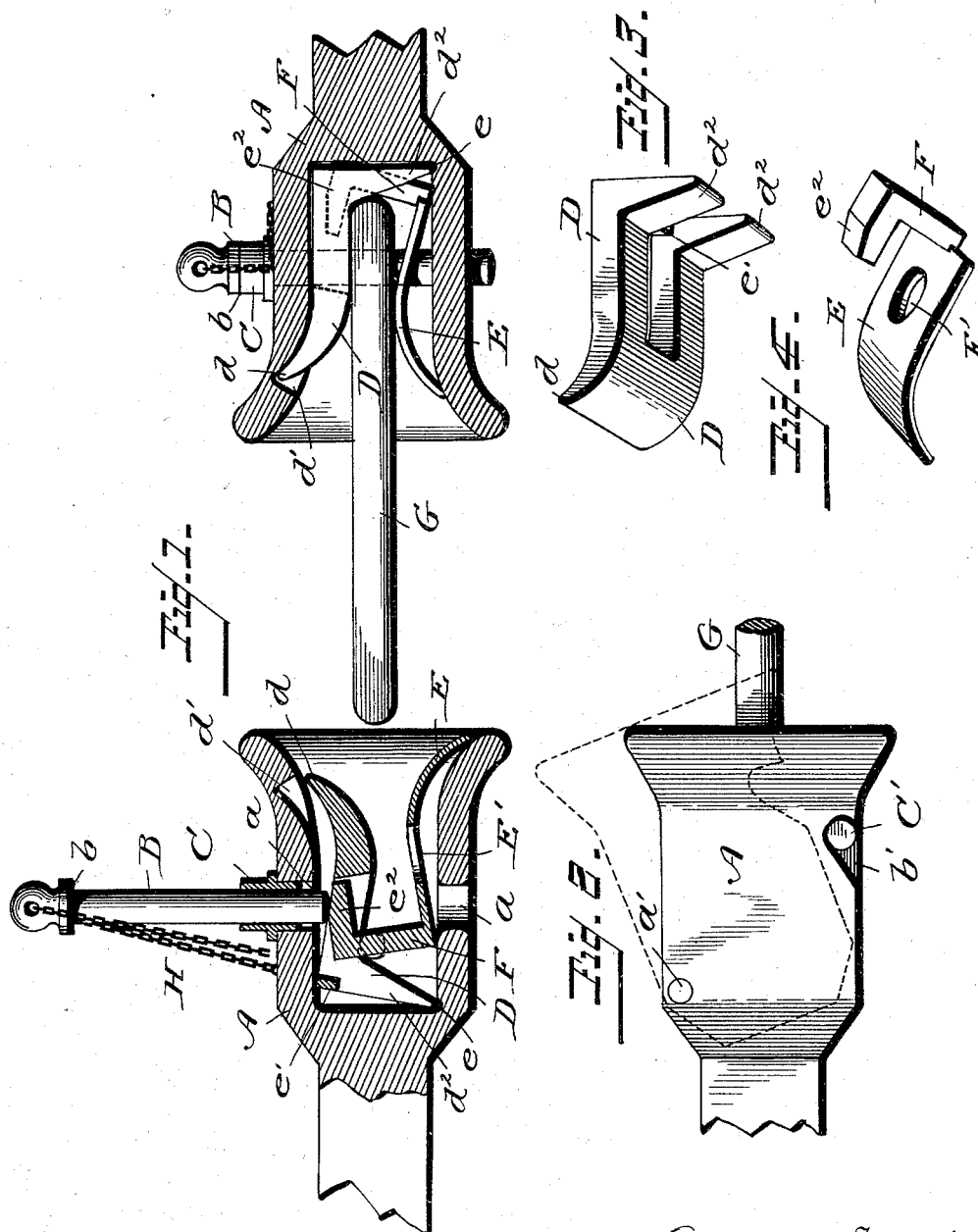


(No Model.)

V. WALLACE.
CAR COUPLING.

No. 493,902.

Patented Mar. 21, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 493,902, dated March 21, 1893.

Application filed January 16, 1893. Serial No. 458,522. (No model.)

To all whom it may concern:

Be it known that I, VICTOR WALLACE, a citizen of the United States, residing at Oneida, in the county of Madison and State of New York, have invented certain new and useful Improvements in Car-Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in car couplings of that class known as automatic, and it has for its objects among others to provide a simple and cheap construction which will keep the link horizontal and which will be positive and accurate in its operation, not liable to get out of order and requiring but little change in the construction of the drawhead. I provide a spring to support the link in a horizontal position and this spring or spring plate carries a lug which serves to hold the coupling pin up until it is struck by the link on the engaging or opposing car. A loosely mounted plate is arranged within the drawhead which acts in conjunction with the spring plate and its lug to hold the link in place when once engaged with the pin. One side of the drawhead is removably or pivotally supported to permit access to the operative parts when necessary.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention in this instance resides in the peculiar combinations, and the construction, arrangement and adaptation of parts all as more fully hereinafter described, shown in the drawings and then particularly pointed out in the claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which

Figure 1 is a vertical longitudinal section through two couplings constructed in accord-

ance with my invention. Fig. 2 is a side elevation of a drawhead. Fig. 3 is a perspective view of the loosely mounted plate removed. Fig. 4 is a perspective view of the spring plate and its lug removed.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the drawhead recessed as shown and provided with the vertical hole *a* for the coupling pin B which may be of any well known construction provided with a shoulder *b*, and C is a collar fitted within the upper hole in the drawhead and through which the pin passes as seen in Fig. 1 at the left. This collar extends above the drawhead as shown in Fig. 1 so as to give an extended bearing for the pin to better keep it in its vertical position. One side A' of the drawhead is made movable so as to permit access to the parts within the drawhead and as shown in Fig. 2 this side is pivoted as at *a'* near one upper corner so that it may be moved on the pivot as indicated by dotted lines in said Fig. 2 and near its lower front corner it is provided with a notch *b'* which is designed to engage a pin or stop C' as shown in Fig. 2 to limit its downward movement and the pin binds just sufficiently in this notch to hold the movable side against displacement under ordinary conditions.

D is a plate loosely mounted within the drawhead and provided with an upturned curved lip *d* which is designed to engage in a notch *d'* within the drawhead upon the upper side thereof, and at its rear end with prongs or points *d''* which are designed to rest in a recess or groove *e* in the bottom rear side or edge of the recess of the drawhead as seen in Fig. 1, so as to turn therein as upon a pivot; a web or rib *e'* connects the prongs or points at their upper end as seen in Figs. 1 and 3.

E is the spring plate curved upwardly as seen in Figs. 1 and 4 and this plate is provided with a hole E' for the passage of the coupling pin and with a lug F at its rear end which extends at a right angle to the length of the plate and at its upper end is formed into a hook or lug *e''* at right angles thereto as seen in Figs. 1 and 4.

Normally the parts are in the position in which they are shown at the left of Fig. 1 with the plate D tipped forward and the spring plate E inclined to the rear the lower end of the coupling pin being supported upon the lug e^2 of the spring plate as seen; when the approaching car comes against the drawhead the link G strikes the vertical portion of the lug of the spring plate and moves it from the position in which it is shown at the left of Fig. 1 into the position in which it is shown at the right of said figure; as the spring plate is moved backward it strikes the loosely mounted plate D and throws the same into the position in which it is shown at the right of Fig. 1; the parts are held in this position and the spring plate serves to keep the link horizontal; as soon as the plate E is moved rearward the lug thereof is moved from under the end of the coupling pin which latter falls through the hole in the spring plate and locks the parts.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

A chain or cord H may be employed to prevent entire removal of the coupling pin; this chain or cord may be connected to any part in any suitable manner.

What I claim as new is—

1. The combination with the drawhead and the pin, of a loosely mounted plate and a spring plate within the drawhead, independent of said loosely mounted plate as and for the purpose specified. 35

2. The combination with the drawhead, of the pin and a spring plate having a lug and a bolt opening for keeping the link horizontal, as set forth.

3. The combination with the drawhead and the pin, of a loosely mounted plate having a lip and lugs, and a connecting cross bar as set forth. 40

4. The combination with the drawhead and the pin, of a plate loosely mounted and having lugs, and a spring plate having a lug, working between the said lugs substantially as specified. 45

5. The car coupling described consisting of the drawhead, the pin, the link, the plate loosely mounted within the drawhead and having lugs and the spring plate having lug working between the lugs of the loosely mounted plate as and for the purpose specified. 50

In testimony whereof I affix my signature in presence of two witnesses. 55

VICTOR WALLACE.

Witnesses:

D. E. ANTHONY,
CHARLES E. FISH.