

E. M. WRIGHT.
Car Coupling.

No. 42,897.

Patented May 24, 1864.

Fig. 1.

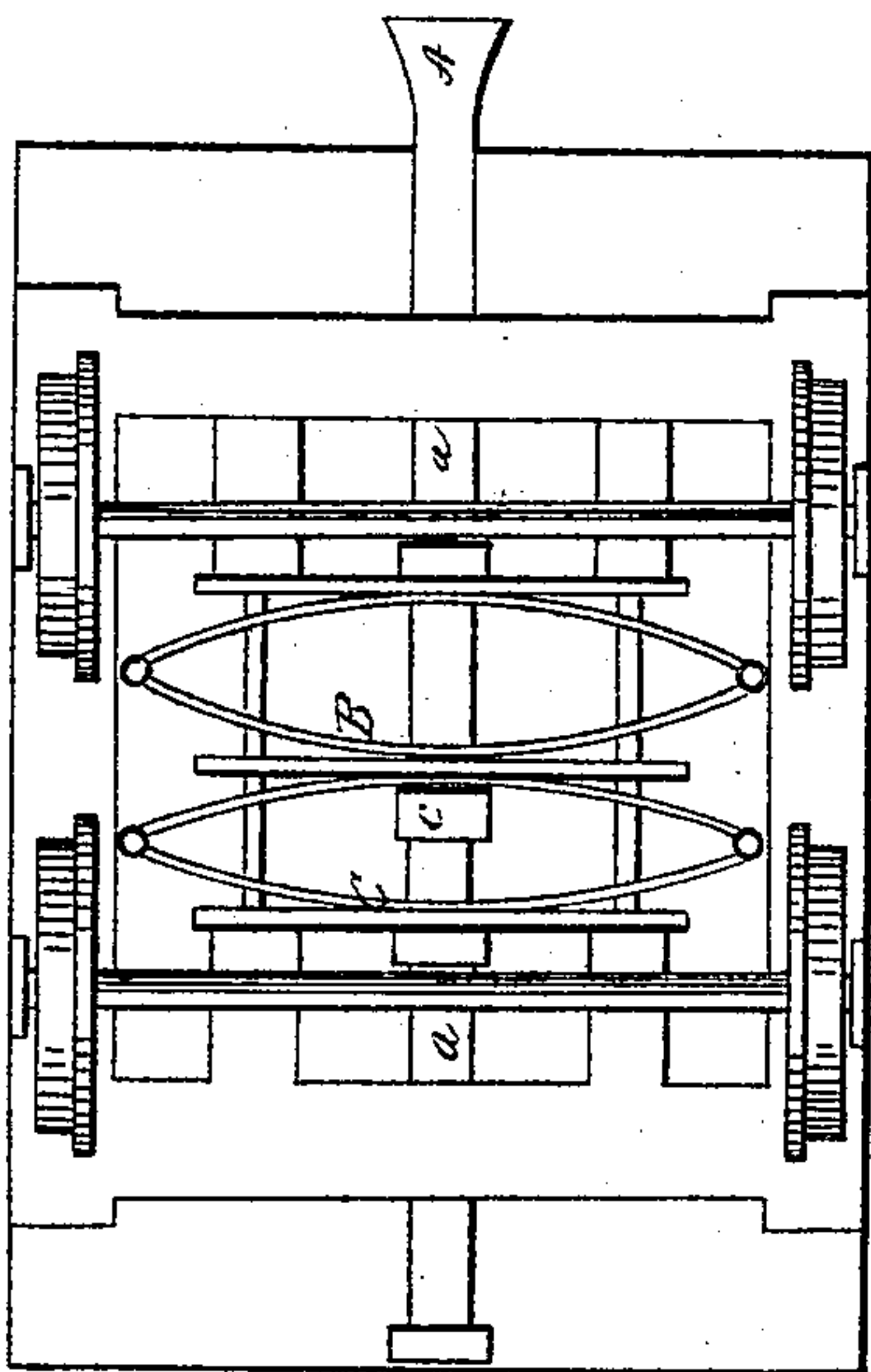


Fig. 3.

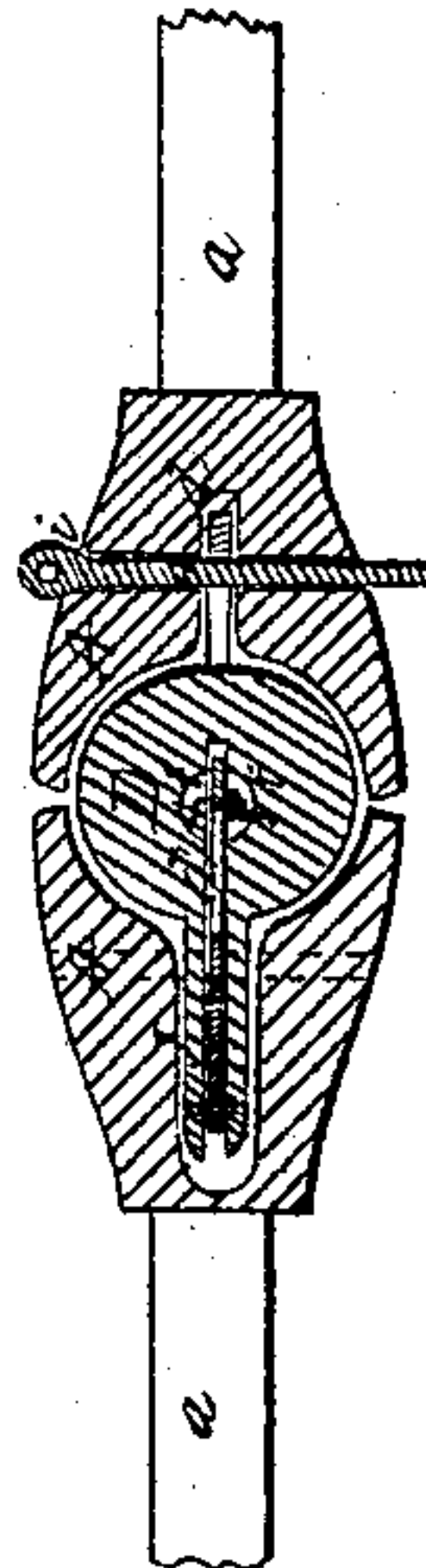
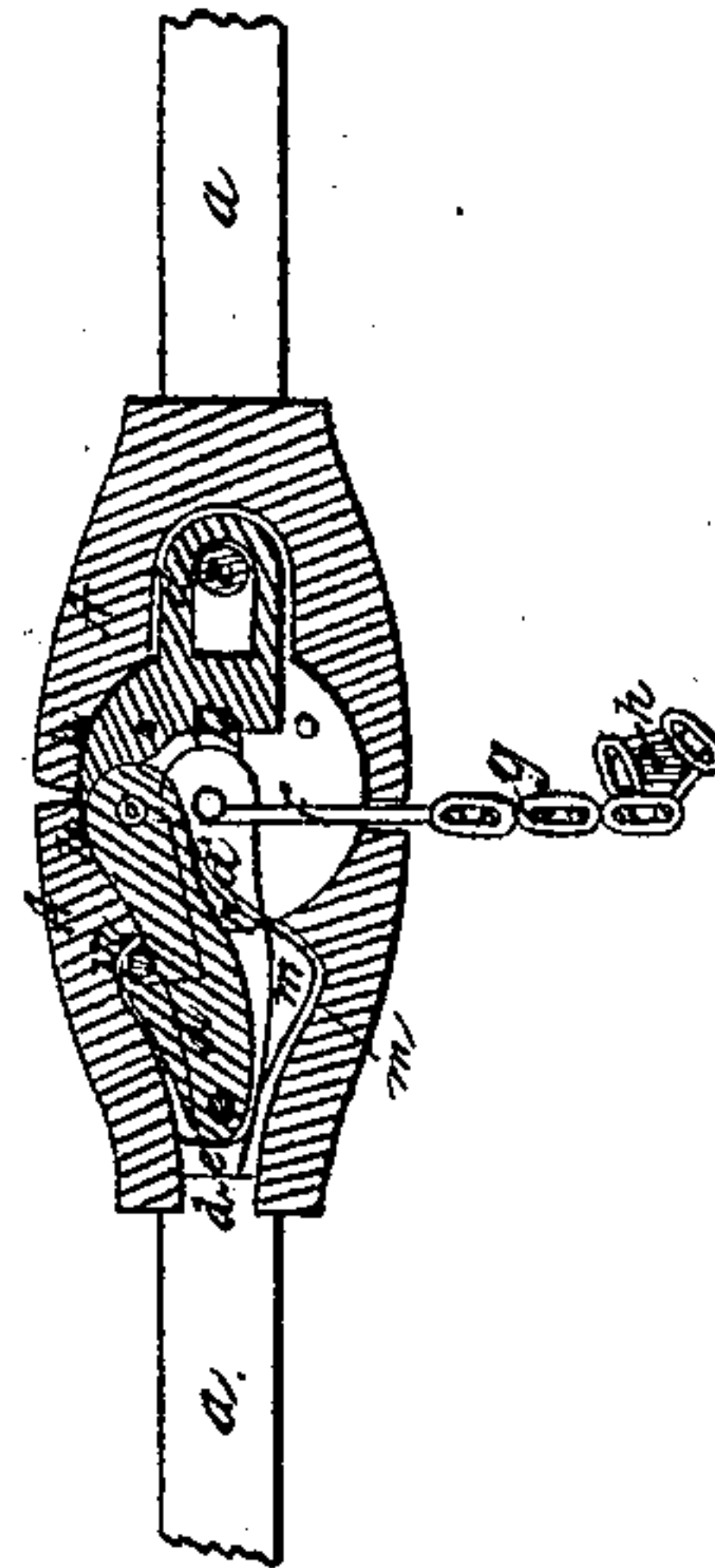


Fig. 2.



Witnesses:

Wm. M. Bryant.
E. M. Woodruff

Inventor:

E. M. Wright,
By his atty,
J. S. Brown

UNITED STATES PATENT OFFICE.

ELIAS M. WRIGHT, OF WYANDOTTE, KANSAS.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 42,897, dated May 24, 1864.

To all whom it may concern:

Be it known that I, ELIAS M. WRIGHT, of Wyandotte city, in the county of Wyandotte and State of Kansas, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a plan of the under side of a car-truck provided with my improvement; Fig. 2, a central vertical section of my improved car-coupling, and Fig. 3 a central vertical section of the same.

Like letters designate corresponding parts in all of the figures.

For the application of my improved coupling each bumper-head A, Figs. 2 and 3, has a nearly hemispherical socket or cavity, *b*, in its front end, and the coupling D itself has a nearly spherical body fitting the two cavities of the two adjacent bumper-heads, so that said bumper-heads may come together, and so that they will allow but slight play of one bumper-head by the other horizontally, as indicated in Fig. 2, while vertically the said bumper-heads may have considerable play on each other, as indicated in Fig. 3, in order to allow the necessary up and-down vibratory movement of the cars. Thus the cars ride more steadily, since the coupling prevents unnecessary side swaying and oscillation of the cars—a desideratum of considerable importance. These enlarged hemispherical cavities *b b* of the bumper-heads, by offering wide mouths, allow the tongues *d d* of the coupling D to freely and surely enter therein automatically without the guidance or care of the attendant, thus simply accomplishing an object much to be desired. There are throats beyond the hemispherical cavities in the bumper-heads for the reception and retention of the tongues *d d*, substantially as indicated in Figs. 2 and 3. One tongue of each coupling may have the ordinary link or loop to receive the usual coupling-pin, *i*, as seen at the right hand in Figs. 2 and 3, or both tongues may be of my improved construction, as seen at the left hand in said figures, and which I will now proceed to describe.

In the tongue *d* a hook-catch, *d'*, is pivoted at its forward or outer end, so that its rear or inner end will vibrate freely. This free end of the catch is ordinarily forced outward by a spring, *p*, Fig. 2, or its equivalent, so that its hook will catch around a shoulder or pin, *m*, in the throat of the bumper-head, into which the tongue is inserted, and thus it holds the cars coupled securely together; and when it is desired to uncouple the cars the inner free end of the catch is drawn in by any suitable means till its hook is brought within the outline of the tongue itself, as indicated by red lines in Fig. 2, and then the cars are free to separate. This catch may be drawn inward thus by the means represented in the drawings—namely, a rod, *f*, attached to the catch at one end, and at the other end connected by a chain or cord, *g*, with a winding-shaft, *h*, to be controlled by the brakeman. Any equivalent means may be employed. It will be seen that this hook-catch is so shaped that it will enter past the pin or shoulder *m* automatically. There may be only one catch in each tongue, as shown, or a second one on the other side operated in the same way. When only one is used, there may be a hook on the other side of the tongue itself, as shown in Fig. 2, so arranged that when the swinging catch *d'* is closed in its unnotched edge will cover the notch in the tongue, thereby pushing it within the line of the pin *m* and setting the whole tongue free to be drawn out.

Other modifications of the catch arrangement might be suggested, but it is deemed unnecessary.

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

The coupling D, constructed, arranged, and operating, in combination with the nearly hemispherical cavities *b b* in the bumper-heads, substantially as and for the purposes herein set forth.

The above specification of my improved car-coupling signed by me this 11th day of July, 1863.

ELIAS M. WRIGHT.

Witnesses:

FRANKLIN BAYHAN,
W. B. FISHER.