

C. S. DAVIDSON.
Car-Couplings.

No. 152,552.

Patented June 30, 1874.

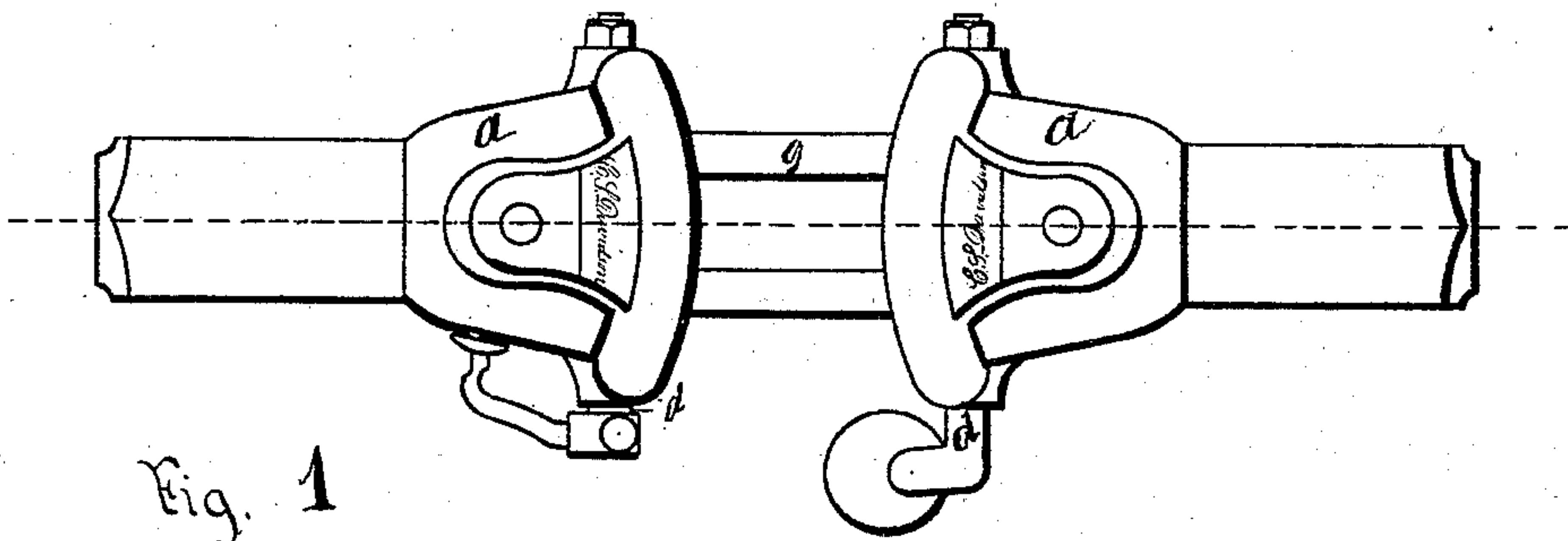


Fig. 1

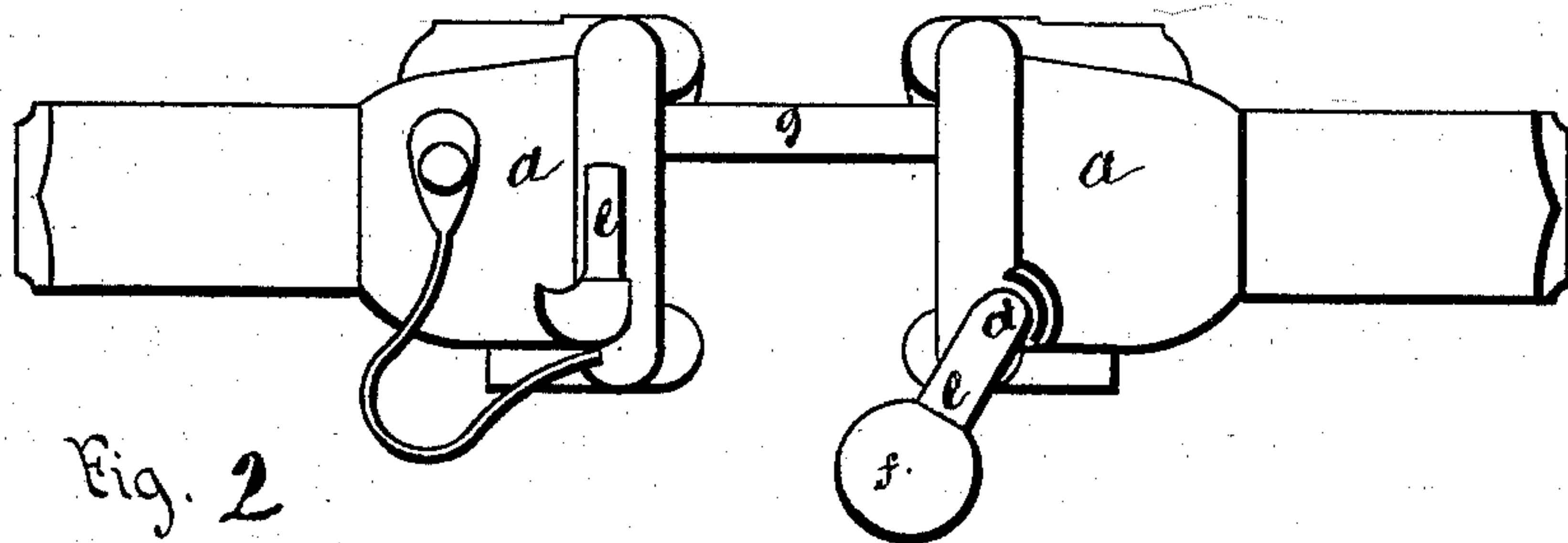


Fig. 2

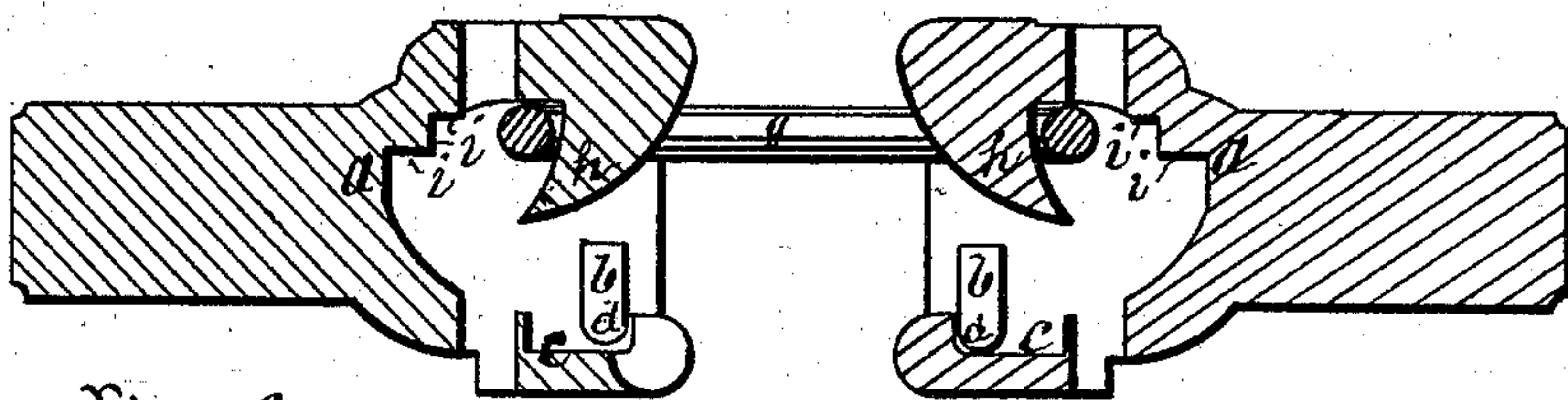


Fig. 3

Witness.

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IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **152,552**, dated June 30, 1874; application filed March 25, 1874.

To all whom it may concern:

Be it known that I, CHARLES S. DAVIDSON, of the city and county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Car-Couplings; and to enable others skilled in the art to make and use the same, I will proceed to describe it, referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this invention will be fully understood from the specification and drawing.

Figure 1 is a top view of two couplings connected in position of draft. Fig. 2 is a side view of the same. Fig. 3 is a vertical section of the same.

a is the head or body of the coupling, made in shape very much the same as in the common way. *b* is a vibrating bracket, fitted into a recess or aperture, *c*, just inside of, and at the bottom of, the mouth, extending across the full width of the opening, and, when turned down into the aperture *c*, will be about flush with the lower side of the mouth, and is held secure and vibrates upon a fulcrum or shaft, *d*, which passes through coupling-head and lower edge of, and is firmly secured in, said bracket, so that when the shaft is turned the bracket must move or vibrate therewith. On the outer end of this shaft *d* is secured a lever, *e*, actuated by a spring or weight, *f*, or their equivalents, to firmly hold the bracket *b* in a vertical position, except when a greater pressure from, or by, the connecting-link *g* shall

strike the face of the bracket *b*, and cause it to vibrate back and allow the end of the link to pass under, and rise over, the firmly-fixed and immovable draft-hook *h*, formed on the upper side of the mouth of the coupling, when the bracket *b*, by the action of mechanical pressure, will instantly vibrate into its perpendicular position, lifting the draft-link *g* up over the draft-hook *h*, where it remains until it is desirable, by manual or mechanical means, to actuate the bracket to vibrate into a horizontal position, when the link *g* will be free to be withdrawn.

The throat or back end of the mouth of this coupling is provided with steps *i*, by means of which the link is placed and held in the desired position to enter the approaching coupling.

By the use of this improved automatic or self-acting car-coupling accidents are avoided in coupling, which often occur by the operators getting between the cars in the common way; and a great saving of time is produced in making up the trains, and also a great saving and expense of making coupling-pins.

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

The draw-head *a*, having the stationary draft-hook *h*, vibrating bracket *b*, fitted into a recess *c*, and a shaft, *d*, all combined to operate substantially as shown and described.

CHARLES S. DAVIDSON. [L. S.]

Witnesses:

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