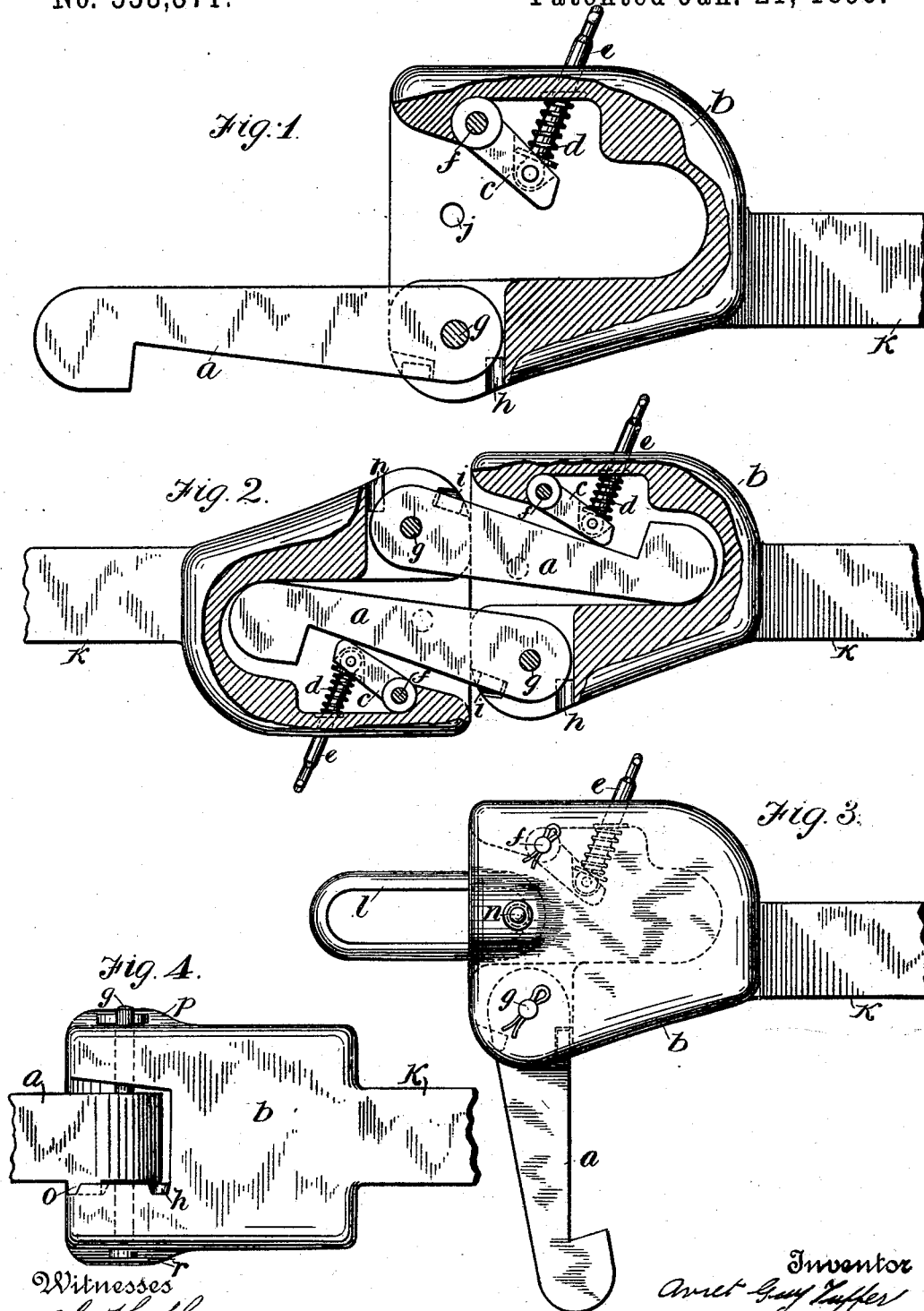


(No Model.)

A. G. TUPPER.  
CAR COUPLING.

No. 553,371.

Patented Jan. 21, 1896.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 553,371, dated January 21, 1896.

Application filed February 27, 1894. Serial No. 501,626. (No model.)

*To all whom it may concern:*

Be it known that I, AVRET GUY TUPPER, a citizen of the Dominion of Canada, residing in Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings and letters of reference marked thereon, in which drawings like letters of reference indicate like parts.

Figure 1 is a plan view with a part in section of one half of a complete coupling. Fig. 2 is a like view of the complete coupler. Fig. 3 is a plan view of a portion of the coupler, showing the ordinary link in engagement therewith, and Fig. 4 is an elevation.

In detail, *a* indicates the tongue; *b*, the body or shell; *c*, a dog; *d*, a spring; *e*, an operating pin or rod; *f*, pivots on which the dogs are mounted; *g*, pivots on which the tongues are mounted; *h* and *i*, recesses; *j*, pin-receiving opening; *k*, draw-bar; *n*, coupling-pin, and *e* lug on the tongue.

The shell is constructed in the form shown in the drawings and is attached to the draw-bar *k*, which may be of any of the usual forms of construction. Upon one side of the shell and about middle way between the top and bottom of the opening therein I pivotally mount the tongue *a* upon a suitable pin *g*. The tongues are made hook shape at the free ends.

Upon the side of the body opposite the side on which the tongue is pivoted and on the inner face I pivot a dog *c* upon a pin *f*. The dog *c* is normally held in the path of the tongue by the operation of a spring *d*, and the rod or pin *e* passes through the shell and is pivotally connected with the dog *c*. I prefer that the spring *d* be made in the form of a spiral and be arranged around the rod *e*.

It will be seen that as the cars are brought together the free ends of the tongues will enter the openings in the shells and will be deflected from their normal position and be conducted by contact with the sides of the opening in the body, and pressing against the dogs will force them out of the path of the tongues until the heads or hooked portions pass the nose of the dogs, when the springs will operate to force the dogs back toward their normal position, and thus prevent the withdrawal of the

tongues from the coupling-shells until the dogs have been retracted out of the path of the tongue ends.

In order to avoid the use of springs and to maintain the tongues in proper position to enter the shells and cause the coupling to be locked automatically, I provide the lower face of each of the tongues with a lug and provide recesses *h* and *i* in the shell to receive the lug. It will be seen, therefore, that as the lug upon the tongue rests in the recess *i* no ordinary jar or motion will throw it out of that position, but that the force of the cars when they come together will be sufficient to cause it to escape from the opening, and thus allow the tongue to enter the opposite coupling and become engaged.

When it is desired to use the coupling in the ordinary manner by the employment of a link, I turn the tongue to a position approximately at right angles to the draw-bar, and in this position the lug upon the tongue will enter the recess *h*, and will be maintained in that position until turned by lifting the end slightly, and then turning it to a position to cause the lug to enter the recess *i*, thus fixing it in position to be automatically locked or coupled.

Having therefore described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination in a car coupler of a coupler body *b* provided with a tongue *a* pivotally mounted at one end in a tongue receiving recess formed in the side wall of the body and open at the sides to permit the tongue to turn outwardly in a horizontal plane, the tongue being formed without lateral projections except for the engaging hook at the free end and a lug on the lower face of the pivotal end; said tongue receiving recess being provided with recesses to receive the lug on the tongue when the tongue projects in line to engage the opposite coupler and when it is turned outwardly leaving the opening to the coupler unobstructed, and an engaging dog or latch mounted in the body to engage the opposite tongue, substantially as shown.

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Witnesses:

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