

(No Model.)

J. KLENK.
VEHICLE COUPLING.

No. 324,474.

Patented Aug. 18, 1885.

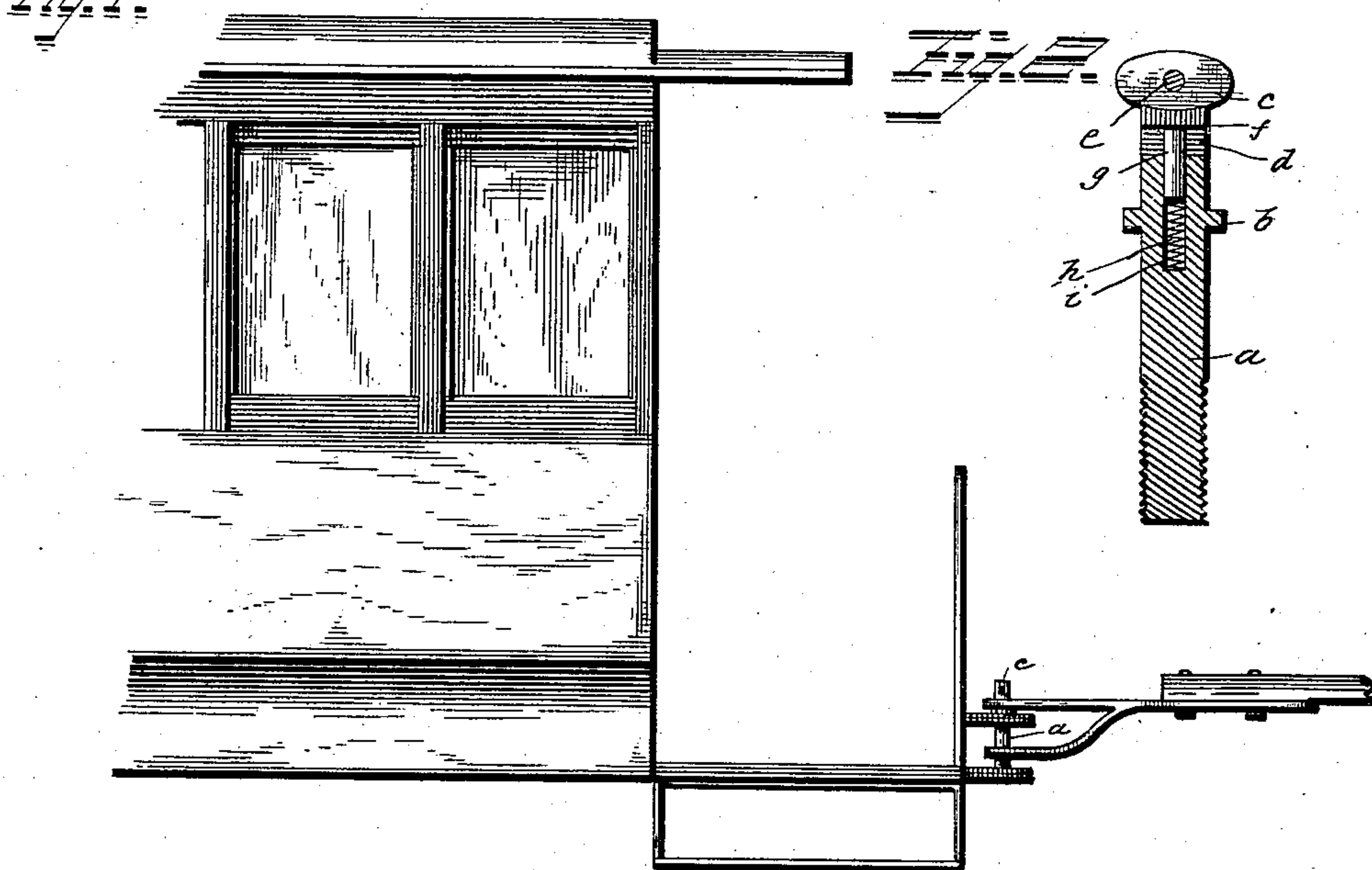


Fig. 5.

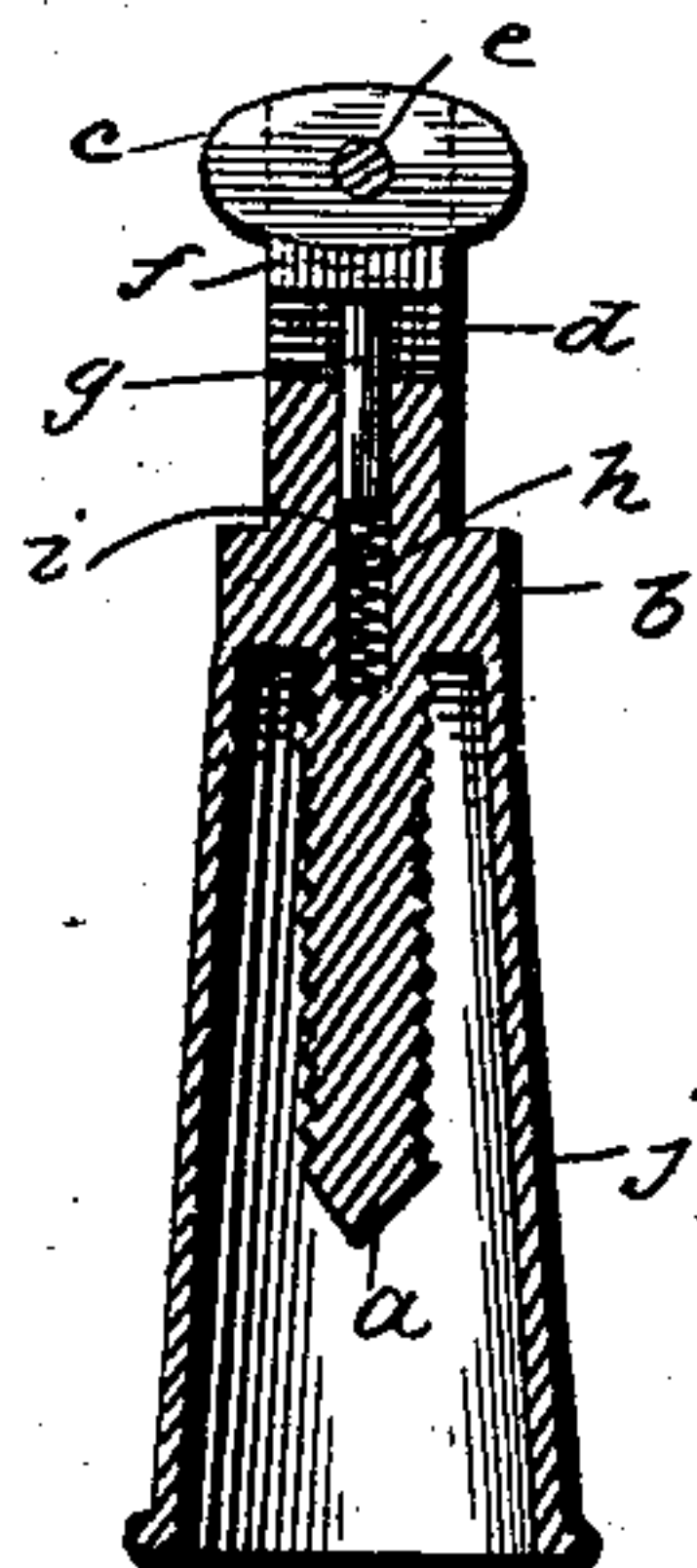


Fig. 3.

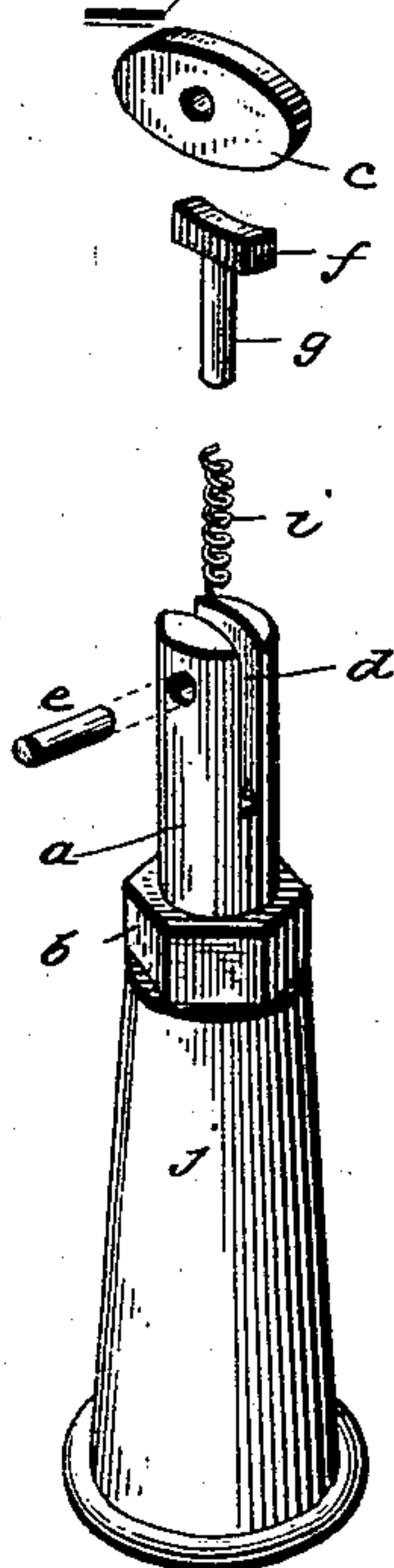
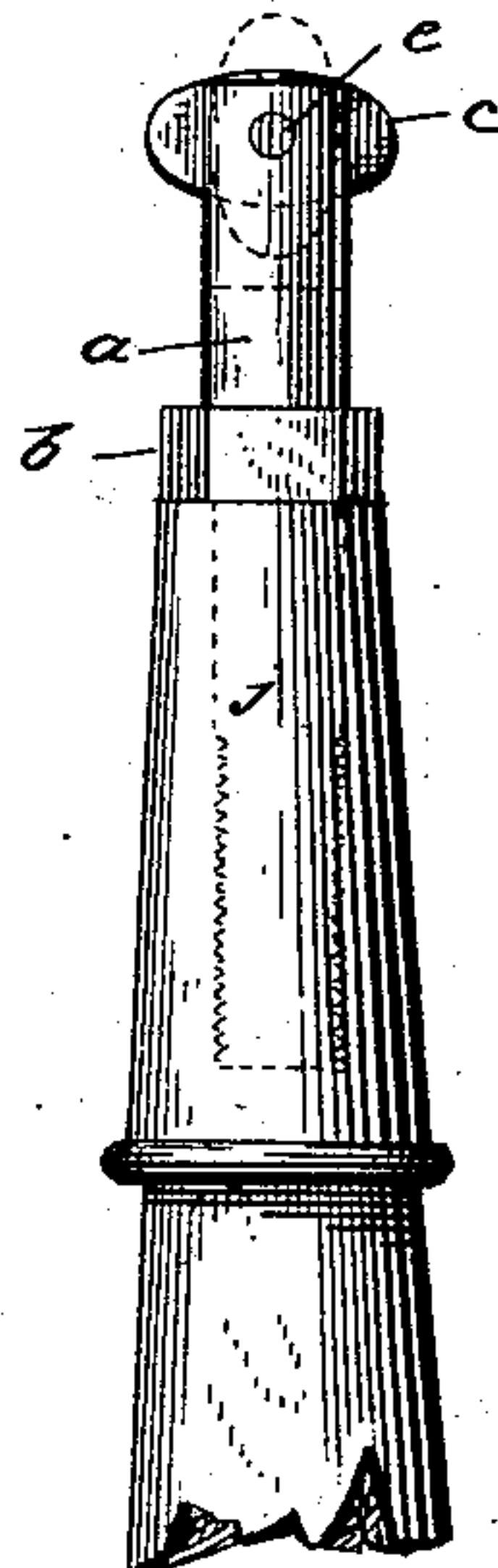


Fig. 4.



WITNESSES
F. L. Ourand
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UNITED STATES PATENT OFFICE.

JOHN KLENK, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO SAMUEL H. HAAS, OF SAME PLACE.

VEHICLE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 324,474, dated August 18, 1885.

Application filed December 31, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN KLENK, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improved Vehicle-Coupling, of which the following is a full, clear, and exact description.

The object of my invention is to provide a device stationary on the vehicle or some part of it, which may be easily operated for the connection of the pole or traces, and which will securely hold the same when so applied.

The invention consists in a pin stationarily fixed to the vehicle, and having a movable spring cross-piece adapted to admit the attachment of a pole or tongue or trace, and be thereafter turned across the path of escape of such tongue or trace to prevent its escape, substantially as hereinafter particularly set forth and claimed.

I may here remark that my invention is primarily designed for a street-car coupling; but, as indicated in the accompanying drawings, its applicability is extensible elsewhere.

In said drawings, in the several figures of which like parts are similarly designated, Figure 1 is a side elevation of part of a street-car embodying my invention. Fig. 2 is a vertical section, on a larger scale, of the pin detached. Fig. 3 represents in perspective the several parts of the device as applied to a whiffletree; Fig. 4, an elevation, and Fig. 5 a vertical section of whiffletree-hooks of my construction.

As usually made the poles of street-cars have a forked iron at the rear end, the upper member of which has a hole in it, and the lower member of which is notched. The car has projecting irons to receive these members, with a hole in each, and a loose pin is dropped through the holes in said tongue and car-irons to connect them, the notched iron permitting the requisite rise and fall of the pole.

Instead of a loose pin, I fix in the car-irons or other equivalent projection from the platform a pin, *a*, and have herein shown it as screw-threaded to this end; but, obviously, a

nut may be used to fasten it. This pin has a collar, *b*, to limit the play in one direction of the article secured to it, and the play in the other direction is restricted, and the admission and removal of such article is governed by a cross-piece, *c*. This cross-piece is pivoted in a recess, *d*, in the head of the pin upon the pin *e*, so as to freely turn therein; but its freedom of motion is restricted by a follower-block, *f*, having a stem, *g*, which is fitted in a socket, *h*, in the pin *a*; and acted upon by a spring, *i*, set beneath it in said socket, and tending to force the follower-block out against the cross-piece.

The spring will be of sufficient strength to hold the cross-piece in the position to which it is turned manually securely against accidental displacement. This cross-piece has two movements—one shown in full lines, where it stands crosswise of the pin, and the other indicated in dotted lines, Fig. 4, when it is in alignment with the pin *a*; and this latter position is the one into which it is turned when the pole or trace is to be applied or removed, while the crosswise position is that which will be given when the pole or trace is to be locked to the pin.

My pin as a coupling-pin for street-cars will be found of great utility, as it is a fixture, not liable to detachment, loss, or displacement, and is very easily operated.

A pin substantially such as shown in Fig. 2 may be reduced in size and screwed in a whiffletree, one at each end, for use in securing the traces, and a ferrule, *j*, then applied to each end of the whiffletree; or said pin and ferrule may be made as a single casting, as shown in Figs. 3 and 5.

I have shown only these two applications of my pin; but its use is obviously extensible.

What I claim is—

1. A coupling-pin provided with a threaded shank, a cross piece pivoted in its head, and a spring-follower in engagement with such cross-piece to hold it in given position, substantially as described.

2. The pin *a*, having the collar *b*, pivoted cross-piece *c*, set in a recess in the head of the pin, a follower-block, *f*, acting on said cross-

piece, and its spring *i*, substantially as shown and described.

3. The pin *a*, having the spring-held cross-piece *c*, combined with the coupling-irons of
5 a street-car for connecting the pole or tongue, substantially as shown and described.

In testimony whereof I have hereunto set

my hand this 30th day of December, A. D. 1884.

JOHN KLENK.

Witnesses:

SAMUEL H. HAAS,

FREDK. BREITINGER.