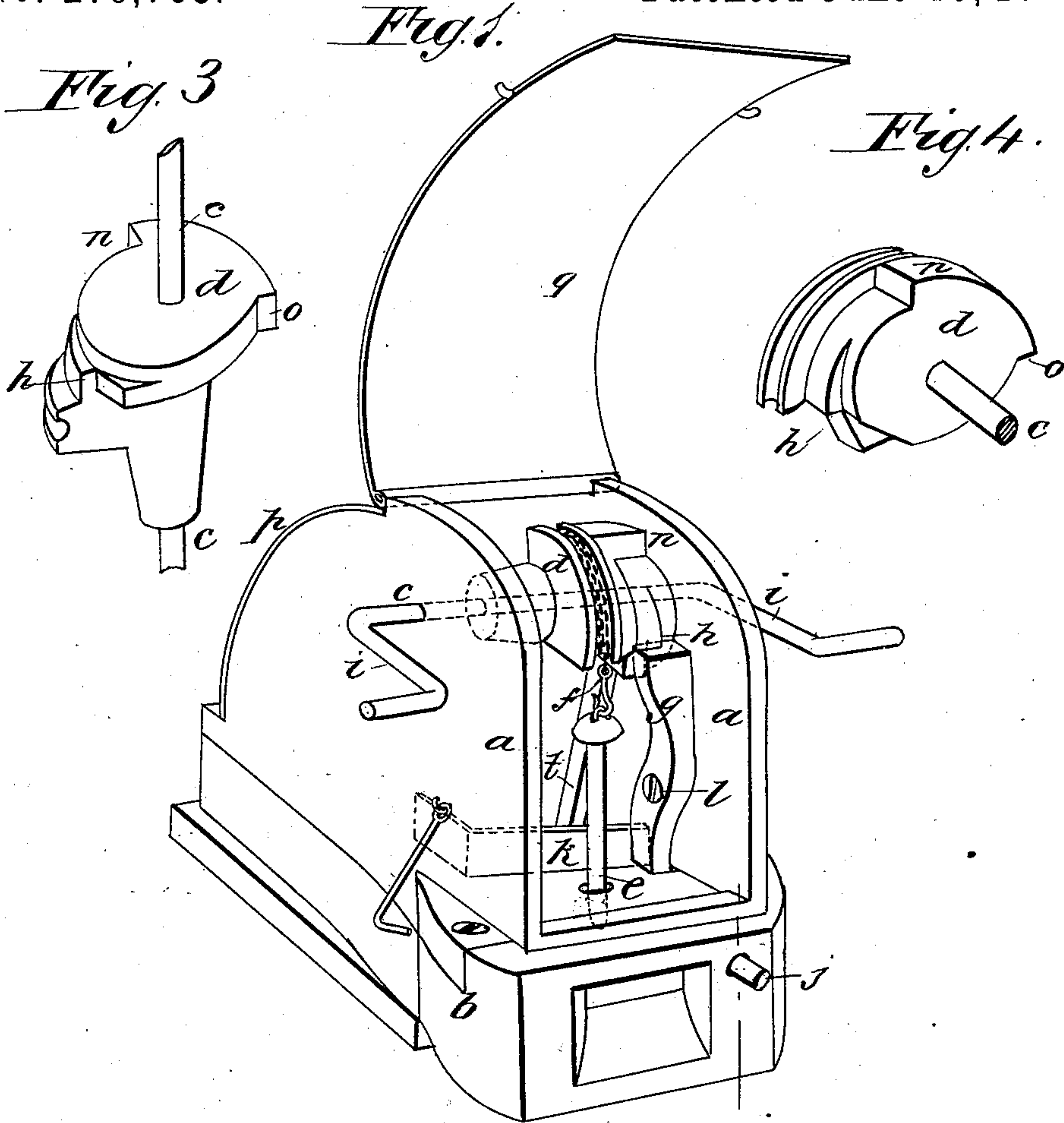


(No Model.)

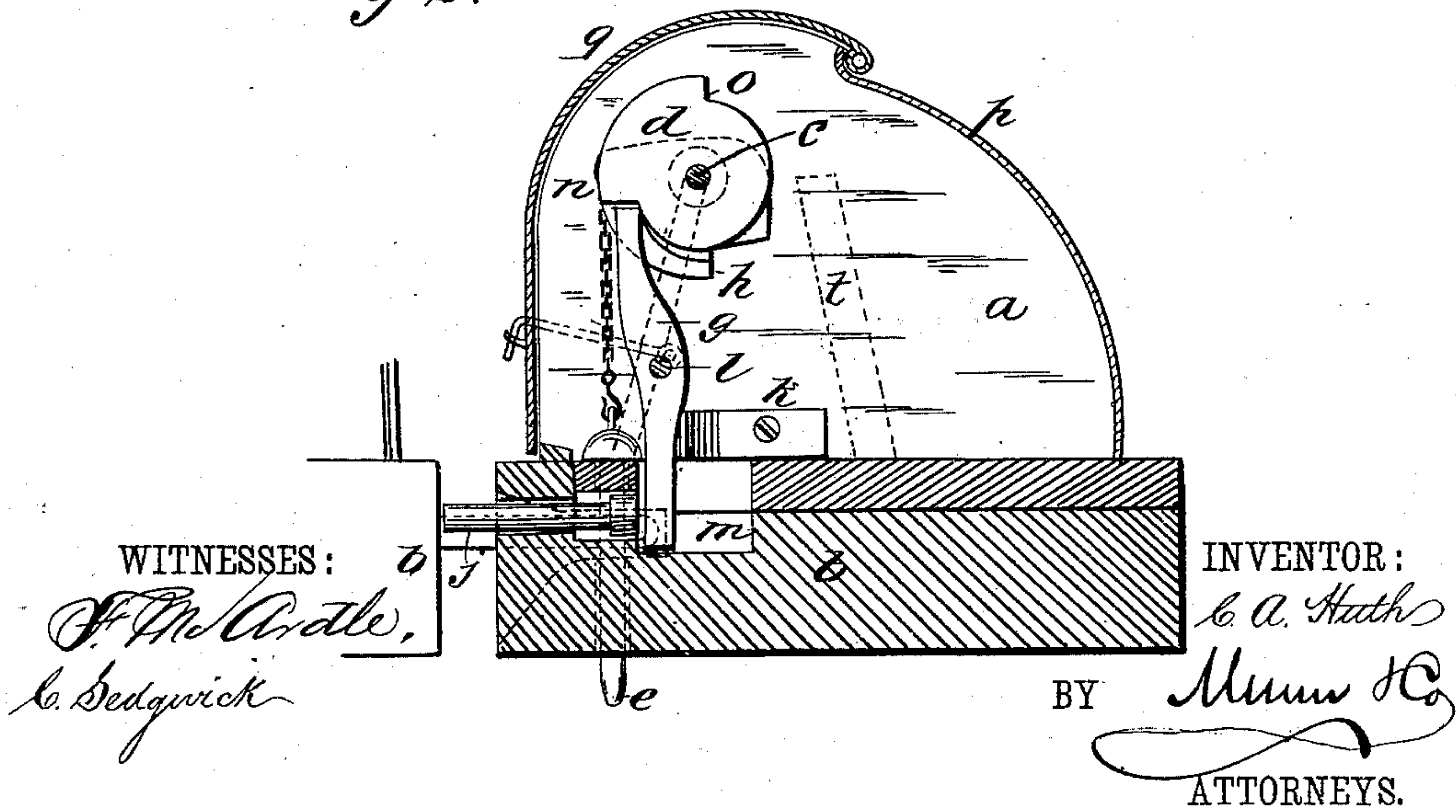
C. A. HUTH.  
CAR COUPLING.

No. 279,763.

Patented June 19, 1883.



*Fig. 2.*





# UNITED STATES PATENT OFFICE.

CHARLES A. HUTH, OF MAYNARD, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 279,763, dated June 19, 1883.

Application filed March 20, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. HUTH, of Maynard, in the county of Belmont and State of Ohio, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

My invention consists of a cranked drum located over the coupling-pin and having the pin suspended from it, with a spring-latch to hold the pin up for self-coupling when tripped by the approaching car, and cranks for raising the link and setting it, the same being a simple and efficient contrivance for self-coupling, as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved car-coupling. Fig. 2 is a longitudinal section of the same; and Figs. 3 and 4 are perspective views of the lifting, suspending, and tripping arm.

I arrange housings *a* on the top of the draw-bar *b*, at each side, or thereabout, for the support of the crank-shaft *c*, whereon I have a drum, *d*, to the periphery of which the pin *e* is connected by a chain, *f*, so that the pin may be raised up out of the link and be suspended above it by turning the drum until the latch *g* swings under shoulder *h*, the cranks *i* of the shaft being then raised up to a horizontal position, so that when the drum is tripped for allowing the pin to fall the weight of the cranks will turn the drum and prevent the fall of the pin being hindered by them, and also so that they hang downward when the pin is down. The latch is to be tripped, to let the pin fall when the cars come together, by the draw-bar of the car to be coupled on pressing back the pusher *j* against the lower end of latch *g*. The spring *k* swings the latch forward and causes the upper end to swing under shoulder *h*, when the pin is to be set. Said spring throws the pusher forward at the same time. The latch *g* is arranged in a vertical position under the drum *d* on a pivot, *l*, supported by the housings *a*, and the lower end of the latch extends into a recess, *m*, in the draw-bar, where it meets the head of pusher *j*, extending from said recess out through a hole in the end of

the draw-bar. The drum *d* has another shoulder, *n*, that rests on the end of the latch *g* when the pin is down, which, together with the weight of the pin and crank, prevent the drum from turning out of position, and there is also another shoulder, *o*, to serve as a stop by contact with bar *t*, attached to one of the housings, to prevent the drum from being turned too far back when being raised; also to prevent it being accidentally turned when the pin is set.

In this example the crank-shaft is represented as being made in one rod or shaft going entirely through the drum; but in practice I shall prefer to make it in two separate parts to be inserted into the drum at each end, and be secured by set-screws as a simple arrangement for construction and application of the cranks and the drum to the housings.

It will be seen that by making the cranks *i* to extend the proper distance each way from the draw-bar the pin can be raised to uncouple and set without going between the cars and being exposed to danger thereby. I propose to arrange a cover, *p*, of sheet metal over the housings at the back part, and a hinged door, *q*, over the front part to exclude the snow and rain.

I have in this case represented the draw-bar as made in two parts that may be separated for the placing of the push-pin in position with its head within the recess to effectually secure it, and I prefer this arrangement, although it may be made solid with other means of securing the pin.

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

1. The combination, with the lever-latch *g*, of the pin-lifting drum having the shoulder *h*, whereby the pin may be held up, as described.

2. The combination, with lever-latch *g*, of the pin-lifting drum having the notch *n*, whereby the drum cannot turn forwardly beyond said notch, as described.

3. The combination, with the pin-lifting drum having the shoulder *o*, of the bar *t*, whereby the drum cannot be accidentally turned farther back than said shoulder, as described.

4. The pin raising and setting drum having shoulders *h*, *n*, and *o*, in combination with latch *g* and a stop, *t*, and being mounted with

relation to the coupling-pin, and having said pin connected to it by a chain, substantially as described.

5 5. The pusher *j* and spring *k*, in combination with latch *g*, drum *d*, chain *f*, and coupling-pin *e*, said drum being arranged over the coupling-pin and on a crank-shaft, substantially as described.

10 6. In a car-coupling having a setting-drum, tripping-latch, and a pusher, *j*, to actuate the pusher by the car to be coupled on, the said pusher secured in its place by a head confined

between the two parts of a draw-bar fastened together, substantially as described.

7. The combination, in a car-coupling, of a 15 setting and tripping drum, the coupling-pin connected to said drum by a chain, housings for the support of the drum, and an inclosing-cover, *p*, and door *q* of the housings, substantially as described.

CHARLES A. HUTH.

Witnesses:

GEORGE W. DOYLE,

JOEL NICHOLS.