

No. 616,203.

C. S. & G. B. PARK.
CAR COUPLING.

Patented Dec. 20, 1898.

(No Model.)

(Application filed Feb. 8, 1898.)

Fig. 1.

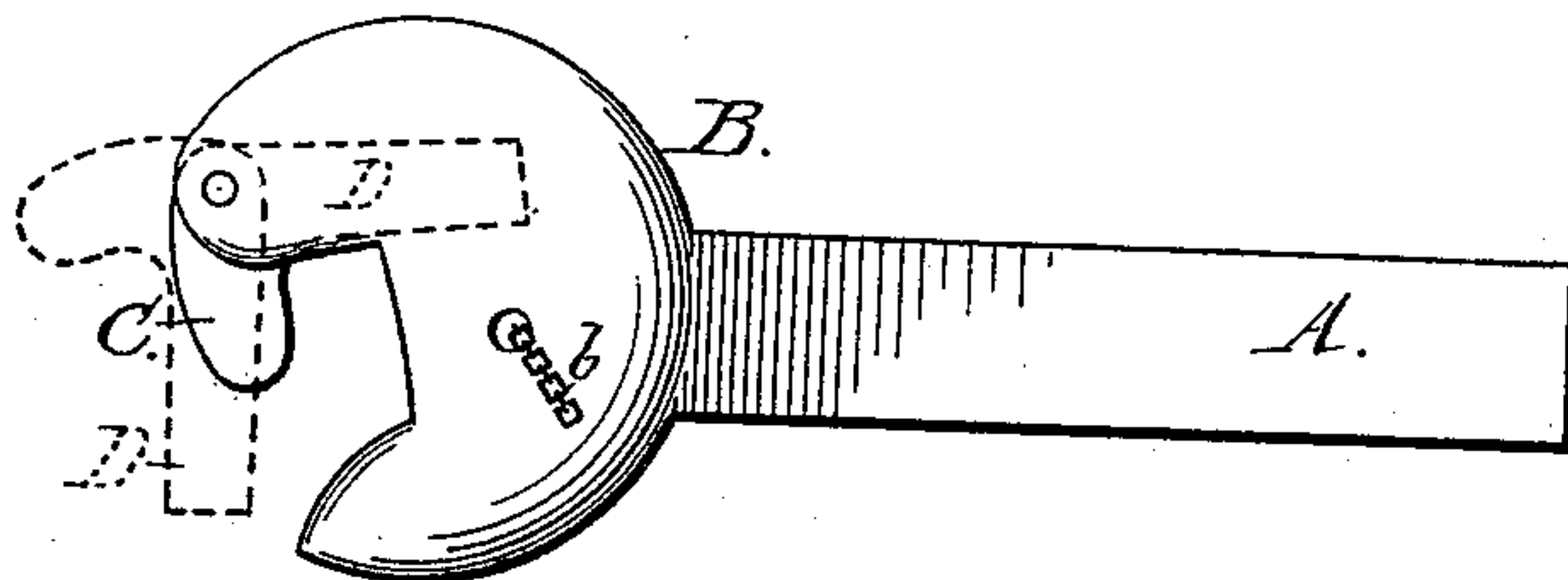


Fig. 2.

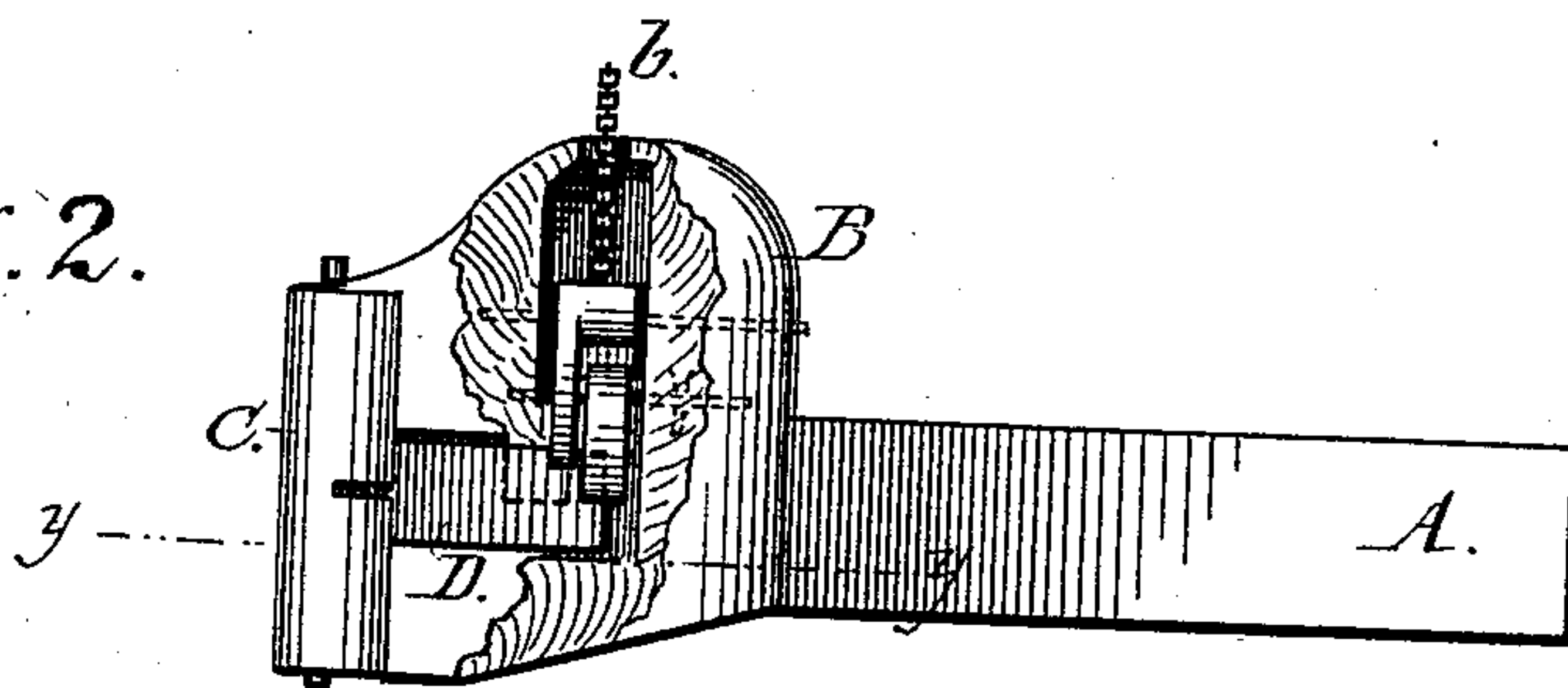


Fig. 3.

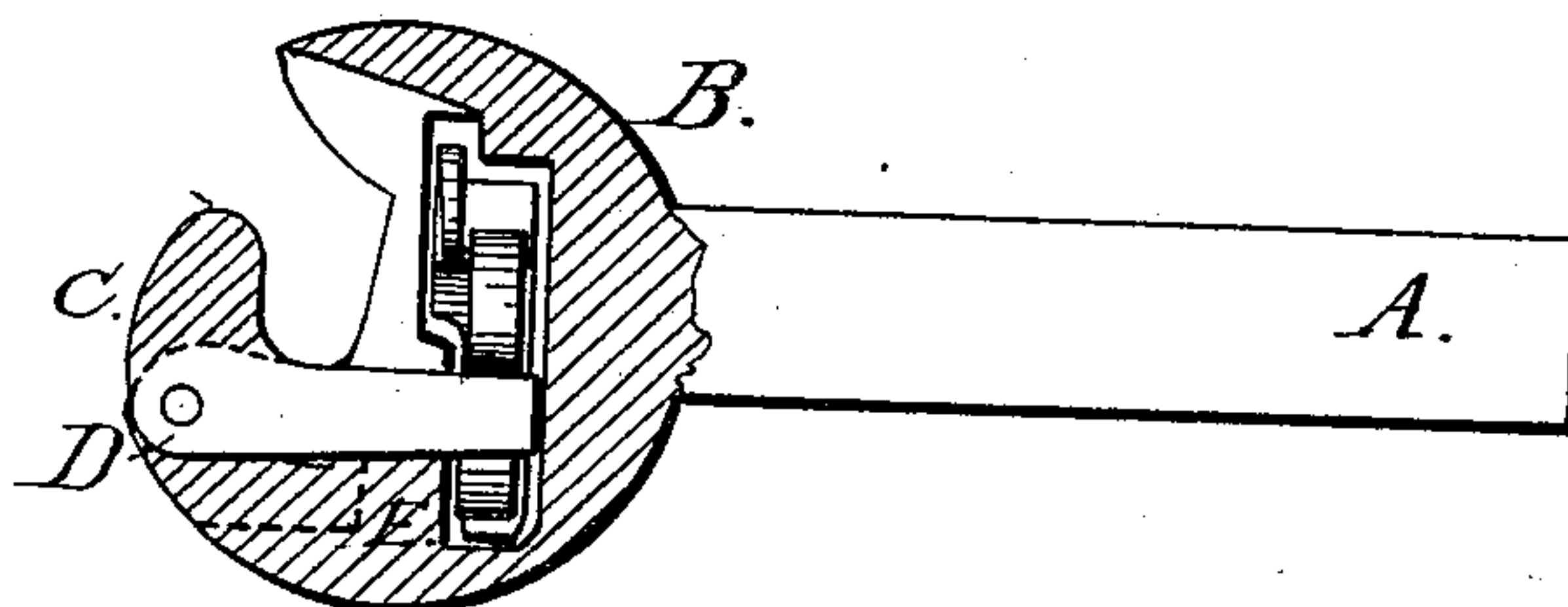


Fig. 4.

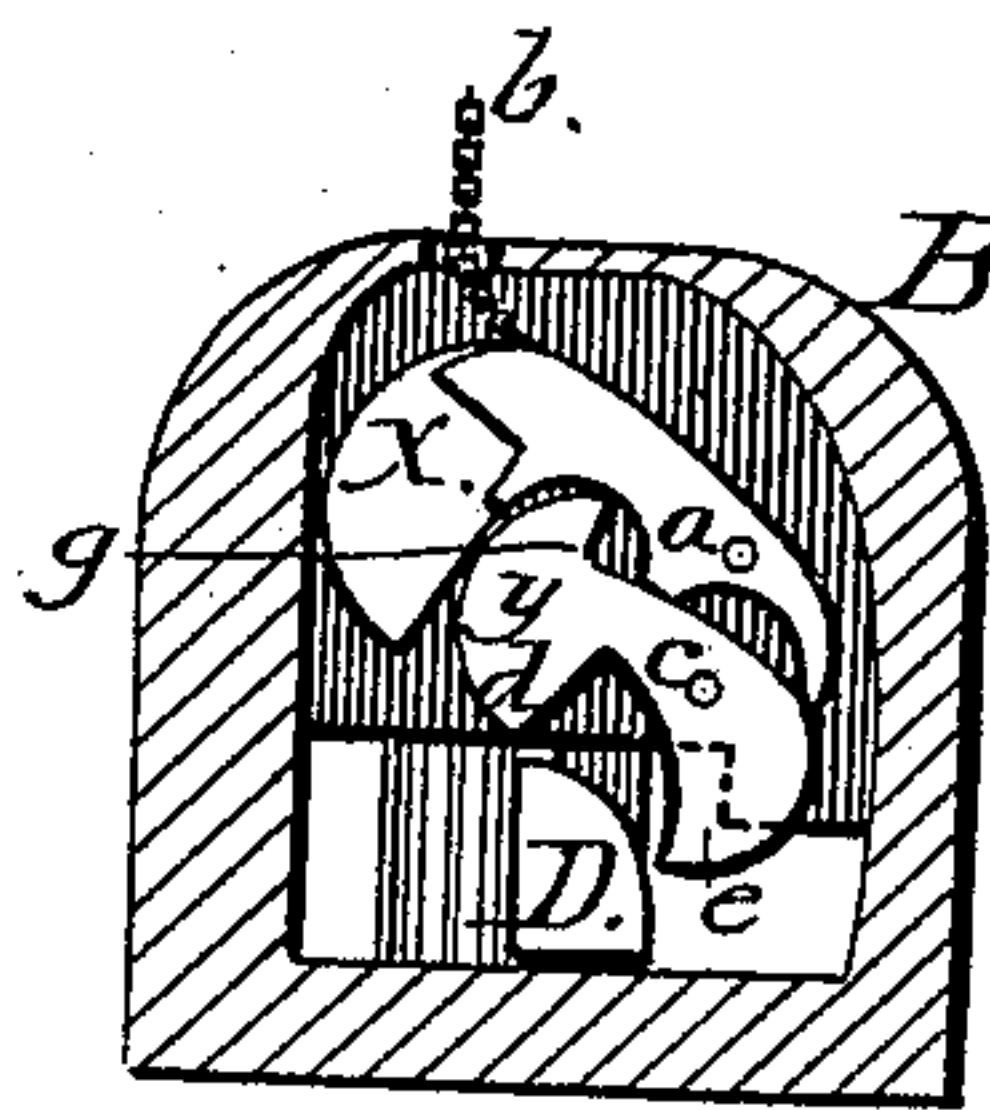
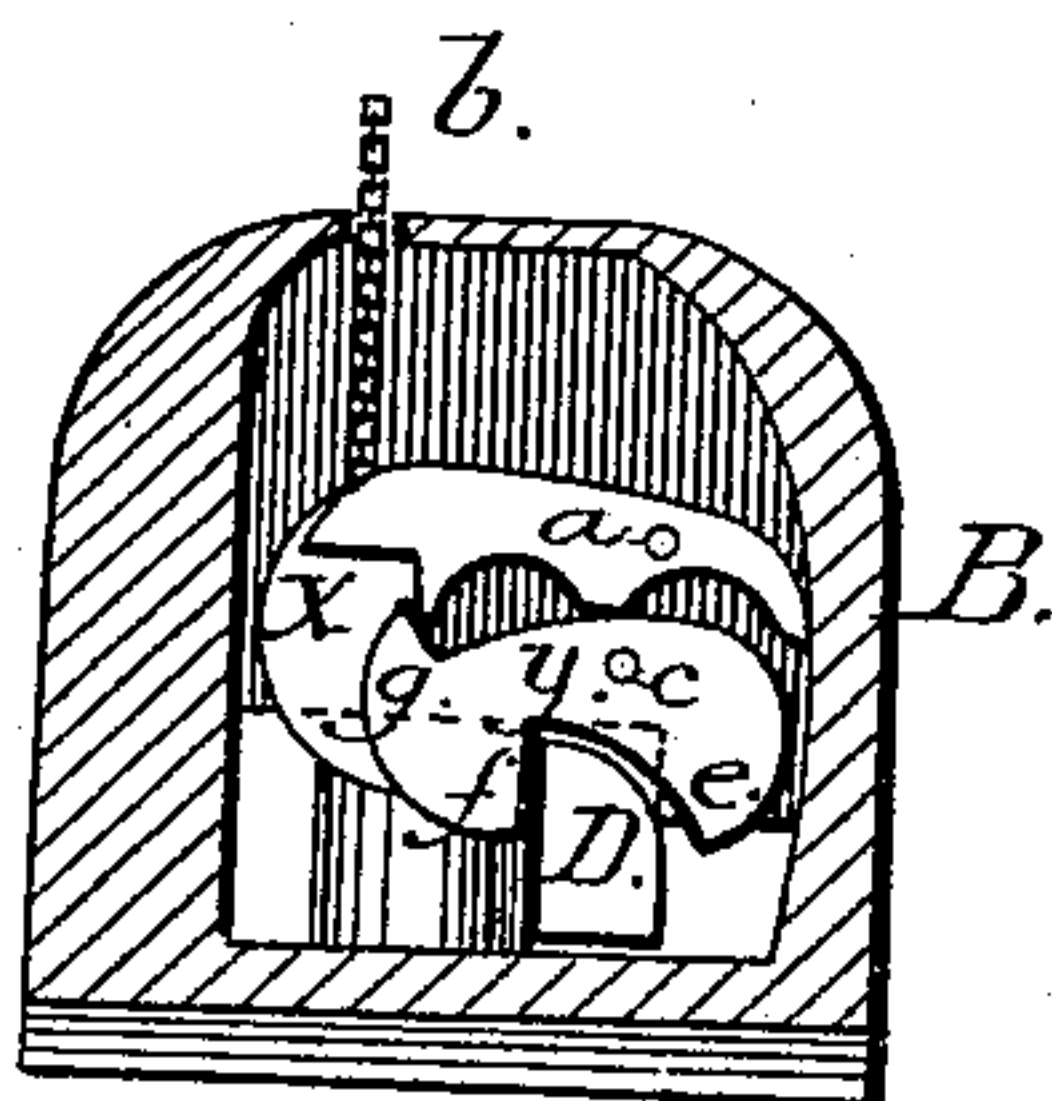
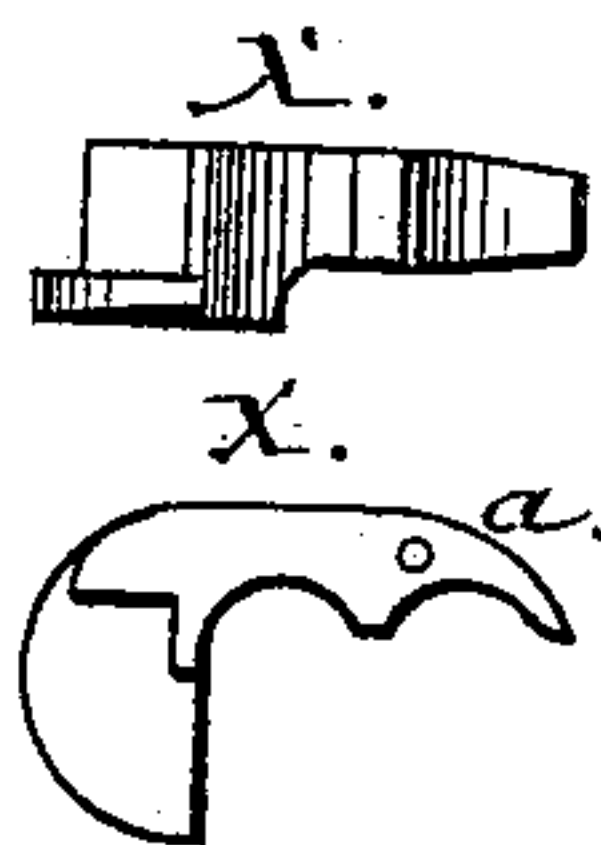


Fig. 5.

Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES S. PARK AND GEORGE B. PARK, OF GREENFIELD, MASSACHUSETTS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 616,203, dated December 20, 1898.

Application filed February 8, 1898. Serial No. 669,539. (No model.)

To all whom it may concern:

Be it known that we, CHARLES S. PARK and GEORGE B. PARK, citizens of the United States, residing at Greenfield, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Car-Couplers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to car-couplers in the class known as the "Janney" type; and the invention consists in the construction, combination, and arrangement of the various parts of the device, as shown, described, and particularly set forth in the drawings, the specification, and the claims herewith presented. In this device the coupler is locked with its fellow automatically in the act of antagonism, one of the couplers at the time being open and the other closed. In the arrangement of our coupler we employ two tumblers, both of which are pivoted, hung, or hinged in the draw-head of the car. The unlocking is accomplished through the agency of the chain attached to the upper of the two tumblers, which in the hands of the brakeman is drawn upward to release the tumblers and at the same time throw out the knuckle and the tongue, a part of it.

In the drawings illustrating our invention, Figure 1 is a plan or top view of one of the couplers. Fig. 2 is a side view broken away to show the tumblers and other parts related thereto. Fig. 3 is a horizontal section on line *y y*, partly broken away, (see Fig. 2,) looking upward. Fig. 4 is a sectional view, taken partly in a plane in line with the releasing-chain, looking outward. Fig. 5 is a sectional view, taken partly in a plane in line with releasing-chain, showing tumblers, &c. Fig. 6 is a detail showing the form of the upper tumbler.

Referring to the drawings, A is the draw-bar, to be attached to a car in the usual manner.

B is the draw-head, secured to the draw-bar, having a form quite similar to the general form of draw-heads of this system. To one of the ears of the draw-head is hinged

the knuckle C, provided centrally with a tongue D, integral therewith, adapted by its extension to engage one of the tumblers hinged and housed in said draw-head.

x is a tumbler loosely hinged or hung on a pin or shaft *a* as an axis, fixed horizontally in the draw-head, having the form as shown in Fig. 6 of the drawings. To this tumbler, on the longer side in its upper wall, is secured a chain *b*, which passes through the upper wall of the draw-head. This chain extends upward and is fixed to some convenient and easily-worked mechanical device attached to the car and within convenient reach of the brakeman. *y* is a second tumbler which swings upon a pin or shaft *c* which runs partly through the draw-head horizontally, it being duly keyed to prevent movement axially. This tumbler *y* is notched, as shown in the drawings, and has opposite points *d* and *e*, adapted to bear against the tongue D of the knuckle in the act of opening and closing the latter or holding it closed.

The function of the tumbler *x* is to fall upon the tumbler *y* and there rest, carrying said tumbler down with a movement about its axis, catching in its movement with the bearing *f* of the tongue of the knuckle and carrying said tongue against a projecting lug or stop E, fixed in the draw-head, in which position it and the knuckle are held firmly for the time.

It will be noticed that the axis of the tumbler *x* is above and to one side of the axis of the tumbler *y* and that the bearing-point of tumbler *x* rests against a shoulder *g* of tumbler *y*. A pressure exerted against tumbler *y* from below would not lift tumbler *x*, for the reason that such pressure could only act indirectly against the axis of said tumbler *x*, which latter, being rigid, would not yield. Tumbler *x*, however, when moved about its axis with an upward pull would act upon tumbler *y*, and the bearing-point *e* of the tumbler *y* would act upon the tongue D to open the knuckle, and thus open the coupler automatically. The chain attached to tumbler *x* being now dropped, the opposite coupler coming in would strike against the tongue D, throw it against the bearing *f* of the tumbler *y*, throw said tumbler back and shift the bearing *e* of

tumbler *y*, and thus allow tumbler *x* to fall upon said tumbler *y* and hold it to place with the coupler locked.

5 Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

10 1. The combination with the draw-head, of the two tumblers, formed with offsets and notches, to insure unity of action, as described, pivoted one above the other and out of line axially, the upper arranged to fall upon the lower, of the knuckle, hinged in the draw-head, having a tongue to engage the lower tumbler and indirectly the upper one, as and
15 for the purpose specified.

2. In combination, the draw-head, formed

with a suitable cavity to receive the tumblers, the tumblers described pivoted therein or hinged upon separate axes longitudinally with reference to the draw-bar, the knuckle 20 provided with a beveled tongue adapted to engage the lower of said tumblers the stop *E* and the releasing-chain all arranged as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses. 25

CHARLES S. PARK.
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Witnesses:

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