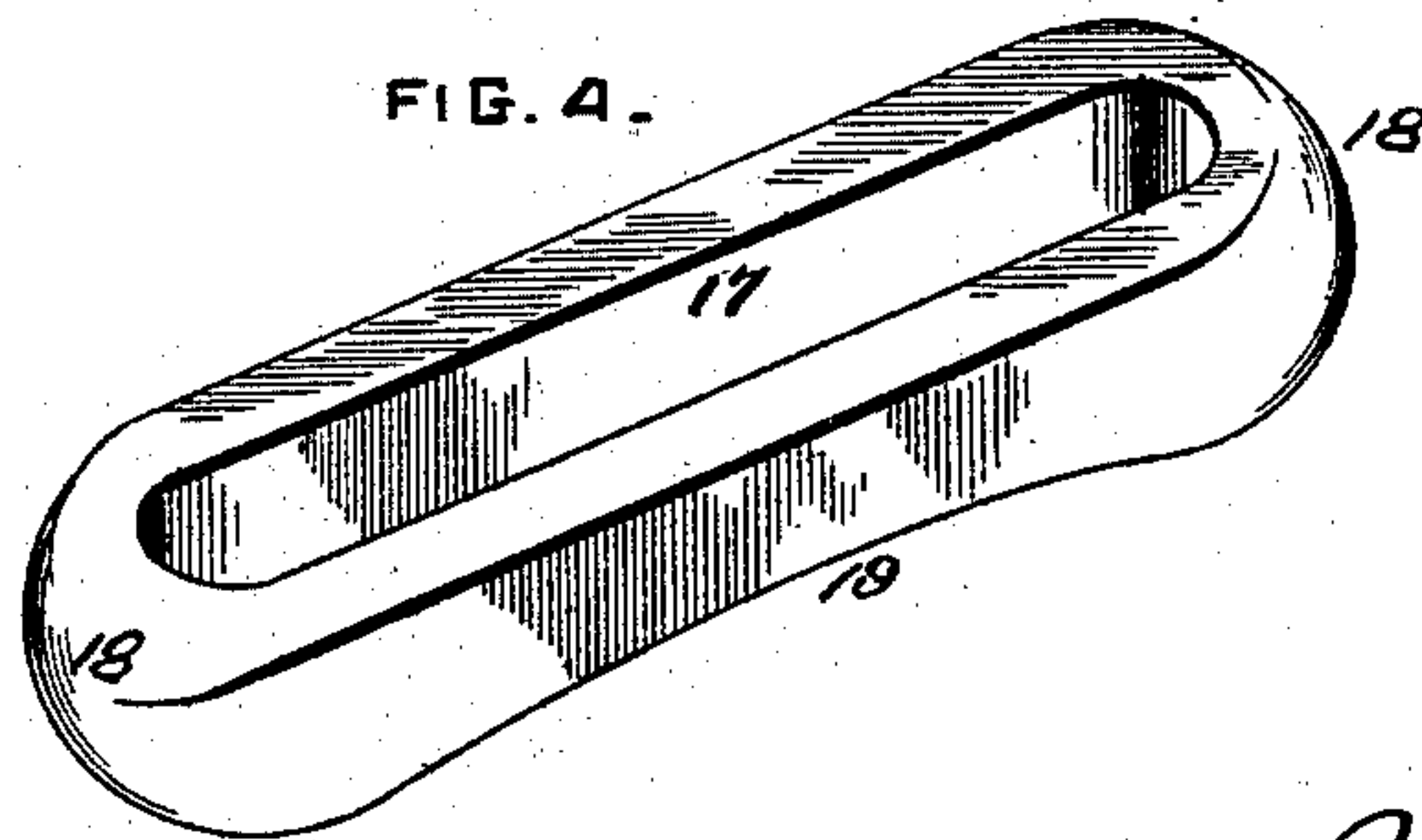
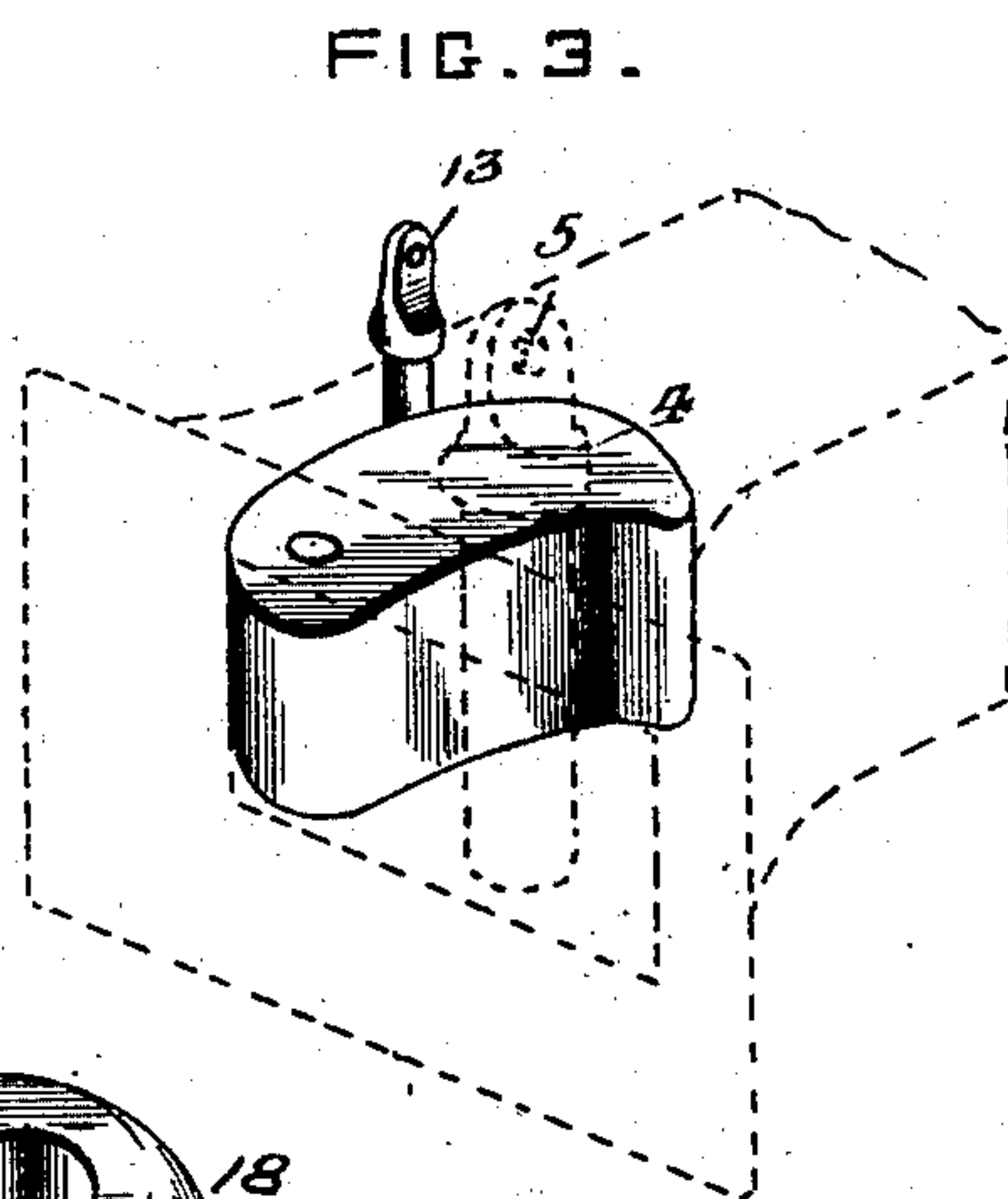
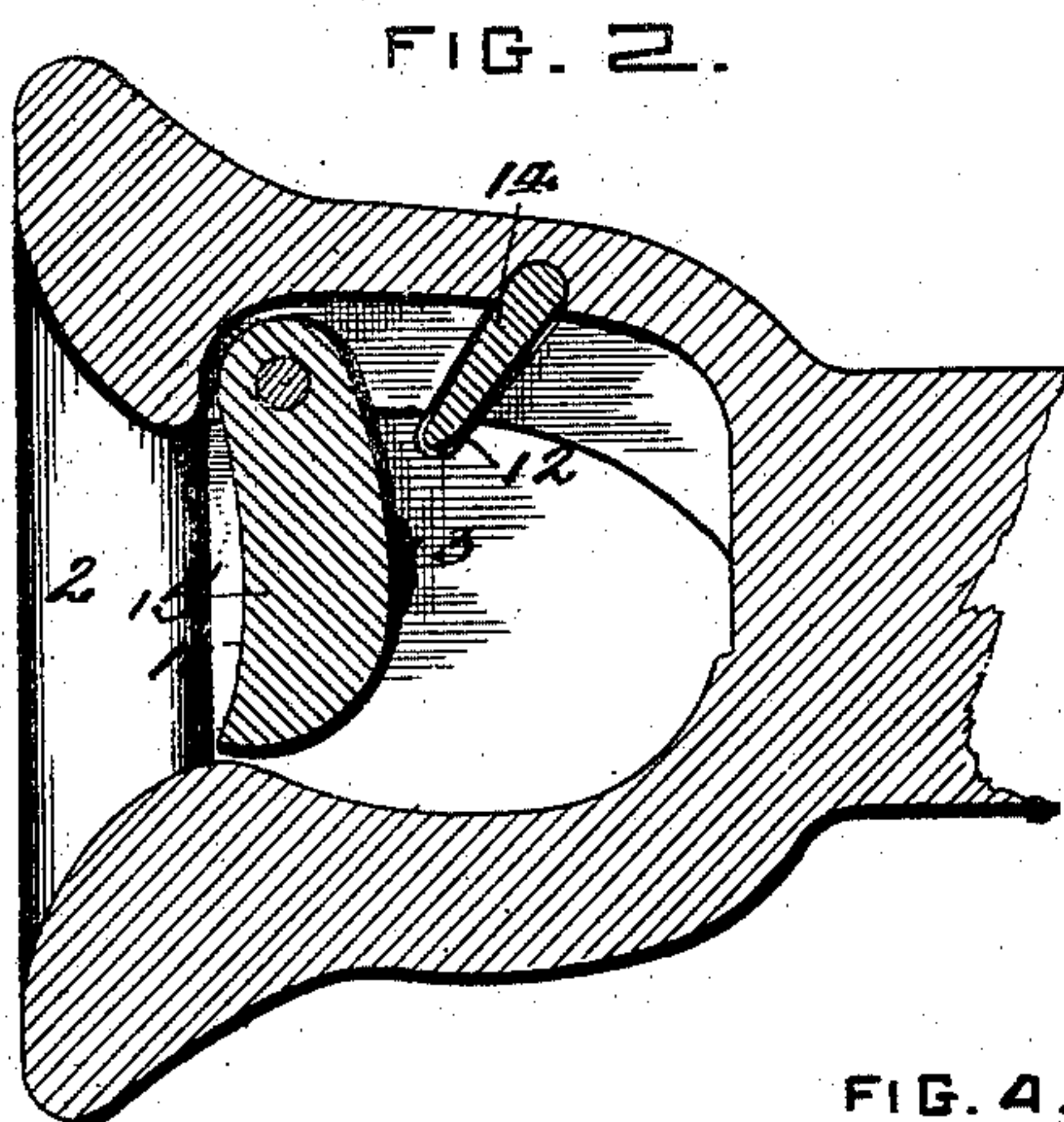
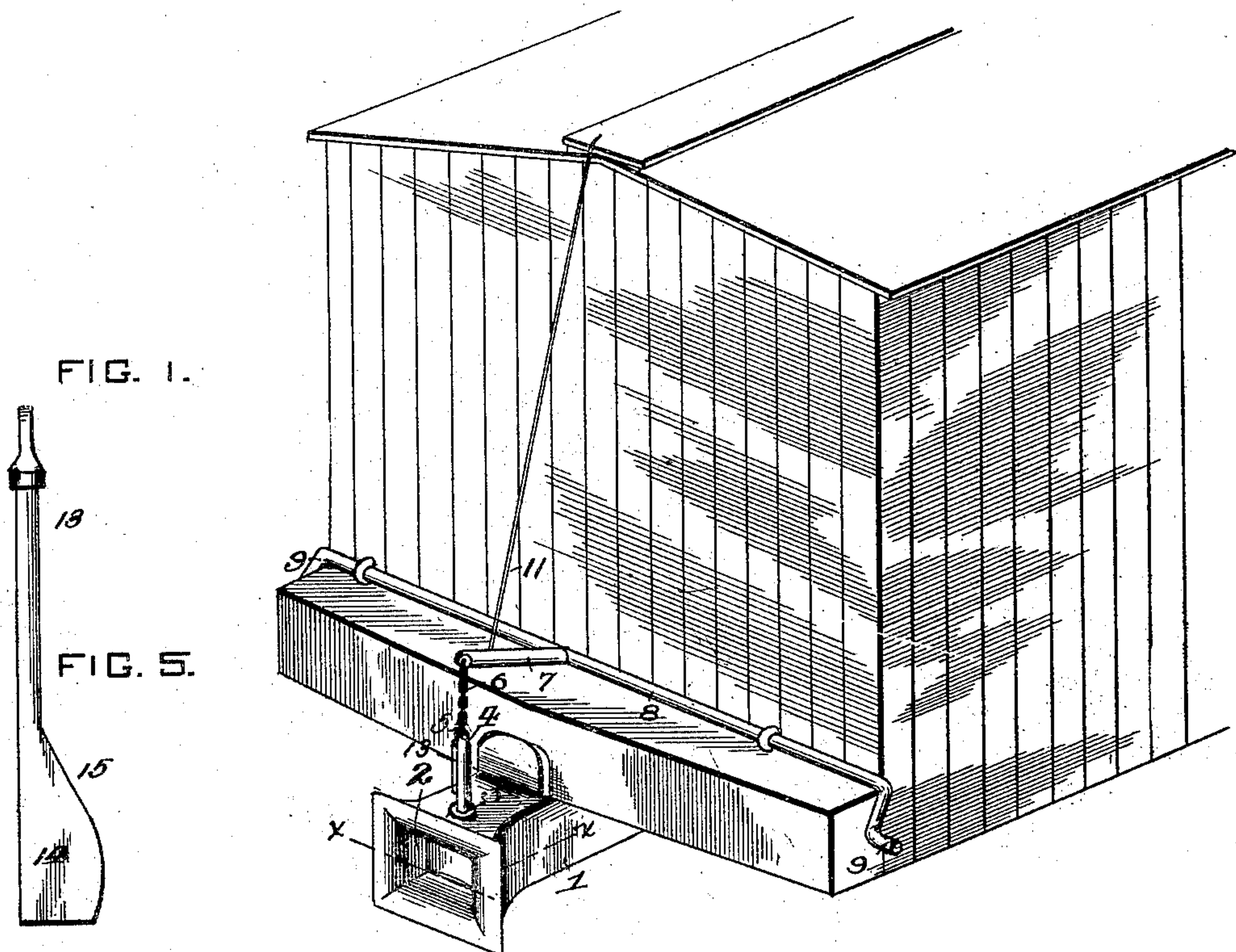


(No Model.)

B. BURGLIN.
CAR COUPLING.

No. 509,872.

Patented Dec. 5, 1893.



Witnesses
John D. Smith
Chas. S. Hyer.

Inventor
Bernhard Burglin.

By John Wedderburn
Attorney

UNITED STATES PATENT OFFICE.

BERNHARD BURGLIN, OF SAN ANTONIO, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 509,872, dated December 5, 1893.

Application filed September 12, 1893. Serial No. 485,360. (No model.)

To all whom it may concern:

Be it known that I, BERNHARD BURGLIN, a citizen of the United States, and a resident of San Antonio, in the county of Bexar and State of Texas, have invented certain new and useful Improvements in Car-Couplings; and I 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.

This invention relates to car-couplings, and has for its object to facilitate the coupling of cars without danger to life and limb of the trainmen or railroad employes by providing an automatic mechanism which may be partially operated from the side or top of the car, to which the coupling is applied, to place the latter in position for connection.

The invention consists of the construction and arrangement of the several parts which will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view of a portion of the end of a car, showing the improved coupling applied thereto. Fig. 2 is a horizontal sectional view on the line $x-x$ Fig. 1. Fig. 3 is a skeleton perspective view showing the interior mechanism in full line, and the draw-head in dotted lines. Fig. 4 is a detail perspective view of a link employed in connection with the coupling. Fig. 5 is a pin provided with a cam for actuating the gate or door.

Similar numerals of reference are employed to indicate corresponding parts in the several figures.

Referring to the drawings, the numeral 1 designates the draw-head of the ordinary form of construction, having a link slot 2, and pin openings 3, to receive a pin 4 having a head 5, with an eye therethrough, and attached by a chain 6 to a suitable crank-arm 7, carried by a shaft or rod 8 secured to the end of the car in proximity to the draw-head, and supplied with handles 9 at the opposite ends, which may be readily engaged at opposite sides of the car. A chain, or other device, 11, may be also attached to the said crank-arm, and extended upwardly to the top from said point, and the device is thereby made especially useful in connection with what are known as "box cars." In the said draw-head

is formed another opening 12, which is broadened or increased in dimension in the form of a slot in the lower part of said draw-head, to adjustably receive a pin 13, having a lower cam 14 with an upper inclined edge 15. The cam of the said pin 13, is comparatively thin, but extends a considerable distance in width, and pivotally mounted in the said draw-head is a gate or door 15', which is formed with a front concave face 16, and a rear curved surface which engages the said cam during the operation of coupling. The said gate or door in the act of coupling, closes over the link opening in the draw-head, and when the link strikes the same, it forces the said gate or door backwardly into the draw-head, and, acting on the upper inclined edge of the cam on the pin 13, forces the said cam downwardly and draws the said pin 13 to its seat. The movement of the said pin 13 is imparted to the coupling pin 4 by means of a chain or other connection, secured to the upper end of the said pin 13, and to the crank-arm heretofore set forth which draws the said arm downwardly, and allows the pin 4 to drop by gravity through the link and thereby automatically completes the coupling.

As shown in Fig. 4, the link 17 is of substantially ordinary form with the exception that it is thickened at its opposite ends, as at 18, and the opposite ends thereof are concaved as at 19, in order to retain the pin in its horizontal position, when carried by one draw-head, and coupling with another. This operation of holding the link in a horizontal position is also facilitated by making the link opening in the draw-head extend slightly down below the mouth of the said opening, and allow the thickened portions at the opposite ends of the link to extend downward into the lower part of said link opening, and balance the said link.

The device as a whole, will be found to be exceptionally positive and safe in its operation, either in uncoupling or in coupling, and can be readily applied to draw-heads already in use, without a great amount of extra labor or manipulation or change in construction of the ordinary form of head.

Having thus described the invention, what is claimed as new is—

1. In a car-coupling, the combination of a

draw-head, having a gate or door, pivotally mounted therein; a coupling-pin, adapted to be raised by suitable mechanism; an extra pin, also proportionately arranged with the said coupling-pin, and having a lower cam, adapted to contact with the said gate or door, to close the latter over the link opening of the draw-head; and a link; substantially as described.

10 2. In a car-coupling, the combination of a draw-head, having a link opening therein; a coupling pin; a link; a door, pivotally mounted in said draw-head, and adapted to close over the said opening; an extra pin, having
15 a lower cam to operate in conjunction to the gate or door; a rotatable shaft or rod, secured against the end of the car; a crank-arm, attached thereto; and means for connecting the

said pins with the crank-arm; substantially as described.

20 3. In a car-coupling, the combination of a draw-head, having a link opening therein, which is slightly depressed below the level of the lower part of the mouth of the same; and a link, having its opposite ends increased in thickness, and its long side concaved, to thereby hold the said link in horizontal position; substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

B. BURGLIN.

Witnesses:

EDWARD HADY,
ROBERT STRACH.