

(No Model.)

R. JONES.
CAR COUPLING.

No. 354,553.

Patented Dec. 21, 1886.

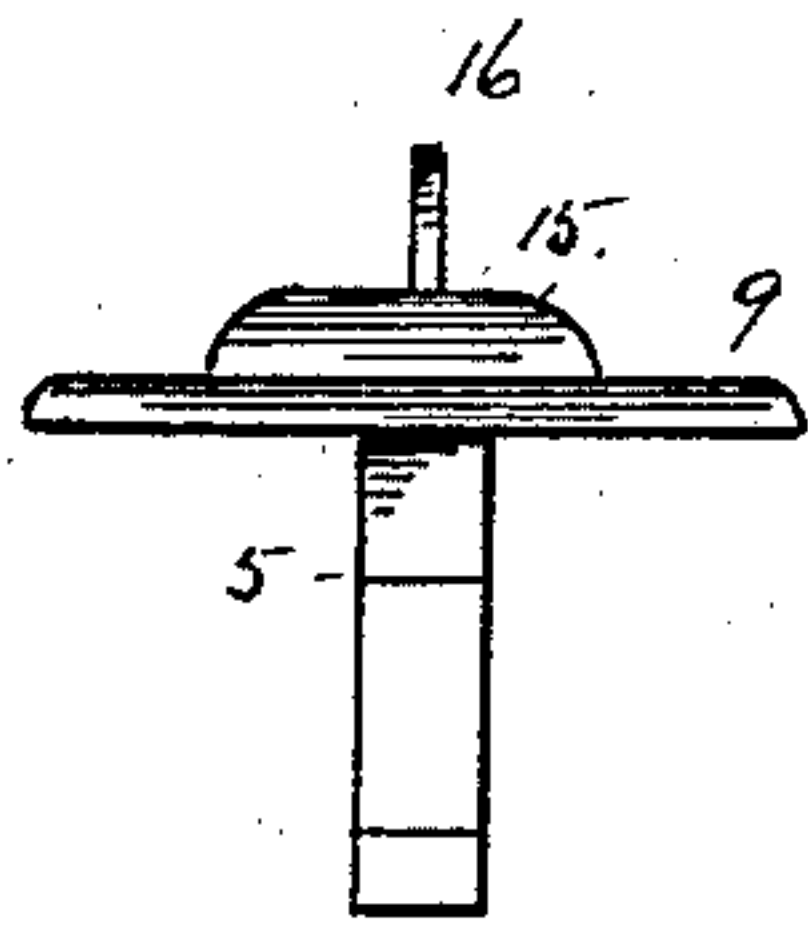


FIG. 4.

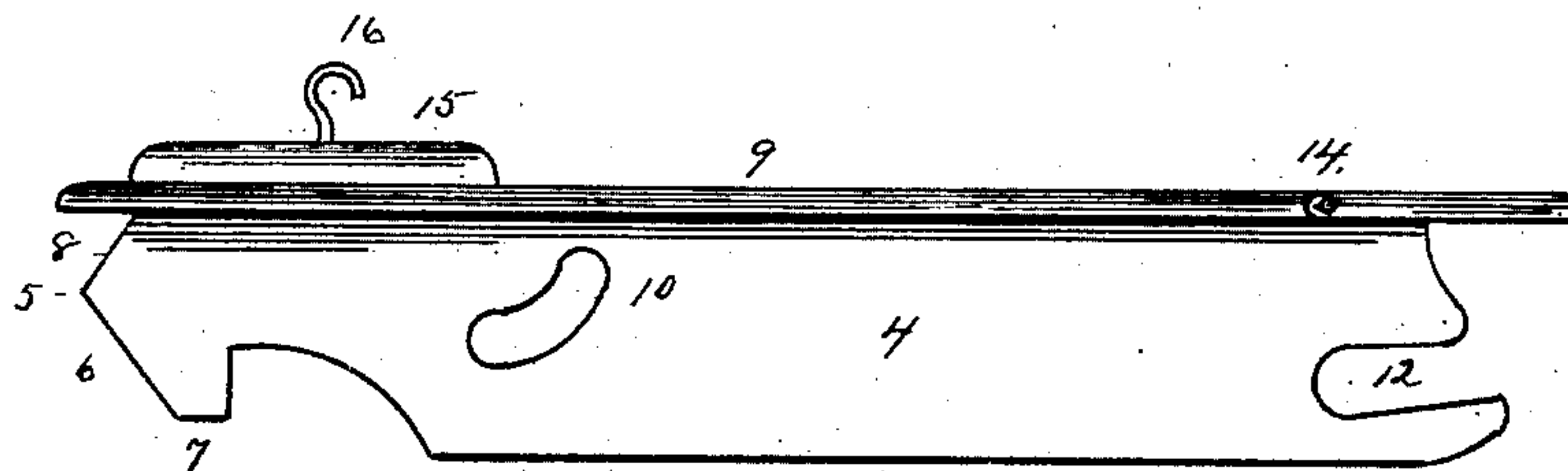


FIG. 3.

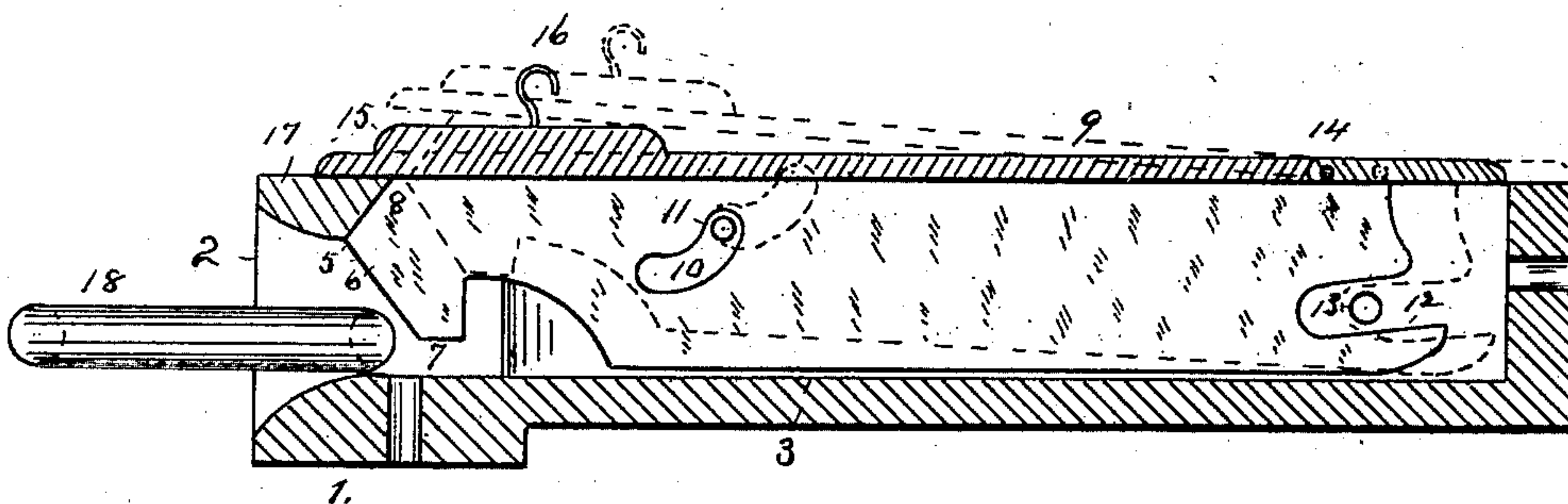


FIG. 2.

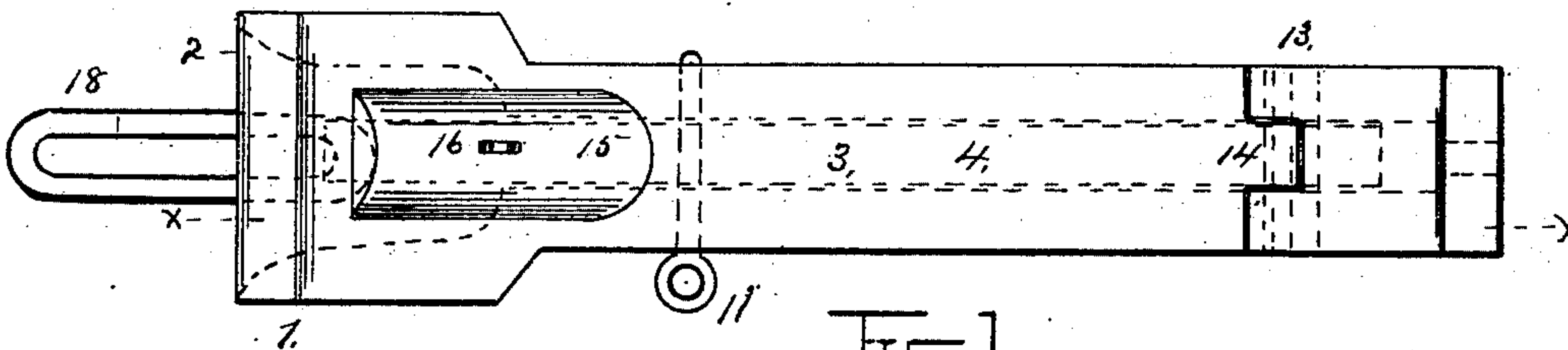


FIG. 1.

WITNESSES:

Pienpont Bartow,
Edwin A. Kelley

INVENTOR.

Richard Jones

BY

Edwin A. Kelley
ATTORNEYS.

UNITED STATES PATENT OFFICE.

RICHARD JONES, OF UTICA, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 354,553, dated December 21, 1886.

Application filed September 25, 1886. Serial No. 214,562. (No model.)

To all whom it may concern:

Be it known that I, RICHARD JONES, of Utica, in the county of Oneida and State of New York, have invented certain new and useful
5 Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to
10 reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to an automatic car-coupling; and it consists in the mechanism hereinafter pointed out and claimed.

Figure 1 represents a top view of my improved car-coupler. Fig. 2 represents a vertical section on line *xx*, Fig. 1. Fig. 3 represents a side view of the automatic latch,
20 forming a coupling-pin. Fig. 4 is an end view of the same.

In the accompanying drawings similar figures refer to corresponding parts throughout
25 the several views.

In the accompanying drawings, 1 represents the draw-head, which is attached to the car in any of the well-known ways for attaching the same.

30 2 represents the ordinary mouth or opening in the draw-head, having the usual flaring mouth or opening for receiving the link.

In constructing my improved draw-head I provide recess or groove 3, (shown in Fig. 2,) the groove being open at the top with parallel
35 vertical walls. (Indicated in dotted lines in Fig. 1.) This groove is surrounded on three sides by the walls of the draw-head. Into this recess is fitted a gravity-latch, 4, Fig. 3, on
40 the front end of which are two inclines, forming obtuse angle 5. The lower incline, 6, recedes toward catch 7, and the upper incline, 8, recedes from the angle toward lid 9, which is formed by projecting flanges on the latch,
45 which flanges are substantially the same width as the draw-head, and is constructed and formed as a protection to the recess or groove, for preventing rain or snow from lodging in the groove.

50 10 represents a semicircular opening in the latch, through which opening pin 11 passes,

the same passing through the walls of the draw-head, and is provided for limiting the upward and downward movement of the latch. In the rear of the latch I provide slotted recess 12,
55 for receiving and engaging pin 13, which serves the purpose of limiting the horizontal movement of the latch, and renders the same removable while it is retained in position when in the groove and prevented from jarring out. 60

14 represents a joint in the flanges, which permits the up and down movement of the latch at its front end, and furnishes a protection for the recess.

15 represents a strengthening-rib on the
65 latch.

16 represents a hook, which engages or in which a cord can be placed for operating the coupling from the top of the coach.

For retaining the catch in the position shown
70 in Fig. 2 when the link is back of projecting catch 7, I provide incline shoulder 17 in the draw-head, which engages incline 8 on the catch, and thereby retains the catch in fixed position when the cars are coupled, furnishing
75 a safe and reliable coupling. The draw-head and catch being in the position shown in Fig. 2, the cars are coupled by driving drag-link 18 backward, striking incline 6 on the latch. The latter is thereby moved backward, and
80 the front end is simultaneously moved upward by the circular slot 10, acting on pin 11, until the drag-link is passed to the rear of projection 7 of the catch, when the catch is free to move forward by gravity, and the front end
85 drops down, so that incline 8 on the catch engages incline 17 on the draw-head, thereby holding the catch in a fixed position, forming a substantial and reliable coupling by the horizontal and vertical circular movement of
90 the front end of the catch by engaging the incline in the drawings, substantially as set forth.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a draw-head having
95 a longitudinal recess, of the reciprocating catch having a circular slot working on a pin, the two inclines on the front of the catch, and the incline in the draw-head for engaging the incline on the front of the catch, substantially
100 as set forth, for the purposes stated.

2. The draw-head having a longitudinal

groove in the upper surface, in combination
with the reciprocating catch fitted in the
groove, the catch having projecting flanges,
the circular slot and pin passing through the
5 slot, the slot and pin at the rear of the catch,
the two inclines at the front of the catch, and
the incline in the draw-head for engaging the
upper incline on the catch, arranged substan-
tially as set forth, for the purposes stated.

In witness whereof I have affixed my signature in presence of two witnesses.

RICHARD JONES.

Witnesses:

EDWIN H. RISLEY,

THOMAS W. OWENS.