

No. 700,262.

Patented May 20, 1902.

J. TIMMS.
CAR COUPLING.

(Application filed June 8, 1901.)

(No Model.)

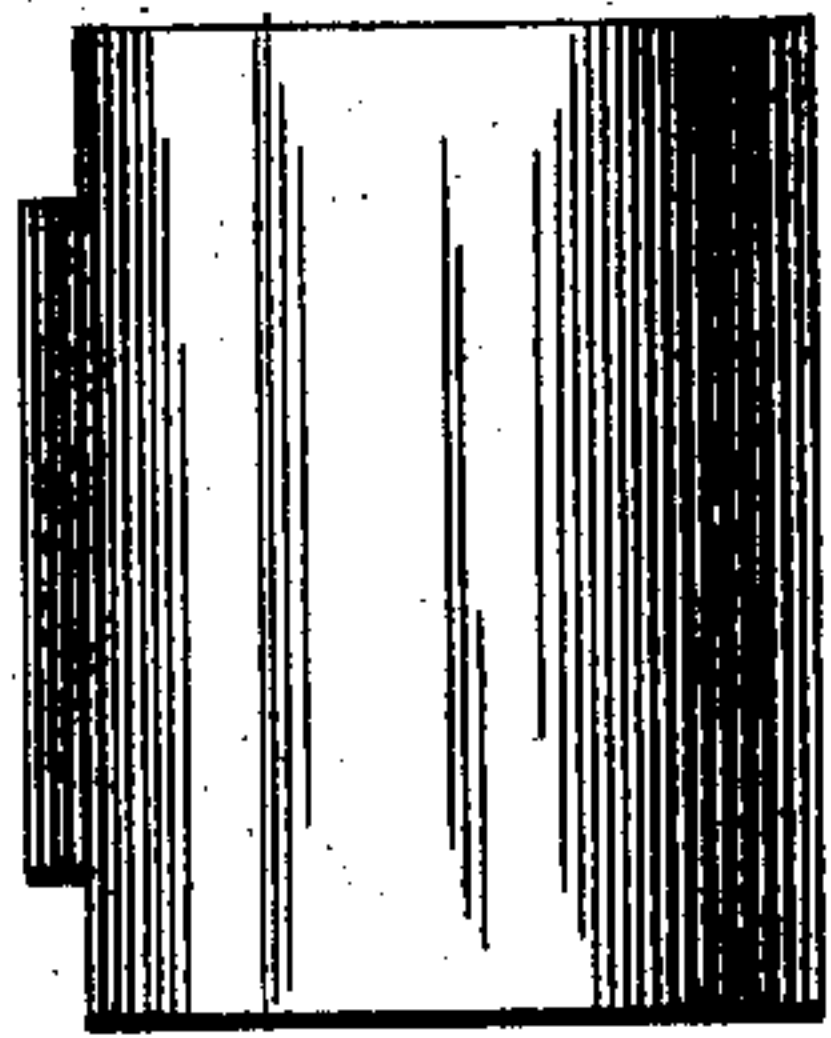
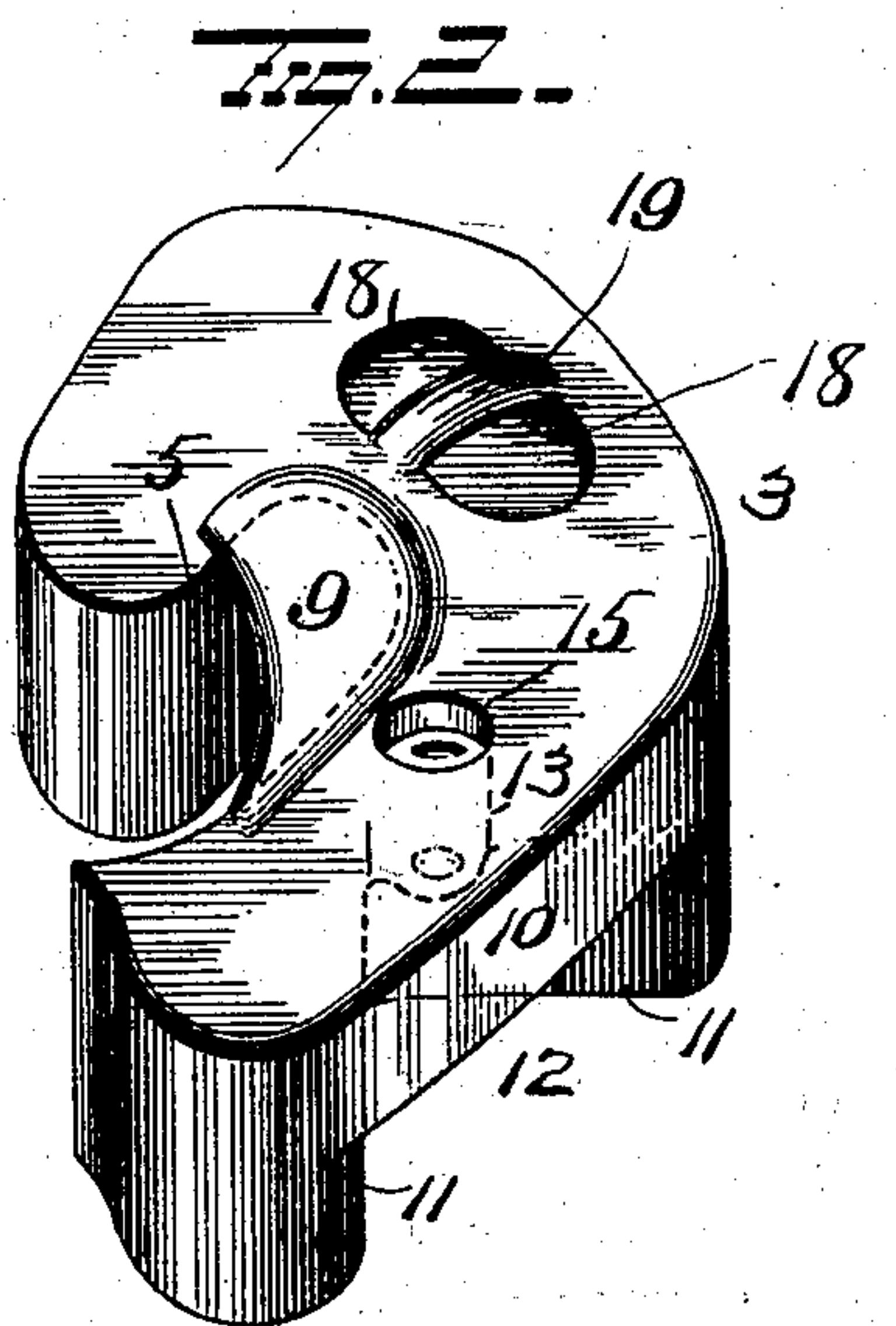
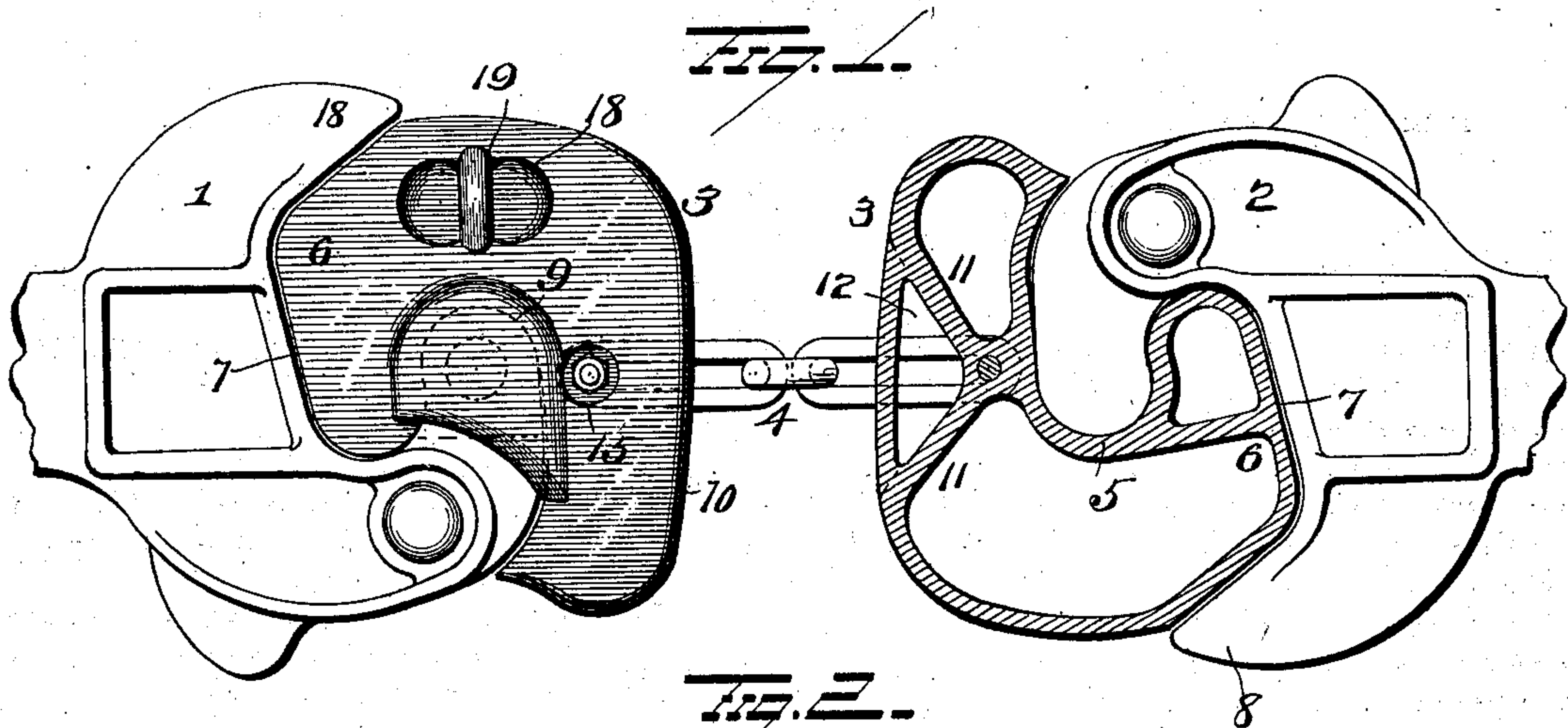


FIG. 4.

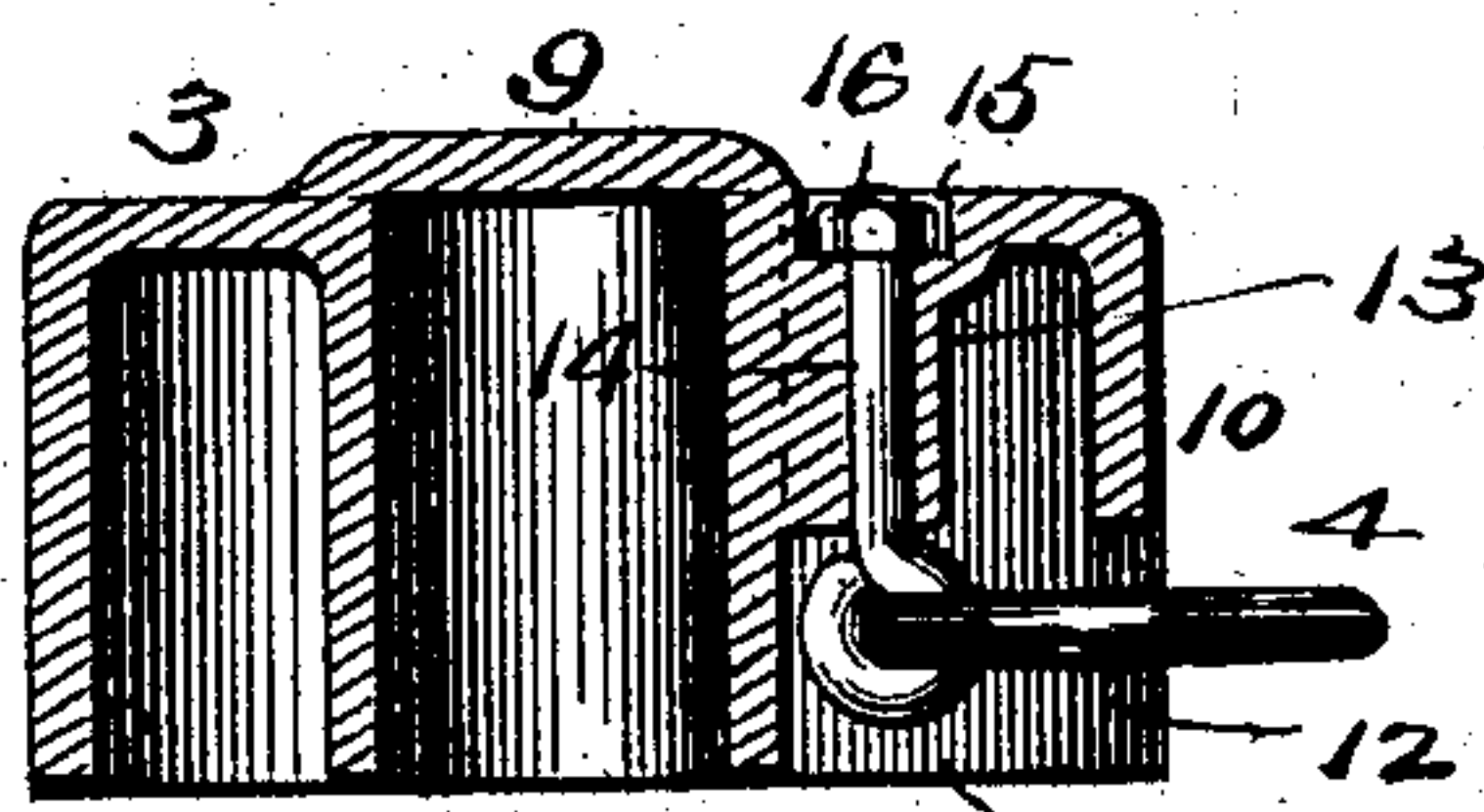


FIG. 3.

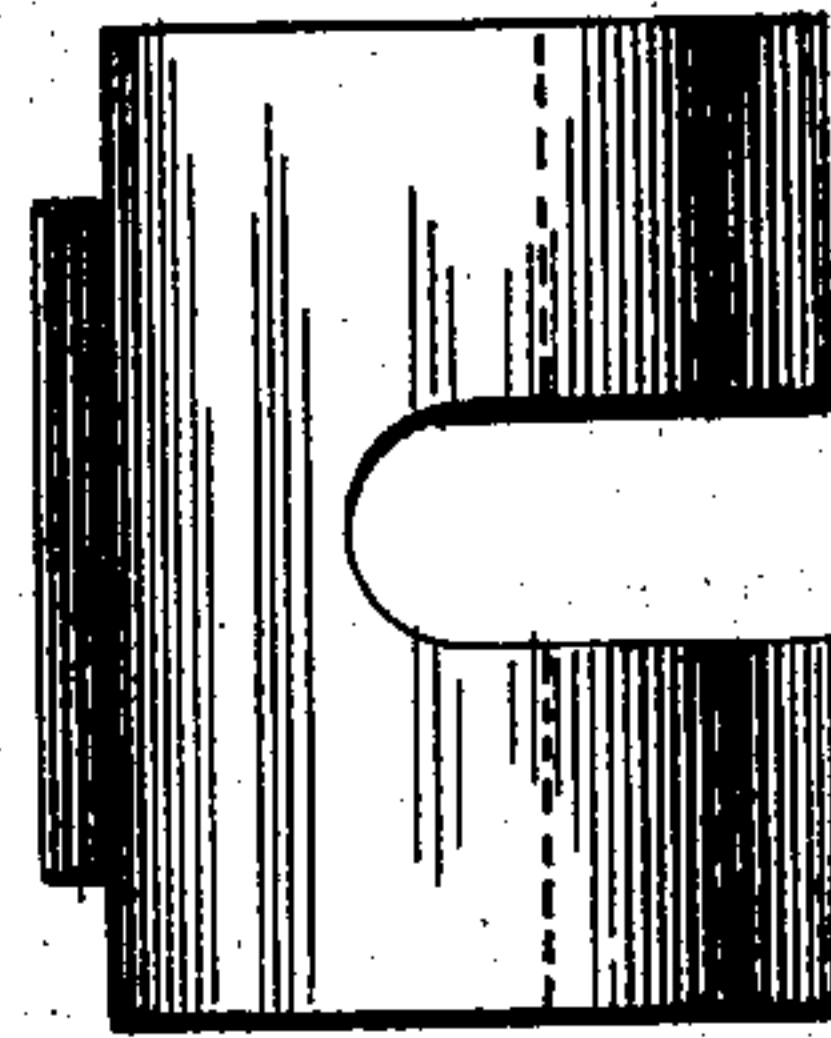


FIG. 5.

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JAMES TIMMS, OF COLUMBUS, OHIO, ASSIGNOR TO BUCKEYE MALLEABLE IRON AND COUPLER COMPANY, OF COLUMBUS, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 700,262, dated May 20, 1902.

Application filed June 8, 1901. Serial No. 63,793. (No model.)

To all whom it may concern:

Be it known that I, JAMES TIMMS, of Columbus, in the county of Franklin and State of Ohio, 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.

My invention relates to an improvement in car-couplings, and more particularly to means for connecting two draw-heads of automatic car-couplings to enable the cars to which the couplings are applied to run on sharp or short curves, the object of the invention being to provide connecting devices of the character stated by means of which the draw-heads on two cars can be connected together in such manner as to enable them to be run forwardly or backwardly on a short curve without liability of the end sills of the respective cars abutting against each other.

A further object is to provide simple and efficient devices adapted to be removably attached to the draw-heads of automatic couplings for connecting the coupling-heads of two cars in such manner as to enable the cars to be run on short curves, such as found in depot-yards, said devices being constructed and adapted to project sufficiently beyond the coupling-heads to constitute buffers and permit cars to be backed on a short curve.

A further object is to provide means whereby two automatic couplings can be operatively connected together while the cars to which said couplings are attached are standing on a short curve.

A further object is to avoid the necessity of slotting the knuckle of an automatic coupling for the reception of a link and of perforating the knuckle for the passage of a pin to connect said link with the head, as has heretofore been the custom in connecting two automatic couplings in depot-yards, where the cars are run on curves too short to enable the operation of the automatic couplings as such.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of

parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view, partly in section, showing the application of my invention for connecting two automatic couplings. Fig. 2 is a perspective view of one of the hoods. Fig. 3 is a sectional view of one of the hoods. Figs. 4 and 5 are views of knuckles.

1 2 represent the heads of two automatic couplings, the knuckles of which may be made solid, omitting the link-slot and pin-holes, as shown in Fig. 4, with which these knuckles are usually provided for a purpose which is well known, my improvements hereinafter described in detail obviating the necessity for these slots and holes; but said improvements are applicable to coupling-heads now in use in which the said slots and holes are provided, as shown in Fig. 5.

In carrying my invention into effect I employ two hoods, blocks, or auxiliary heads 3 3, united by means of a flexible connection, preferably a chain 4. The hoods, blocks, or auxiliary heads are identical in construction, and a detail description of one will suffice for both.

The hood or block 3 consists of a casting to conform to the contour of the coupling-head, having a hook-shaped portion 5 to conform to the shape of the knuckle and a portion 6 to bear against the front face 7 of the coupling-head and the inner face 8 of the horn. An integral cap 9 is disposed over the opening in the hook-shaped portions and rests upon the knuckle to properly support the hood or block. The hood or block is constructed to project forwardly beyond the knuckle and is provided with a front end wall 10, disposed approximately at right angles to the longitudinal axis of the coupling-head, the front wall 10 of one hood or block constituting an abutment for the front wall 10 of the other hood or block when one car is being backed against another. The hoods or blocks thus form buffing-blocks between the two coupling-heads, and they project a sufficient distance beyond the front ends of the heads to keep the cars separated such a distance as to permit them to run on a short

curve without liability of the end sills coming together, and thus endangering the operating-levers and their connections, as has heretofore been experienced where two coupling-heads have been connected by links attached to the knuckles.

The front wall 10 of each hood or block is cut away at its lower portion, and the casting is made with divergent webs 11 to form a V-shaped or flaring recess 12. At the apex of the recess 12 the casting is made with an enlargement 13, having a vertical hole for the passage of a pin 14, and the top of the casting is countersunk, as at 15, for the reception of a suitable nut 16, screwed on the upper end of the pin 14. To the lower ends of the pins 14 in the respective hoods the ends of the chain 4 are attached, as shown in Figs. 1 and 3, said chain constituting a flexible connection between the two hoods or blocks. By providing the hoods or blocks with the flaring recesses 12 and attaching the chain at the apices of these recesses sufficient lateral play of said chain will be permitted to allow the cars to round a very short curve without causing the end sills of the car or even of the buffing blocks or hoods to abut when one car is being drawn by another.

Each hood or block is made in its top with a depression 18, over which a curved bar 19 projects to form means by which the devices can be readily handled.

Various slight changes might be made in the details of construction of my invention without departing from the spirit thereof or limiting its scope, and hence I do not wish to limit myself to the precise details herein set forth.

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

1. A connecting device for car-couplings comprising buffing-blocks adapted for removable attachment to the coupling-heads and a flexible device connecting said buffing-blocks, and permitting the front ends of said blocks to bear against each other.

2. A connecting device for car-couplings, comprising hoods to be removably connected with the knuckles of the couplings, and a flexible device connecting said hoods.

3. A connecting device for car-couplings comprising hoods adapted to be removably attached to the knuckles of the couplings,

said hoods constructed to project forwardly beyond the knuckles and constitute buffers, and a connection between said hoods.

4. A connecting device for car-couplings, comprising two hoods adapted to be mounted on the couplings, one hood constituting an abutment for the other, and a device attached at its respective ends to said heads.

5. A connecting device for car-couplings, comprising two hoods adapted to be removably supported by the couplings and project beyond the same to form buffing-blocks, each hood having a flaring recess in its forward end and a connector, attached at its respective ends at the bases of the flaring recesses in the respective hoods.

6. A connecting device for car-couplings, comprising two blocks constructed to conform to the contour of the front ends of the draw-heads, each block having a portion projecting beyond the knuckle and having a buffing-face, and a device connecting said blocks.

7. A connecting device for car-couplings, comprising buffing-blocks constructed to be removably attached to the knuckles of the draw-heads and project beyond the same and a device connecting said buffing-blocks in a manner to permit them to come together.

8. A connecting device for car-couplings comprising auxiliary heads to be removably connected with the couplings, said heads having outer buffing-faces and means connecting said heads.

9. A connecting device for car-couplings comprising auxiliary heads adapted to be removably secured to the pivoted knuckles of the couplings, and provided with buffing-faces and means connecting said heads.

10. A connecting device for car-couplings comprising removable heads each supported by a coupling, each head having a part approximately filling the space between the inner face of the knuckle and the adjacent surface of the coupling, and also provided with a buffing-face in advance of the knuckle, and means connecting said removable heads.

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

JAMES TIMMS.

Witnesses:

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