W. A. DODGE.

HOSE COUPLING.

APPLICATION FILED NOV. 11, 1914.

1,152,714.

Patented Sept. 7, 1915.

2 SHEETS—SHEET 1.

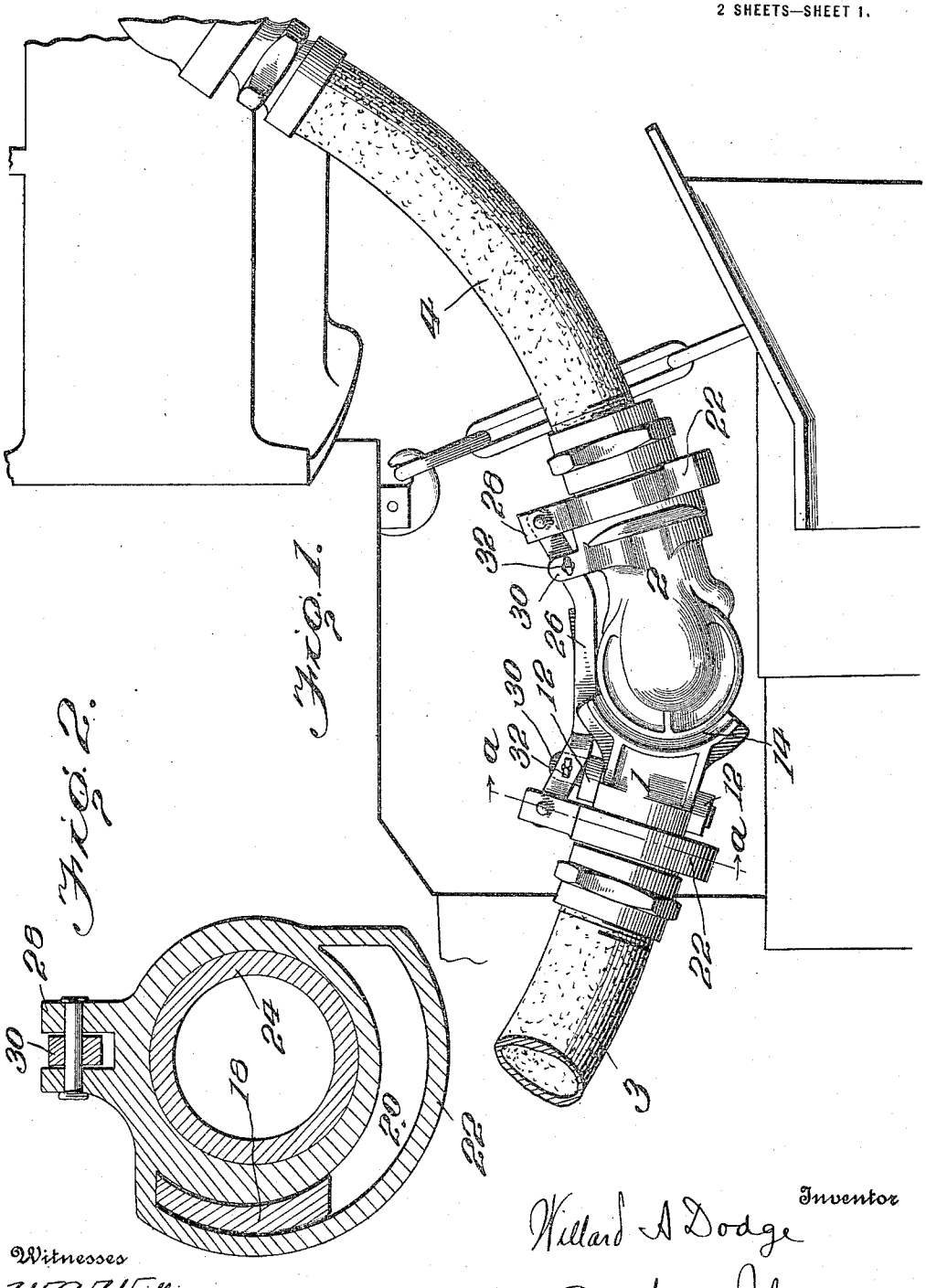


Fig. 1.

Fig. 2.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

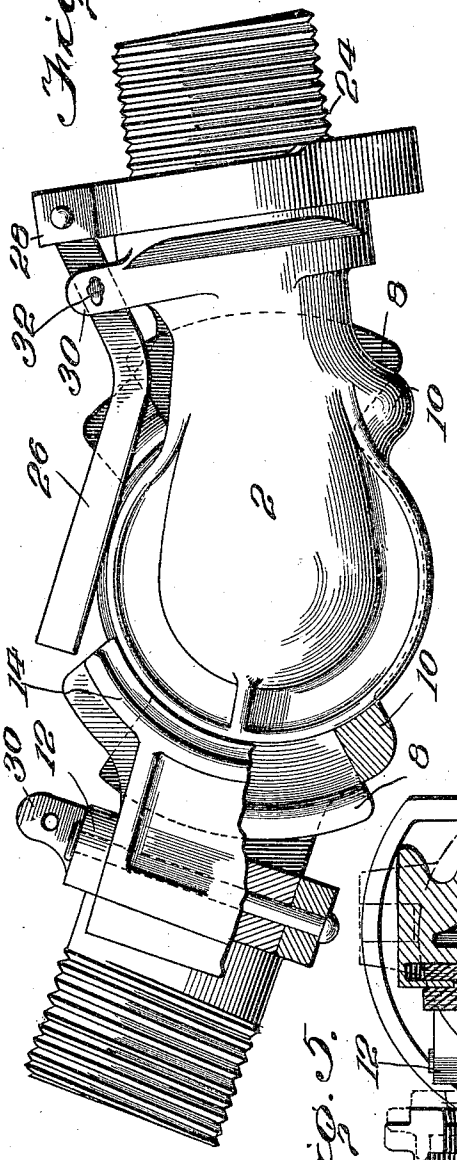


Fig. 4.

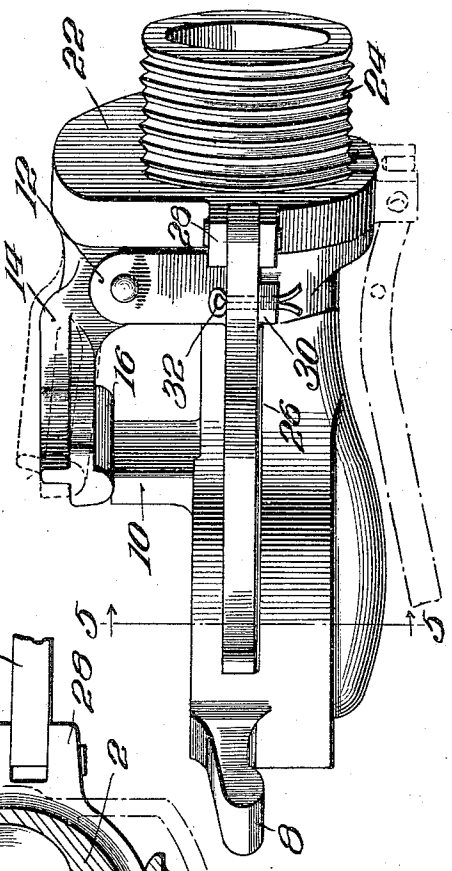
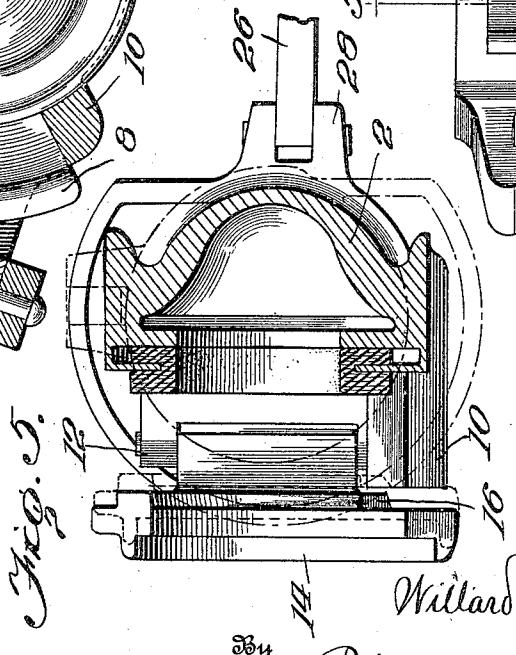


Fig. 5.



Witnesses

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HOSE-COUPLING.

1,152,714. Specification of Letters Patent. Patented Sept. 7, 1915.

Application filed November 11, 1914. Serial No. 871,577.

To all whom it may concern:

Be it known that I, WILLARD A. DODGE, a citizen of the United States, and a resident of Hornell, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Hose-Couplings, of which the following is a specification.

This invention relates to that class of hose couplings particularly designed for use on railway trains, although it will be obvious that the couplings may be used elsewhere.

The invention consists in certain novel features and constructions, and in their arrangement and combination of parts, as more fully and particularly pointed out hereinafter and then definitely claimed.

In the accompanying drawings: Figure 1 is a side elevation of a hose coupling made in accordance with my invention; Fig. 2 is a section on the line *a—a* of Fig. 1; Fig. 3 is a side elevation on a large scale, parts being broken away; Fig. 4 is a perspective view of one of the parts detached; and Fig. 5 is a vertical central section.

Referring now to the details of the drawings by numerals, the coupling comprises, as usual, a pair of complemental heads 1 and 2 which are adapted to fit together and connect the two sections of hose 3 and 4. These heads 1 and 2 are substantially duplicates and therefore a description of one will suffice for both. As viewed in Fig. 4, each head has a segmental projection 8 on one end and a lug 10 projecting at right angles to the face of the head. Each head also has a pair of lugs 12 within which is pivoted a locking member 14 provided at one end with a segmental rib 16. One end of this locking member 14 is adapted to co-act with the lug 10 when it is in locking position. The other end of the locking member is provided with a curved flange 18, see Fig. 2. This flange is adapted to fit within a cam groove 20 formed in a collar 22 rotatably mounted upon the stem 24 of the head. As seen in Fig. 2 the shape of this cam groove 20 is such that when the collar 22 is in the position shown in full lines in Fig. 4, the curved flange is in the position shown in Fig. 2 whereby the locking member 14 will be held in the position shown in full lines in Fig. 4. However, when the collar 22 is rotated so that the curved flange 18 will occupy the opposite end of the cam groove 20, the locking member 14 may be moved to the position shown in dotted lines in Fig. 4. In order to hold the collar 22 in the position shown in Fig. 4, I provide a lever 26 which is pivotally supported by a pair of lugs 28 projecting from the collar 22. This lever 26 normally drops over a lug 30 projecting from part of the head. The coupling is intended to be used in the position shown in Fig. 1 and the levers 26 will normally be held by gravity in their proper position, yet, if desired, a cotter 32 may be employed to pass through perforations in the lug 30 and the lever 26, so that said lever cannot shake out of position.

When it is desired to couple the two heads together, the two levers 26 are thrown out of engagement with the lugs 30 and the levers are moved to rotate the collars 22 until the flange 18 occupies the larger part of the cam grooves 20. Then the two parts of the coupling may be moved together until the segmental flange 8 of one head fits in the curved flange 16 of the locking member 14 of the companion head. When the parts are in this position, the levers are moved to rotate the two collars 22 in the opposite direction until the locking members 14 are forced in the position shown in full lines in Fig. 4. Then the levers 26 may be dropped over the lugs 30 and the couplings will be securely held together.

It is obvious that changes may be made in the form and construction of the parts without departing from the spirit of my invention, the scope of which is set forth by the appended claims.

What I claim as my invention is:

1. In a hose coupling, the combination of a pair of heads each having a segmental projection at one end and a locking member at the other end, the segmental projection of one head adapted to co-act with the locking member of the other head, each locking member being pivoted to its head and having a free end, and collars having cam shaped parts adapted to co-act with the free ends of said locking members and hold them in engagement with said segmental projections, substantially as described.

2. In a hose coupling, the combination of a pair of heads each having a segmental projection at one end and a locking member at the other end, the segmental projection of one head adapted to co-act with the lock-

ing member of the other head, each locking member being pivoted to its head and having a free end, and collars having cam shaped grooves into which the free ends of said locking members project whereby said grooved collars hold said locking members in engagement with said segmental projections, substantially as described.

3. In a hose coupling, the combination of a pair of heads each having a segmental projection at one end and a locking member at the other end, the segmental projection of one head adapted to coact with the locking member of the other head, collars having cam shaped grooves adapted to coact with said locking members and hold them in locking engagement with said segmental projections, and levers for holding said collars in position, substantially as described.

4. In a hose coupling, the combination of a pair of heads each having a segmental projection at one end and a locking member at the other end, the segmental projection of one head adapted to coact with the locking member of the other head, collars having cam shaped grooves adapted to coact with said locking members and control the position of the same, and levers pivoted to said collars and arranged to hold said collars in locking position, substantially as described.

5. In a hose coupling, the combination of a pair of heads each having a segmental projection at one end and a locking member pivotally supported by the other end, the segmental projection of one head adapted to coact with the locking member of the other head, collars having cam shaped grooves adapted to coact with said locking members and control the position of the same, and levers pivotally connected to said collars and adapted to hold the same in position, substantially as described.

6. In a hose coupling, the combination of a pair of heads each having a segmental projection at one end and lugs near the other end, locking members pivotally supported by said lugs and having segmental ribs at one end to coact with the aforesaid segmental projections and curved flanges at their other ends, collars having cam shaped grooves adapted to receive said curved flanges, lugs projecting from the heads, and levers pivotally connected to said collars and adapted to coact with the said lugs to hold the collars in position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLARD A. DODGE.

Witnesses:
HARRY L. ALLEN,
FRANCES O'CONNOR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."