No. 780,192. PATENTED JAN. 17, 1905.

E. S. JONES.

CAR COUPLING.

APPLICATION FILED MAY 19, 1904.

FIG. 1.

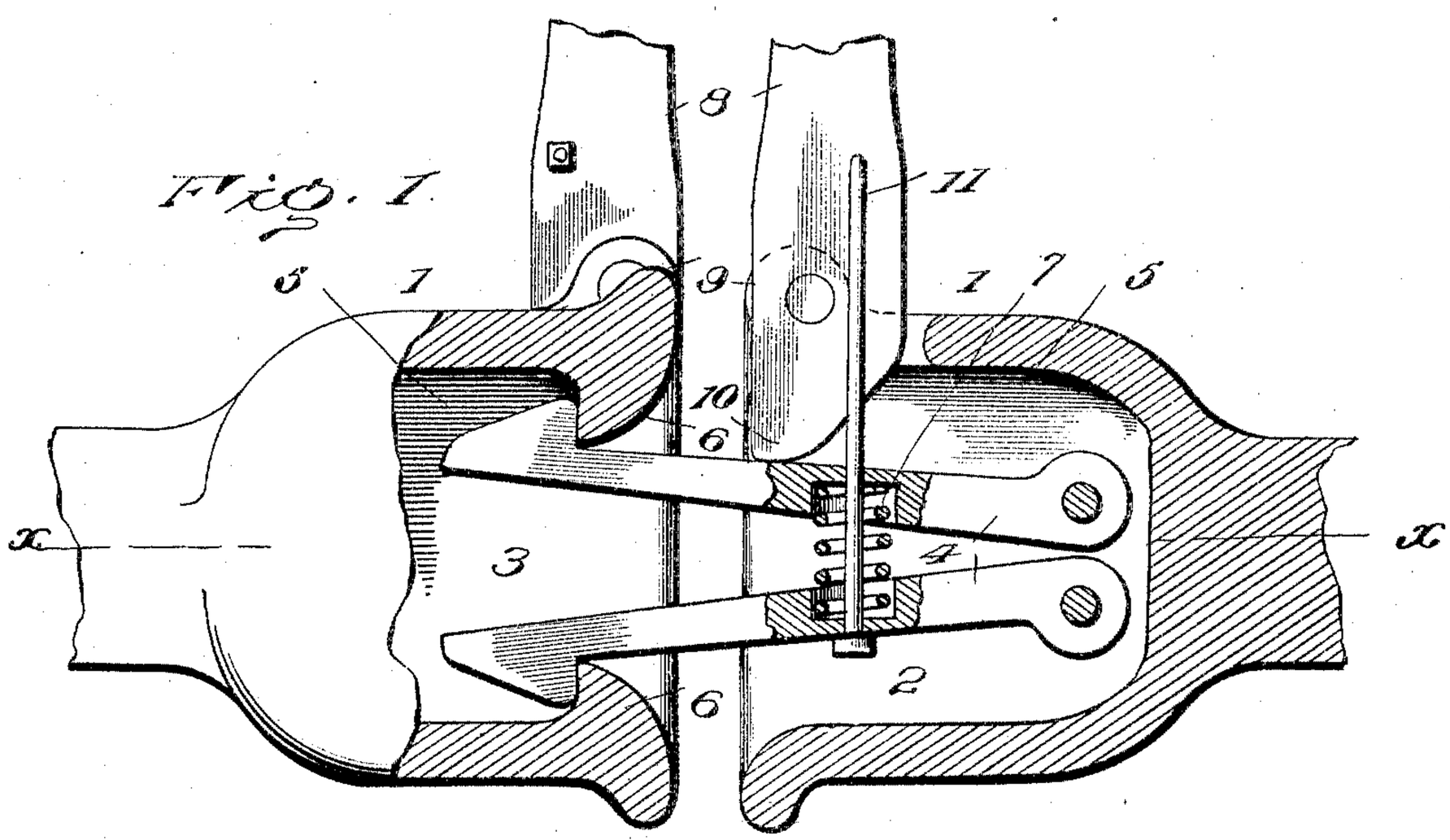

FIG. 2.

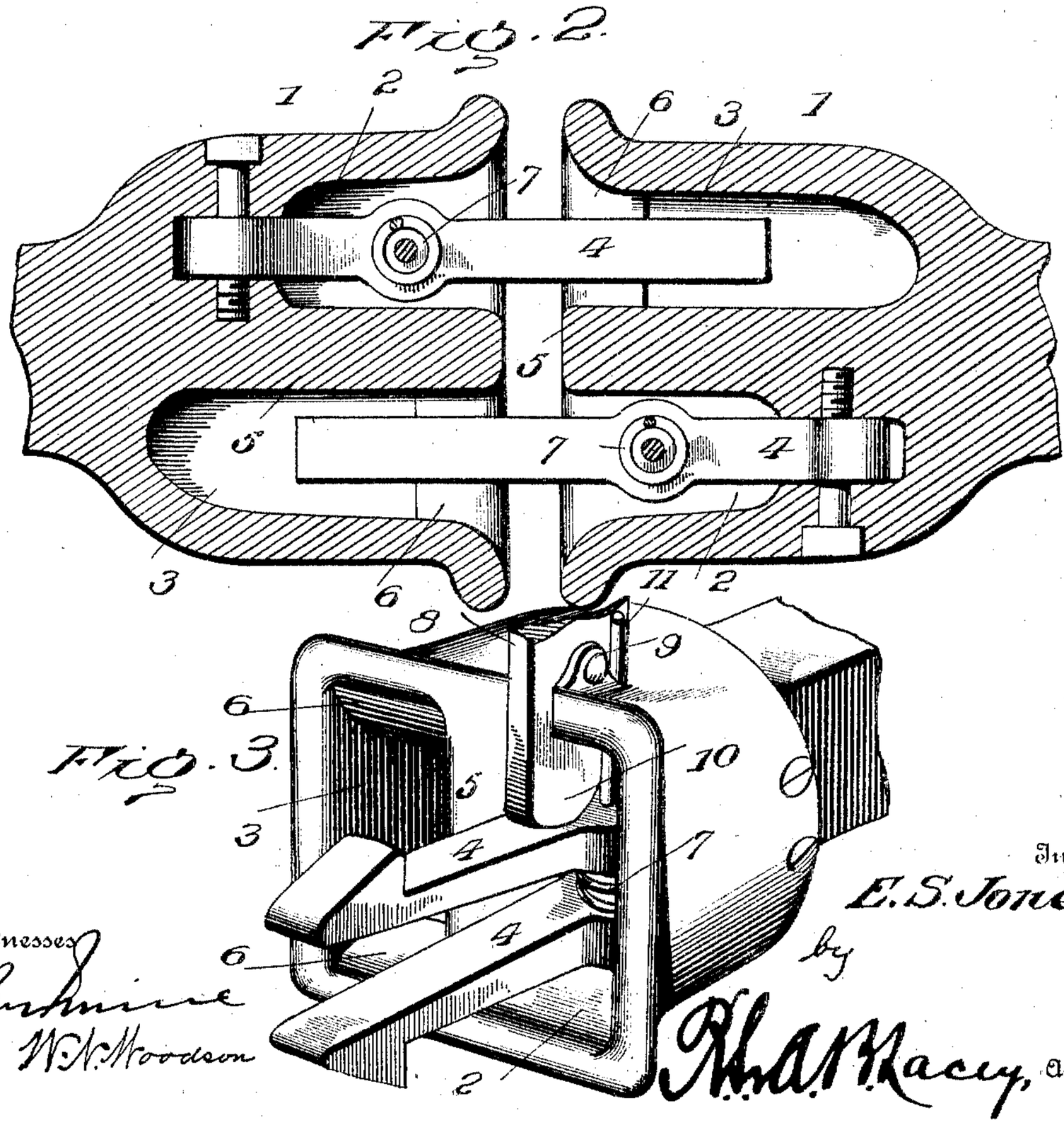

FIG. 3.

Witnesses
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No. 780,192. Patented January 17, 1905.

UNITED STATES PATENT OFFICE.

EVAN S. JONES, OF TURKEY, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 780,192, dated January 17, 1905.

Application filed May 19, 1904. Serial No. 208,720.

To all whom it may concern:

Be it known that I, EVAN S. JONES, a citizen of the United States, residing at Turkey, in the county of Hall and State of Texas, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification.

This invention aims to provide improvements in car-coupling devices, and relates especially to that class of couplings utilizing double draft-hooks in coupling the draw-heads of the car. The invention involves a special construction and mounting of the draft-hooks and peculiar operating means for disengaging the draw-heads when it becomes necessary to uncouple the same; and the invention has for an essential object thereof to reduce the number of parts of the coupling members to thereby attain simplicity in general structure and operation of the coupler.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical longitudinal sectional view. Fig. 2 is a horizontal longitudinal sectional view taken on the line X X of Fig. 1. Fig. 3 is a detail perspective view looking toward the open end of one of the draw-heads, bringing out clearly the arrangement of the draft-hooks and operative connections adjacent.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

As shown in the drawings, the draw-heads 1 are of like form, being suitably mounted upon the draft-beams of the cars in the ordinary manner. Each draw-head is provided with a vertical partition therein, which extends longitudinally of the same, so as to separate the draw-head into separate boxings or chambers 2 and 3, respectively, within which are mounted the engaging members of the coupling device. Within the boxing or chamber 2 of each draw-head are mounted double draft-hooks 4, said hooks being pivoted adjacent their innermost ends to the partition 5 above mentioned. The other chamber or boxing 3 of each draw-head is provided with inwardly-extending projections 6, which are adapted to be engaged by the draft-hooks of the correspopding draw-heads in a manner which will be readily appreciated. The projections 6 are integrally formed with the draw-head, by which they are carried, and these projections are spaced from each other, so as to receive therebetween the hooks 4, both the hooks 4 and the projections 6 being beveled at their outermost portions, so as to facilitate the engagement of these parts as the draw-heads are forced together in the operation of coupling the cars. The hooks 4 of each draw-head are normally held apart at their engaging ends by means of springs 7, interposed between said hooks, so that as the draw-heads are moved together the hooks thereof will automatically engage with the projections 6. In order to disengage the hooks 4 of one draw-head from the projections 6 of the other draw-head, an operating-lever 8 is mounted upon each draw-head, said lever being pivoted to the partition 5 thereof, as shown at 9, and the lower end of this lever 8 is provided with a cam 10, adapted to coöperate with one of the hooks 4. An actuating-bar 11 is connected at its upper end to the cam-operating lever 8, and the lower end of this bar 11 is connected with the draft-hook which is not engaged by the cam 10 of the said lever 8. In the preferred embodiment of the invention the cam 10 engages the upper draft-hook and the actuating-bar engages the lower draft-hook, so that upon a pivotal movement of the lever 8 the cam will engage with the upper hook 4, and the actuating-bar 11 by its coöperation with the lower hook 4 will serve to compress the hooks to admit of disengagement of these members from the projections 6, with which they coöperate when the draw-heads are coupled together. The actuating-bar extends through both of the adjacent draft-hooks 4,

and thus forms a mounting for the interposed spring 7 of said hooks. The lower end of the actuating-bar may be headed or enlarged, so that the same will force the lower draft-hook upwardly when the lever 8 is operated to force the upper draft-hook downwardly. The levers 8 of each draw-head extend thereabove sufficiently to admit of ready operation of these parts to uncouple cars.

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

1. In a car-coupler, the combination of draw-heads, each of said heads being provided with engaging projections and double draft-hooks, the draft-hooks being pivoted at their inner ends to the draw-head, an operating-lever mounted upon the draw-head and coöperating with one of the draft-hooks aforesaid, and an actuating-bar connected with the operating-lever and with the other draft-hook for the purpose set forth.

2. In a car-coupler, the combination of draw-heads, each being provided with engaging projections and double draft-hooks, an operating-lever pivoted to each draw-head and engaging one of the draft-hooks aforesaid, an actuating-bar connected with the operating-lever and engaging the other draft-hook aforesaid, and a spring interposed between said draft-hooks.

3. In a car-coupler, the combination of draw-heads, each of said draw-heads being provided with engaging projections and double draft-hooks pivoted at their inner ends, a spring disposed between the draft-hooks to normally hold same separated, an operating-lever pivoted to each draw-head and provided with a cam engaging one of the draft-hooks thereof, and an actuating-bar connected with the operating-lever and with the other of the draft-hooks.

4. In a car-coupler, the combination of draw-heads, each of said draw-heads being provided with engaging projections and double draft-hooks pivoted at their inner ends, a spring disposed between the draft-hooks to normally hold same separated, an operating-lever pivoted to each draw-head and provided with a cam engaging one of the draft-hooks thereof, and an actuating-bar connected at one end with the operating-lever and at the other end with the other of the draft-hooks aforesaid.

5. In a car-coupler, the combination of draw-heads, a partition separating each of said draw-heads into separate boxings or chambers, projections extended from the draw-head into one of the boxings or chambers aforesaid, draft-hooks mounted in the other boxing or chamber of each draw-head, spring means normally holding the draft-hooks apart, an operating-lever pivoted to the partition of each draw-head and engaging one of the draft-hooks thereof, and an actuating-bar connected with the operating-lever and coöperating with the other draft-hook of said draw-head for the purpose set forth.

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

EVAN S. JONES. [L. S.]

Witnesses:
J. A. McIntire,
J. P. Drake.