(No Model.)

J. GOETTEL.

CAR COUPLING.

No. 388,856. Patented Sept. 4, 1888.

Fig. 1.

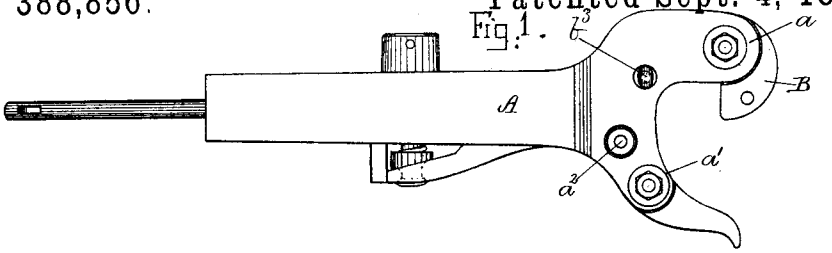


Fig. 2

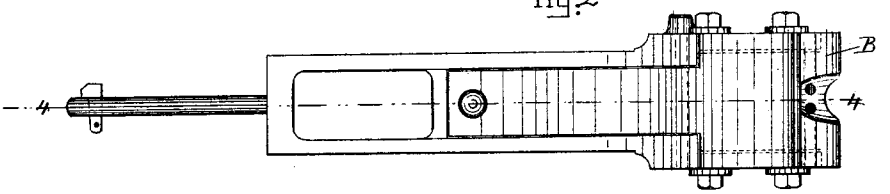


Fig. 3.

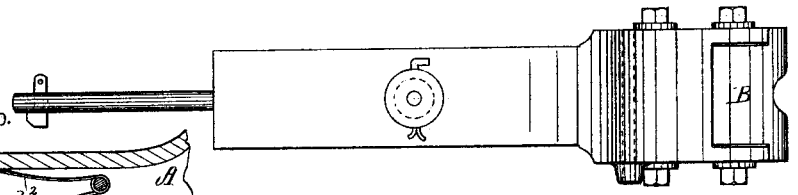


Fig. 10.

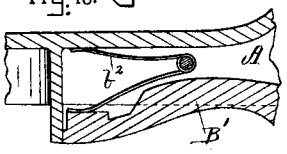


Fig. 6.

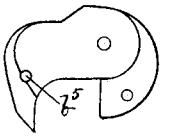


Fig. 4.

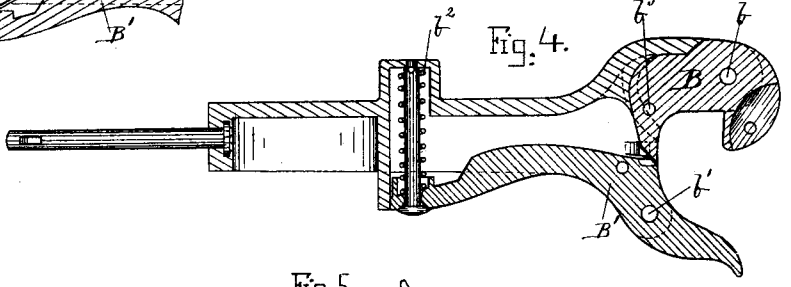


Fig. 7.

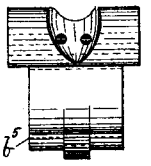


Fig. 5.

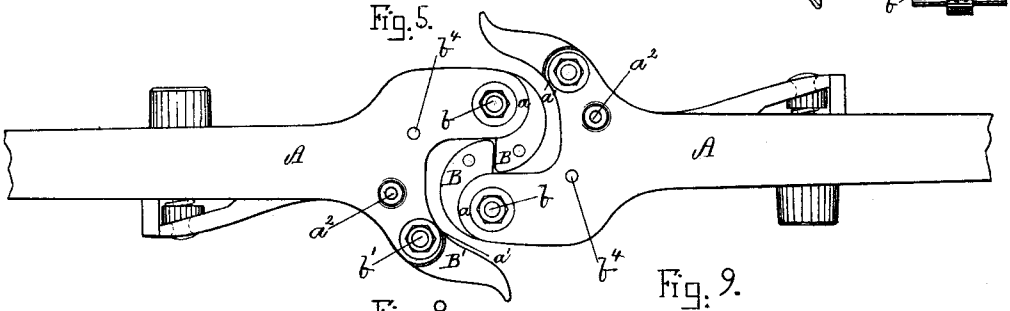


Fig. 8.

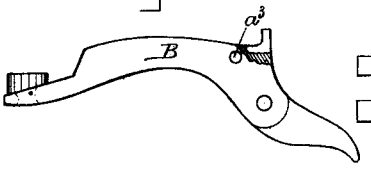
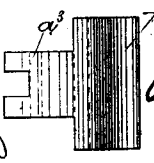


Fig. 9.



Witnesses.
Edgard V. Reade.
John R. Snow.

Inventor
John Goettel.
by his attorney.
J. E. Maynadier

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN GOETTEL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO ALFRED D. TINGLEY, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 388,856, dated September 4, 1888.

Application filed May 10, 1888. Serial No. 273,413. (No model.)

To all whom it may concern:

Be it known that I, JOHN GOETTEL, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification, reference being had to the accompanying drawings, being a part hereof, in which—

Figure 1 is a plan; Figs. 2 and 3, side elevations; Fig. 4, a section on line 4 of Fig. 2; Fig. 5, a plan of a pair of couplings; Figs. 6 and 7, views of one of the jaws detached; and Figs. 8 and 9, views of the other jaw detached. Fig. 10 is a modification.

My improved coupler consists of the main casting A, the lever-jaw B, held by pin b upon the main casting A, and the lever-jaw B′, held by pin b' upon the main casting A, the lever-jaw B′ being controlled by the spring b^2. When the lever-jaws B are locked by the coupling-pin b^3, Fig. 1, which passes through a hole, b^4, in the main casting A, and also through a hole, b^5, near the inner end of the lever-jaw B, (see Figs. 4, 5, 6, and 7,) the lever-jaw B takes the draft, as clearly shown in Fig. 5, where the coupling-pins b^3 are not in place, in order to show the holes b^4 in the main castings A, which coincide with the hole b^5 in the inner end of lever-jaw B. From Fig. 5 it will be clear that removing the coupling-pins b^3 will uncouple, because each jaw B will then be free to turn upon its fulcrum b; but with the coupling-pins b^3 in place the jaws B cannot turn upon the fulcrums b and the hooks on the jaws B will therefore remain hooked together. When the cars are going around curves, that corner a of part A to which jaw B is held by pin b approaches that corner a' of part A of the other coupling to which jaw B′ is held by pin b', this part a' of casting A, together with a portion of jaw B′, serving as a guard to prevent uncoupling. If the jaw B′ were in one piece with the casting A, my coupling would not differ materially from others of the same class; and the main feature of my invention consists in the lever-jaw B′, fulcrumed to the main casting A, in combination with the hooked lever-jaw B and the spring b^2, for by reason of this spring b^2 my couplings can be coupled when the coupling-pin b^3 is in place or the hooked lever-jaws B be otherwise rigidly attached to the main casting A, for when the rounded outer ends of jaws B come in contact as the cars come together each will be forced sidewise upon the inner surface of jaws B′, which will yield, compressing the spring b^2 and allowing each jaw B to pass the other until the two hooks engage.

While I prefer a spiral spring, b^2, as shown in Fig. 4, it will be clear that other forms of springs will answer—for example, that shown in Fig. 10.

My coupling can be coupled with either or both of jaws B locked, (by coupling-pin b^3 or any other locking device,) or can be coupled in the manner usual in couplings of this class where it is necessary that the trainmen shall take pains that one or both of the hooked jaws B be unlocked from the main casting A and opened to allow the passage of the other hooked jaw B, while in other car-couplings of this class (each having a hooked lever-jaw) the couplings are often broken when by accident they are forced together with the hooked jaws B locked.

It frequently happens that it is necessary to push a car by running another car against it when it is not desired to couple those two cars together, and in this case with my improved coupling, if either of the coupling-pins b^3 be out of place, these cars will not be coupled, for one of the hooked levers B will turn upon its fulcrum b whenever a draft comes upon its hook if not locked.

As a matter of extra caution, a pin may be inserted in the holes a^2 which coincide with the hole a^3 in the lever-jaw B′, and the jaw B′ be thereby locked to the main casting A.

What I claim as my invention is—

In a car coupler, the combination, with the main casting A and hooked lever-jaw B, of the lever-jaw B′ and its spring b^2, substantially as set forth.

JOHN GOETTEL.

Witnesses:
EDWARD S. BEACH,
A. D. TINGLEY.