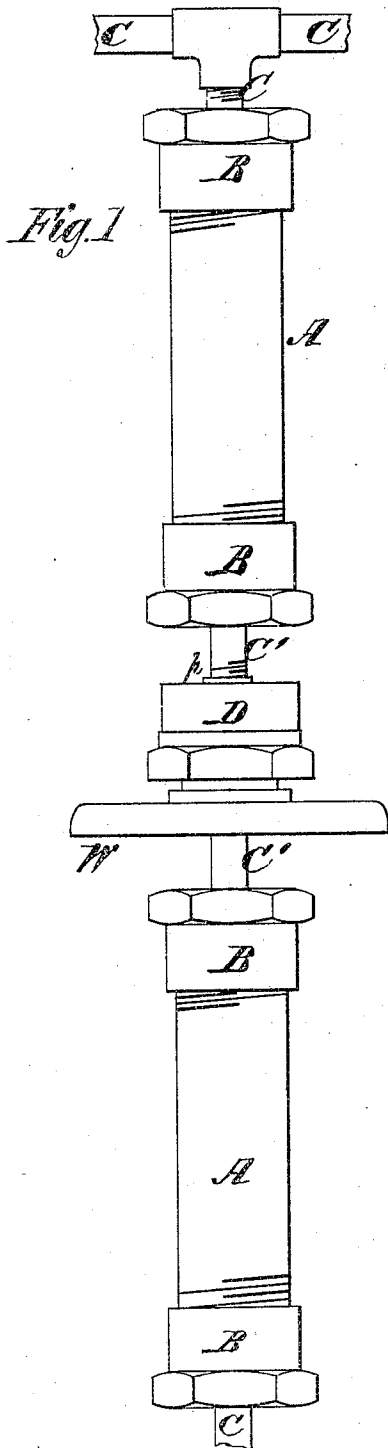


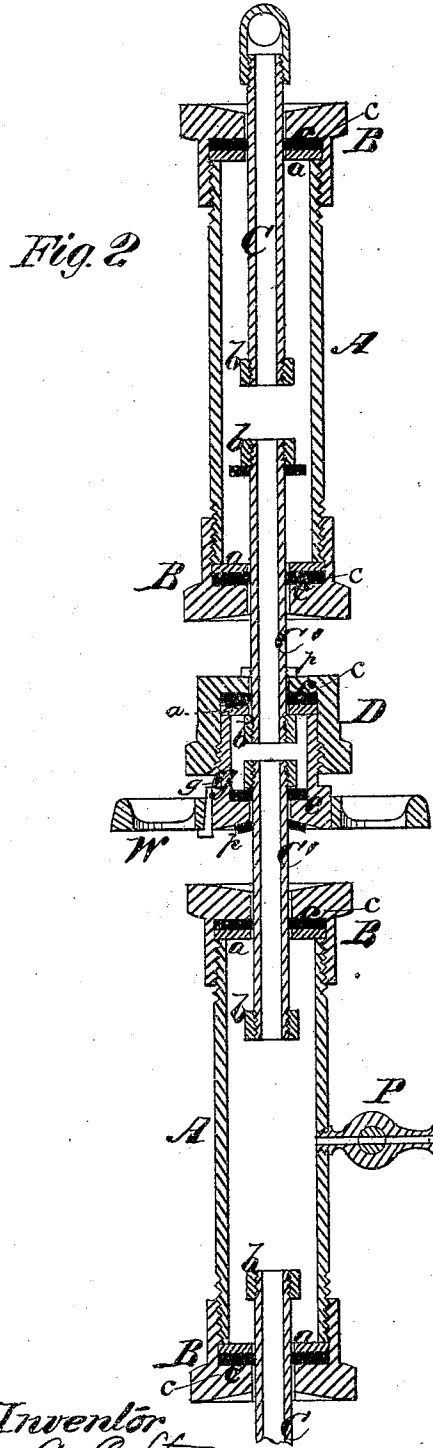
A. G. STORY.
Pipe or Car-Couplings.

No. 138,822.

Patented May 13, 1873.



Witnesses:
R. Campbell,
J. V. Campbell.



Inventor
A. G. Story
by
Mason, Kimball & Sumner

UNITED STATES PATENT OFFICE.

ASA G. STORY, OF WATERLOO, NEW YORK.

IMPROVEMENT IN PIPE OR CAR COUPLINGS.

Specification forming part of Letters Patent No. **138,822**, dated May 13, 1873; application filed February 28, 1873.

To all whom it may concern:

Be it known that I, ASA G. STORY, of Waterloo, in the county of Seneca and State of New York, have invented a new and Improved Railroad-Car Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is an external view of the coupling. Fig. 2 is a diametrical section through the same.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to improve railroad-car couplings so that steam can be conducted through them, thereby admitting of the use of steam-heaters in the cars and the location of the steam-generator on a forward car or on the engine, as will be herein-after explained.

The following description of my invention will enable others skilled in the art to understand it.

In the accompanying drawing, A A represent two cylindrical tubes, the ends of which are closed by means of screw-caps B B. Through the caps B B pass small steam-pipes C C C' C' having collars b b on their ends for preventing them from being drawn out of the tubes A A and the coupling-boxes D g. The pipes C' C' are for conducting steam from one tube, A, to the other between the cars, and the pipes C C conduct steam to the heaters in the cars. The end of one of the pipes C' passes through a female coupling-box, D, and the end of the opposite pipe C' passes through the head of a male coupling-box, g, on which is applied a hand-wheel, W. It is by means of the boxes D and g that cars are coupled and uncoupled. The ends of the pipes C C

C' C', on which are the collars b b, pass loosely through the caps B B and coupling-boxes D g, so as to allow free vertical, lateral, and end-wise play of the cars; and for the purpose of making steam-tight joints I employ elastic packing inside of the tubes B and their coupling, as shown in Fig. 1. This packing consists of elastic cushions c, and metal plates a, which latter are between the cushions c and the collars on the tubes. There may be applied to the outer ends of the coupling-boxes some suitable packing, p p, which, with the internal packing, will prevent the escape of steam at these points. To one of the tubes A I apply a cock, P, for the purpose of drawing off from time to time the water which results from the condensation of steam in the pipes.

It will be seen from the above description that I have a tubular car-coupling through which steam can be conducted from one car to another, such coupling being constructed so that it will telescope, and also allow of lateral and vertical movements of flexure. The tubes A A will be secured to the platforms of cars in any suitable manner, and, if desirable, all of those tubes which are exposed outside of the cars may be covered with some material, which is a poor conductor of heat for preventing undue condensation of steam.

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

The coupling D g, combined with steam-pipes C' C', packing-tubes A A, and steam-pipes C C, the same constituting a tubular, flexible, and telescoping car-coupling, substantially as described.

ASA G. STORY.

Witnesses:

M. D. MERCER,
H. WARNER.