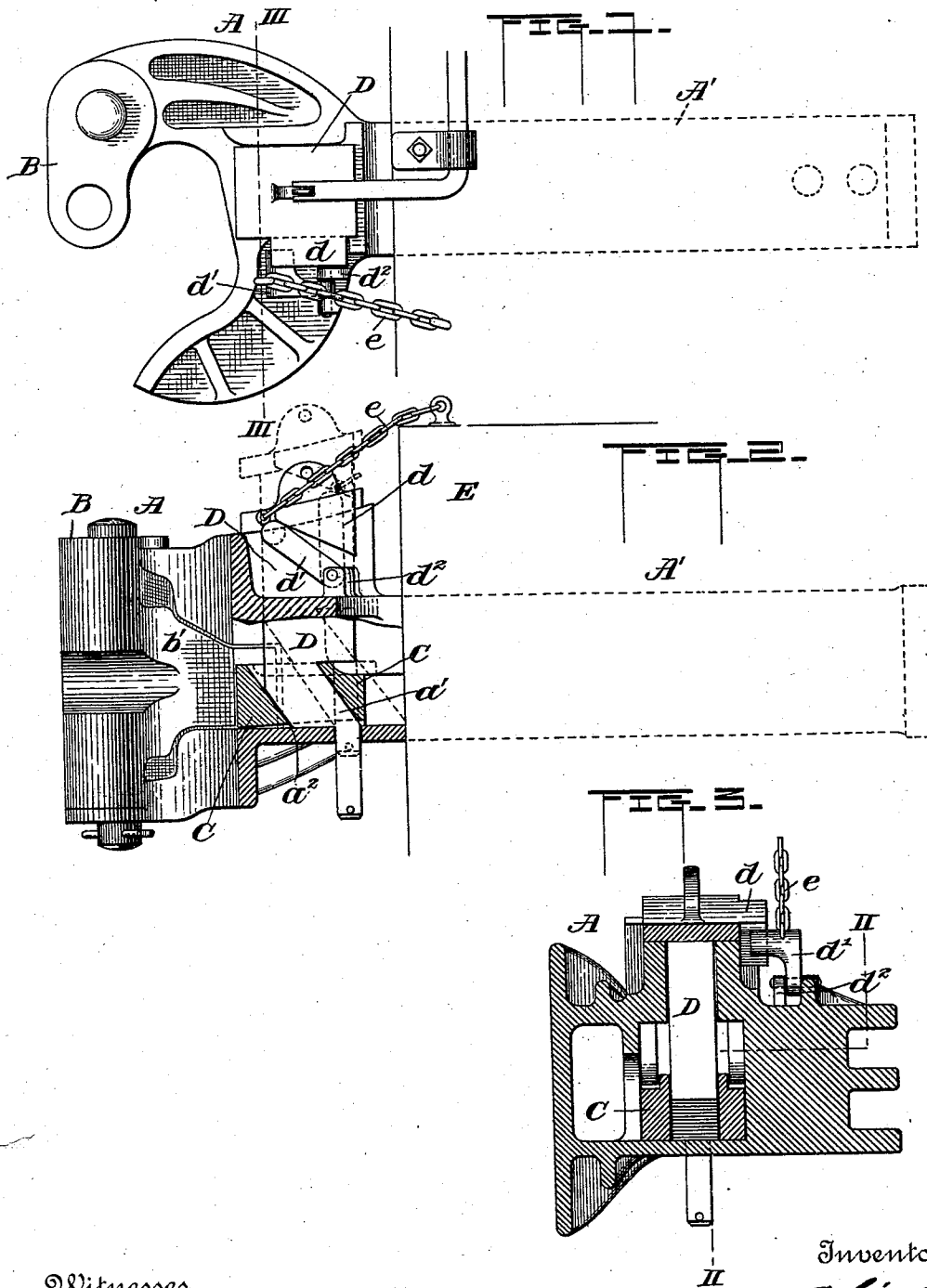


(No Model.)

B. M. WHITLOCK.
CAR COUPLING.

No. 537,329.

Patented Apr. 9, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

BENJAMIN MORRIS WHITLOCK, OF NEW YORK, N. Y.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 537,329, dated April 9, 1895.

Application filed August 3, 1894. Serial No. 519,354. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN MORRIS WHITLOCK, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Automatic Uncoupling Devices; 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.

This invention relates to automatic uncoupling devices for car couplers, but more particularly to couplings of the Janney type.

The primary object of my invention is to provide means whereby the cars will be uncoupled automatically should the tail-pin or draw-head break, thereby allowing the preceding cars to continue on their journey, while the car or cars back of the broken coupler would come to a standstill.

A further object of the invention is to provide a simple and effective device that may be readily applied and used on various designs of couplers.

With these objects in view the invention consists in the construction and combination of the several parts as will be hereinafter fully described, and then defined in the claims at the end of the description.

Referring to the accompanying drawings, forming a part of this specification, Figure 1 is a plan view illustrating the invention as applied to one form of coupler. Fig. 2 is a vertical sectional side elevation taken on the line II—II of Fig. 3. Fig. 3 is a vertical sectional front elevation taken on the line III—III of Fig. 1.

In the drawings I have shown the uncoupling device as applied to a coupler such as disclosed in the patent granted to myself, No. 517,505, dated April 3, 1894, though it is obvious that the same may be applied to other forms of couplers if so desired. In this form A designates the coupler-head having the usual shank A', and B denotes the knuckle which is pivoted to the head A. As shown the knuckle has an inner portion or tail-piece b' arranged at an angle and adapted to fit into the recess of the coupler-head in which it may be locked by a locking block C arranged to slide back and forth in a recess of the coupler-

head or shank for the purpose of locking or releasing the knuckle as may be desired. The block C is itself controlled and locked in position to confine the knuckle in the recess by the vertically sliding pin D which is provided with the opposed inclined sides a' and a^2 which impinge against the sides of an opening in the block C, as fully set forth in the above named patent. By lifting the pin the block slides backward and releases the knuckle and when lowered the reverse occurs thereby rigidly holding the knuckle in a fixed and locked position.

To uncouple the cars automatically should the coupler head or tail-pin break, I preferably provide a lateral projection d of a triangular formation arranged upon the upper portion of the pin D, the lower edge of which serves as an abutting or cam surface for the outer end of a lever or cam d' . This lever d' is pivoted to studs or projections d^2 located upon the upper surface of the coupler-head below the triangular projection d . The lever is adapted to be tilted upon its pivot by a suitable connection with a stationary portion of the car E, though I prefer to connect the outer end of the lever to the car by a chain e as illustrated in Figs. 1 and 2.

The operation of the device will be understood from the foregoing description. It will be seen that should the tail-pin or coupling-head back of the coupling device break the slack in the chain e , which is sufficient for the proper working of the coupler, will be taken up by the strain of the attached cars, and the outer end of the lever d' made to contact with the inclined edge of the projection d^2 which will lift the pin D, causing the block C to slide backward releasing the knuckle B, as illustrated in Fig. 2, thereby allowing the cars to separate at this point.

It will be noticed that the chain e not only serves to uncouple the cars but will prevent the dropping of the coupler-head on to the road bed or track, should the same break, thus preventing the liability of an accident which often occurs from this cause.

I do not wish to confine myself to simply a sliding pin D, as the invention may be used in connection with other locking devices if so desired; nor do I confine myself to the construction shown, as I may vary the same with-

out departing from the spirit of my invention.

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

1. The combination with a coupler, of a pin for locking said coupler; the said pin having a lateral projection provided with a lower cam-surface, a lever pivoted on the coupler head at one side of the pin and adapted to contact with the cam-surface of the projection so as to raise said pin, together with means for actuating the lever, substantially as described.

2. The combination with a car and a coupler arranged thereon, of a pin for locking said

coupler; the said pin having a lateral projection provided with a lower cam-surface, a lever pivoted on the coupler head at one side of the pin and adapted to contact with the cam-surface of the projection, together with a chain connected to the lever and to the car, whereby when the coupler head is pulled beyond a certain point the pin will be raised and the coupler automatically unlocked, substantially as and for the purpose set forth.

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

BENJAMIN MORRIS WHITLOCK.

Witnesses:

WM. J. MEADE,
J. BORKEL.