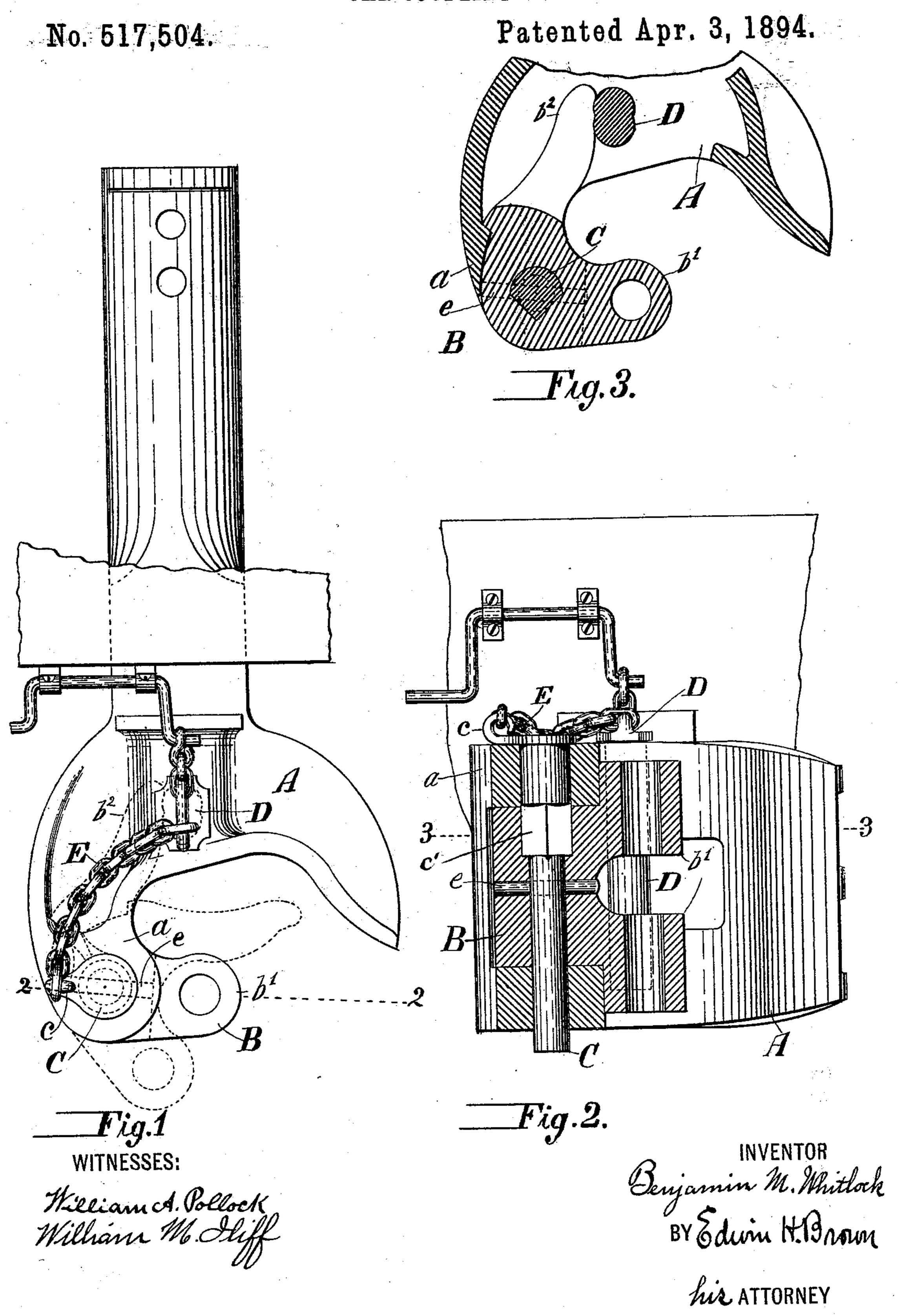
## B. M. WHITLOCK. CAR COUPLING.



## United States Patent Office.

BENJAMIN M. WHITLOCK, OF NEW YORK, N. Y., ASSIGNOR TO THE INTER-STATE COUPLER COMPANY, OF JERSEY CITY, NEW JERSEY.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 517,504, dated April 3, 1894.

Application filed December 21, 1893. Serial No. 494,367. (No model.)

To all whom it may concern:

Be itknown that I, BENJAMIN MÖRRIS WHIT-LOCK, of the city, county, and State of New York, have invented a certain new and use-5 ful Improvement in Car-Couplers, of which the following is a specification.

My improvement relates to car-couplers of the kind having pivotally connected knuckles, which are locked in one position for the purto pose of coupling adjacent cars and are unlocked and allowed to swing outward when it

is desired to uncouple cars.

My improvement consists in the combination with the draw head and knuckle of such acoupling of a pivot pin for the knuckle which is interlocked with the knuckle so that the two will move together and the means for imparting motion to said knuckle by rotating said pivot pin; all as will be hereinafter more fully described and then particularly pointed out in the claim at the end of the description.

In the accompanying drawings, Figure 1 is a top view of the coupler embodying my improvement. Fig. 2 is a vertical section of the same taken on the plane of the dotted line 2—2, Fig. 1. Fig. 3 is a horizontal section on the line 3—3, Fig. 2.

Similar letters of reference designate corresponding parts in all the figures.

A designates the draw head. It may be of the usual form.

B designates the knuckle which consists essentially of two portions b',  $b^2$ , extending at about right angles to each other. The knuckle is pivotally connected at the junction of these two portions to one arm or side a of the draw

head by means of a pivot pin C.

Any suitable locking device may be employed for securing the knuckle in the closed to position, as for instance, a vertically moving locking bolt D. The pivot pin C is made to interlock with the knuckle B. This interlocking is effected by providing a pin having between its ends an angular portion c', adapted to occur a corresponding depression or re-

to occupy a corresponding depression or recess in the knuckle and cause the latter to turn with the pin; the upper and lower ends of the pin being round so as to turn readily in the openings therefor in the arm or exten-

sion a, of the draw head. e denotes a cross- 50 pin fitting an opening in the knuckle and pivot pin, so as to lock them together and serve the double purpose of preventing the pivot pin from moving vertically, so as to disconnect the knuckle, and also causing the two 55 to rotate together. When both the cross-pin and pivot pin with angular formation are used together a very effective double lock is provided, which prevents any accidental displacement of the pivot pin and renders the device 60 certain in action. The pivot pin C, is further provided with a head having a lateral projection or offset portion c, extending to one side of the axis of the pin, to which may be connected a chain E, outside of and clear of the 65 draw head. This chain may also be connected with the locking bolt D, and a suitable device, as the crank-lever F, arranged so as to first raise the locking pin and then rotate and open the knuckle.

Obviously by applying power to the chain which is connected to the pivot pin C to one side of the axis, rotary motion may be imparted to the said pin and the knuckle may be swung into its open position. The locking bolt 75 would of course, have to be previously raised.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a car coupler, the combination with the draw-head, of the knuckle, and the pivot pin 80 having an angular portion fitting a corresponding recess in the knuckle, the cross-pin adapted to lock said pivot pin and knuckle and prevent vertical movement of said pivot pin; the latter having a head with a lateral 85 offset extending to one side of the axis of the pin, and a flexible device connected to said offset so as to act directly upon the pivot pin to oscillate the knuckle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

## BENJAMIN M. WHITLOCK.

Witnesses:
ANTHONY GREF,
WILLIAM A. POLLOCK.