

(No Model.)

B. HALSTEAD.
CAR COUPLING.

No. 515,765.

Patented Mar. 6, 1894.

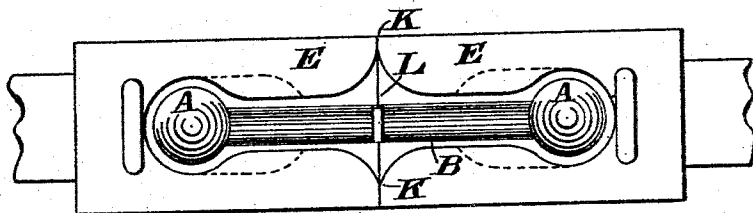


Fig 1

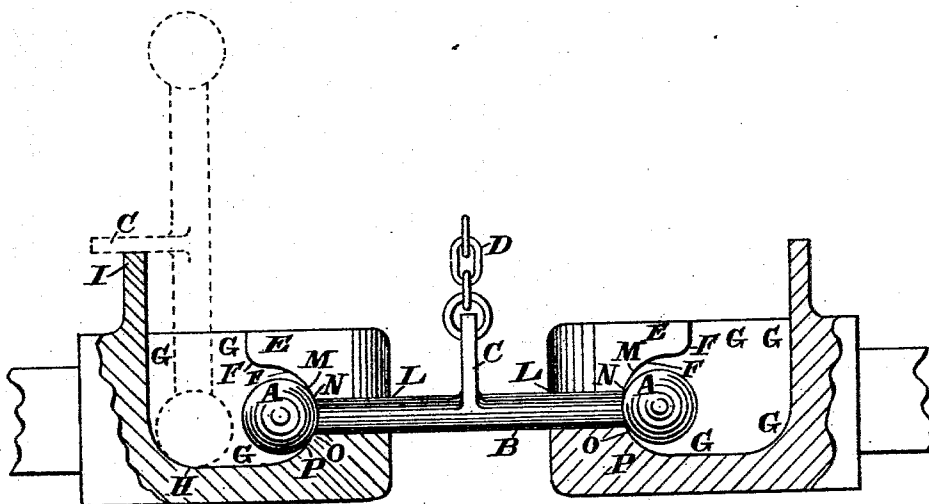


Fig 2

Witnesses

Chas. Leeds.
Harry Moore.

Inventor

Barton Halstead

UNITED STATES PATENT OFFICE.

BENTON HALSTEAD, OF RIVERSIDE, ASSIGNOR TO JAMES G. SCOTT, OF SHANDON, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 515,765, dated March 6, 1894.

Application filed October 7, 1893. Serial No. 487,493. (No model.)

To all whom it may concern:

Be it known that I, BENTON HALSTEAD, a citizen of the United States, residing at Riverside, county of Hamilton, and State of Ohio, have invented a new and useful Improvement in Automatic Car-Couplers, of which the following is a specification.

My invention relates to the novel arrangement of metal in the shape of a dumb-bell provided with a handle and chain; and two hollowed draw-bars slotted at the top and ends, attached to cars to be automatically coupled by collision of the draw-bars or bumpers of the cars causing the dumb-bell to fall through the slots into the hollow of the draw-bars; and enables the uncoupling of same either from the tops of the cars by means of pulling the chain upward or from between the cars by lifting the dumb bell upward when the coupling is not taut, thus providing against the slaughter of men occupied in the business of railroading.

Figure 1 in the accompanying drawings is a plan view of my invention and Fig. 2 is a vertical section of my invention.

Similar letters refer to similar parts throughout both views.

The dumb-bell, so called herein for convenience of expression is in lieu of a link and is made to couple without the employment of a pin. It consists of two spheroids "A" "A" connected by a rod "B" and a handle "C" to which is attached a chain "D" the other end of which chain is made fast to the top of one of the cars to be coupled. The spheroids "A" "A" and the rod "B" connecting same; and the handle "C" are preferably solid, made or cast in one piece.

The draw-bars "E" "E" are provided with a rest "I." Said draw-bars "E" "E" are slotted from the top and at the ends "L" "L" and hollowed at "G" "G" "G" so as to admit the dumb-bell "A" "B" "A" to fall freely through the slots to the bottom of the hollow in the draw-bars when the ends of the draw-bars are in contact or nearly in contact

but when drawn apart the shoulders "F" "F" confine the spheroids "A" "A" within their sockets "M" "N" "O" "P" in the draw-bars and the slots in the ends at "L" "L" of the draw-bars being sufficient in width to allow lateral motion to the rod "B" are not sufficient in width to admit the passage of the spheroids "A" "A" through them at "L" "L" the slots being widened longitudinally from near their bottom, or hollowed as hereinbefore expressed thus forming the interior shoulders "F" "F" and when the dumb bell "A" "B" "A" is dropped through the slots "L" "L" into the hollow "G" "G" the coupling is complete and the spheroids "A" "A" firmly resist the strain upon A A B at near and about the points "M" "N" "O" "P" forming a universal joint.

The process by which the automatic coupling is effected is as follows. The dumb-bell is placed vertical or nearly so the spheroid "A" resting in the bottom of the hollow at "H" and the handle "C" resting upon the support "I" of the draw-bar to the car at rest. The car to be coupled to the one at rest is pushed against the former and the collision though it be but slight will cause the upper end of the dumb-bell to fall swiftly toward the car that imparted the motion and surely down into the slots for at the points "K" "K" an incline plane begins terminating well down in the slots which correct inaccuracies in shifting the draw-bars in opposing attitudes or inaccuracies in perpendicular descent by glancing the descending dumb-bell in a direction parallel with the draw-bars. When the dumb-bell thus falls to the bottom of the hollow gravity immediately turns the handle "C" of the dumb-bell perpendicularly downward or nearly perpendicularly downward between the ends of the draw-bars.

The uncoupling may be effected either from the top of the cars by pulling upward on the chain "D" when the draw-bars are in

contact or nearly in contact or from between the cars by lifting the dumb-bell out from the slots at "G" "G" and "L" "L."

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

1. The dumb-bell "A" "B" "A" provided with a handle "C" in combination with the support "I" for the uses and purposes set forth.

2. The dumb-bell "A" "B" "A" provided with a handle "C" in combination with the support "I" and the chain D for the uses and purposes described.

BENTON HALSTEAD.

In presence of—

JOHN M. SMEDES,
L. G. HITCHCOCK.