

No. 648,596.

Patented May 1, 1900.

G. D. PETTINGELL.
KNUCKLE FOR CAR COUPLINGS.

(Application filed Dec. 11, 1899.)

(No Model.)

Fig. 1

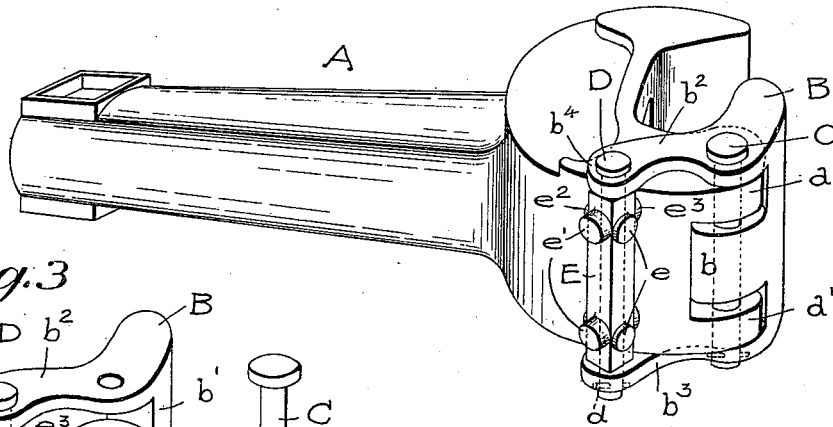


Fig. 3

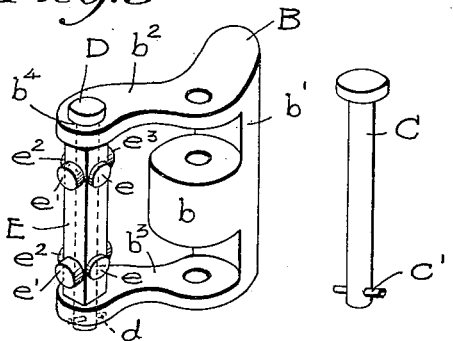


Fig. 2

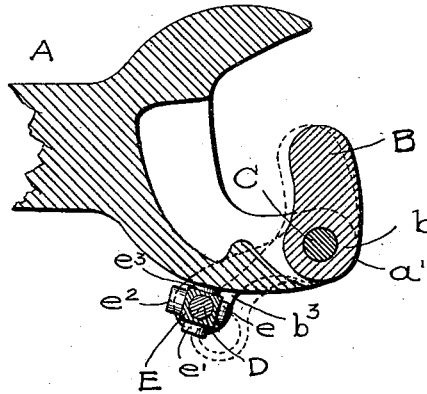
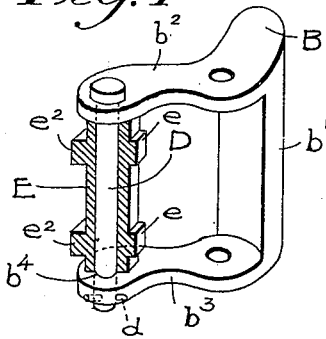


Fig. 4



Witnesses:-

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KNUCKLE FOR CAR-COUPLINGS.

SPECIFICATION forming part of Letters Patent No. 648,596, dated May 1, 1900.

Application filed December 11, 1899. Serial No. 740,365. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. PETTINGELL, of Jefferson, in the county of Greene and State of Iowa, have invented certain new and useful Improvements in Knuckles for Car-Couplers, of which the following is a specification.

The object of my invention is to provide an emergency-knuckle to fit the various designs of draw-heads of the type known as the "Master Car-Builders'" coupler and is intended for use only in emergencies, being adapted to be inserted in couplers of various patterns as a substitute for broken or disabled knuckles and to make a close contact and fit with the interlocking knuckle of any car to which it may be connected.

My invention consists in certain features, construction, and combination of parts hereinafter described and claimed with reference to the accompanying drawings, wherein—

Figure 1 is a perspective view of a draw-head of ordinary pattern and with my emergency-knuckle applied thereto; Fig. 2, a horizontal sectional view of the draw-head with the emergency-knuckle thereon, shown by full lines in one position and by dot-lines in a second position; Fig. 3, a perspective view of the knuckle and pin detached; Fig. 4, a view similar to Fig. 3, showing a modification of the knuckle and showing the locking-sleeve in section.

The draw-head A may be of any pattern which conforms to the requirements of the Master Car-Builders' Association and which has hinge-lugs $a a'$ to receive the lug b of a knuckle B, connected therewith by a coupling-pin C in a well-known manner, the said pin being preferably secured thereto by a cross split pin c' or nut placed upon the lower end of the pin beneath the draw-head.

The emergency-knuckle B consists of a vertical bar or jaw b' , preferably provided with a lug b , as shown in Fig. 3, and having arms $b^2 b^3$, which extend, respectively, above and below the draw-head and beyond the adjacent outer side thereof, the ends of said arms having holes b^4 therein through which a stop-pin D passes to connect the outer ends of said arms, a split pin d or nut serving to hold the said link-pin securely to the outer ends of the knuckle-arms.

A spool E, having lock-blocks $e e' e^2 e^3$ of variable sizes, is fitted upon the stop-pin D, between the arms $b^2 b^3$, to turn thereon and provide graded stops which will bear against the outer side of the draw-head and hold the jaw of the knuckle to closely fit the jaw of the interlocking knuckle of the car to be connected therewith and prevent lost motion between the said knuckles, the spool E being turned upon the pin until the proper adjustment is effected, as clearly shown in Fig. 2, the full lines representing one position of the knuckle and the dot-lines representing a second position thereof.

The emergency-knuckle may be made, as shown in Fig. 4, without the lug b , and other modifications may be made in the design—as, for instance, a fixed pin, as shown in Fig. 3, may be made to connect the ends of the arms $b^2 b^3$, thus making the knuckle in a single piece.

The knuckle may be so formed and proportioned that it will be used on any variety of draw-head or coupler in common use, and may thus be inserted in couplers of various patterns as a substitute for broken or disabled knuckles, thus avoiding the necessity of carrying on the road a stock of spare knuckles in sufficient variety to suit the different classes of couplers in common use.

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

1. An emergency-knuckle adapted to be connected by a coupling-pin to the draw-head of railway-cars comprising a jaw having arms projecting from the upper and lower ends thereof and a stop-pin connecting the ends of the arms and adapted to be held against the outer side of the draw-head, substantially as described.

2. An emergency-knuckle for car-couplers comprising a jaw adapted to be connected to the draw-head having an arm extending therefrom and stop adjustably secured upon the end of said arm to bear against the outer side of the draw-head substantially as described.

3. An emergency-knuckle for car-couplers comprising a jaw adapted to fit the hinge of a draw-head an arm extending therefrom a fixed stop upon the end of said arm, and a

spool-block fitted to turn upon the stop to provide an adjustable contact with the outer wall of the draw-head, substantially as described.

- 5 4. The combination with a draw-head for car-couplers of a knuckle adapted to fit the hinge of the draw-head and arms extending from the upper and lower ends thereof a coupling-pin to connect the knuckle and draw-

head, a stop-pin connecting the ends of the 10 knuckle-arms and a spool fitted upon the stop-pin between the knuckle-arms adapted to vary the position of the knuckle upon the draw-head.

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Witnesses:

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