

No. 744,658.

PATENTED NOV. 17, 1903.

O. P. WILHELM.
DEVICE FOR REPAIRING CAR COUPLINGS.
APPLICATION FILED MAR. 2, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1

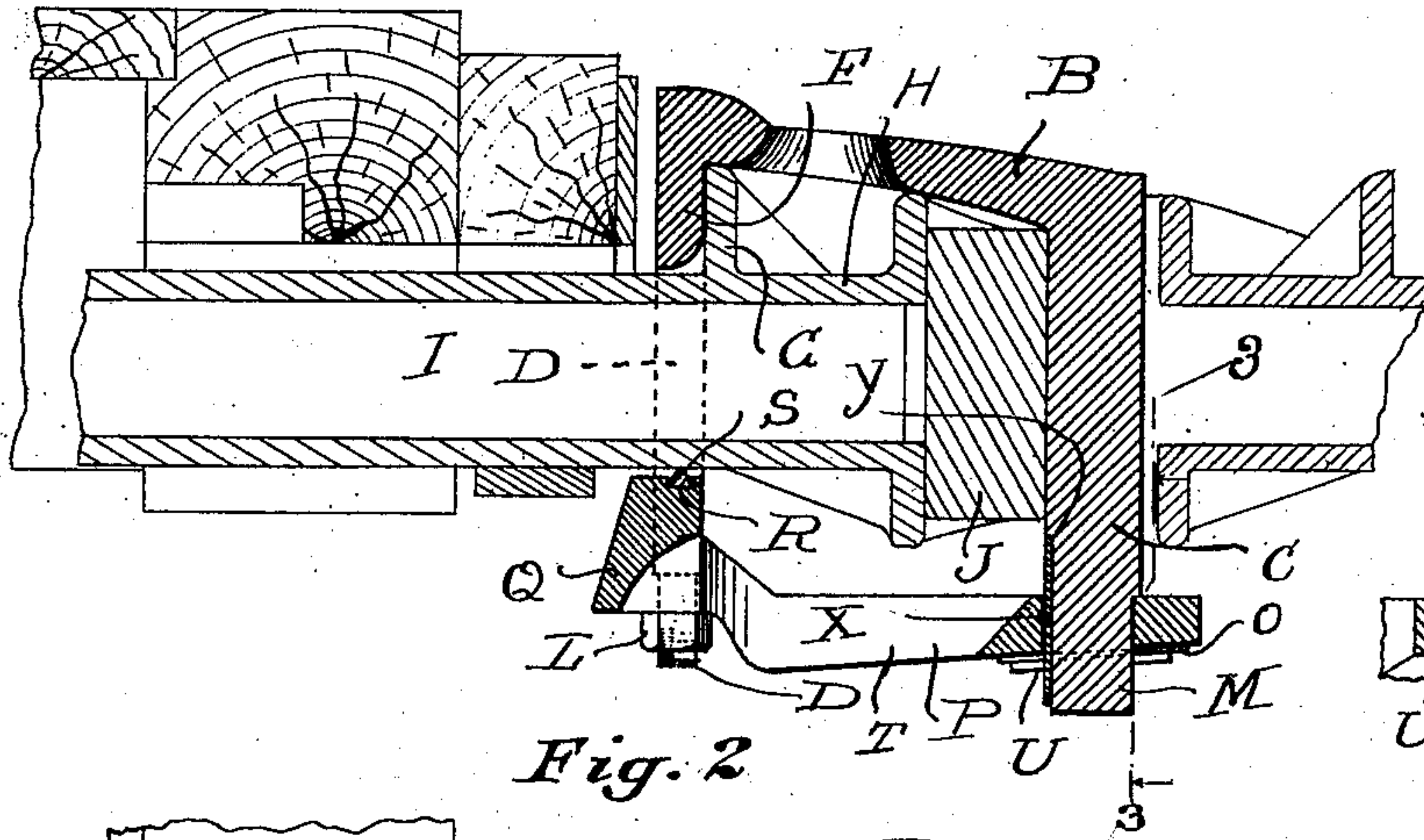


Fig. 3

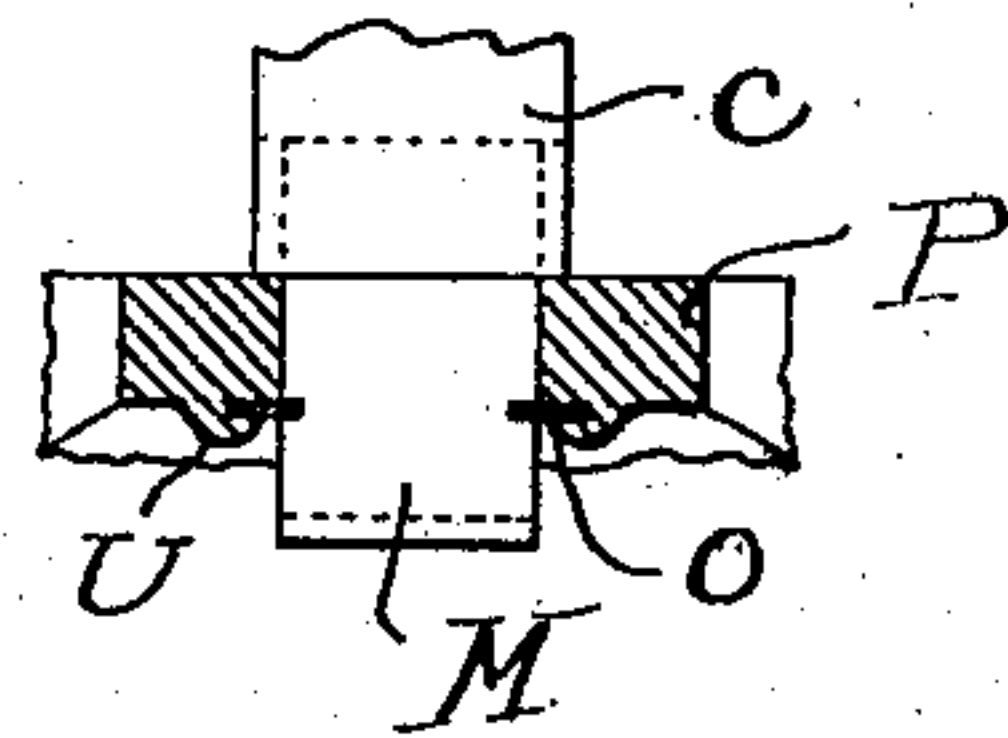
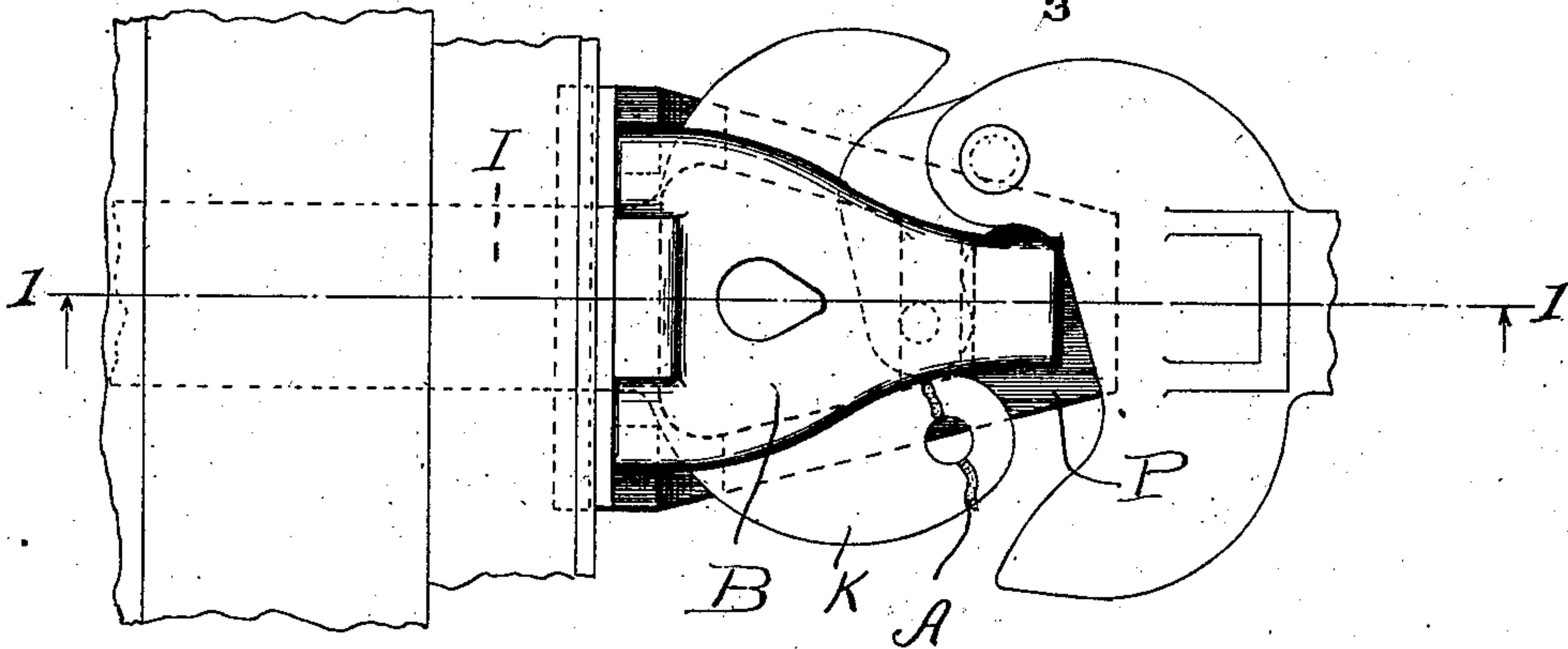


Fig. 2



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2 SHEETS—SHEET 2.

Fig. 4

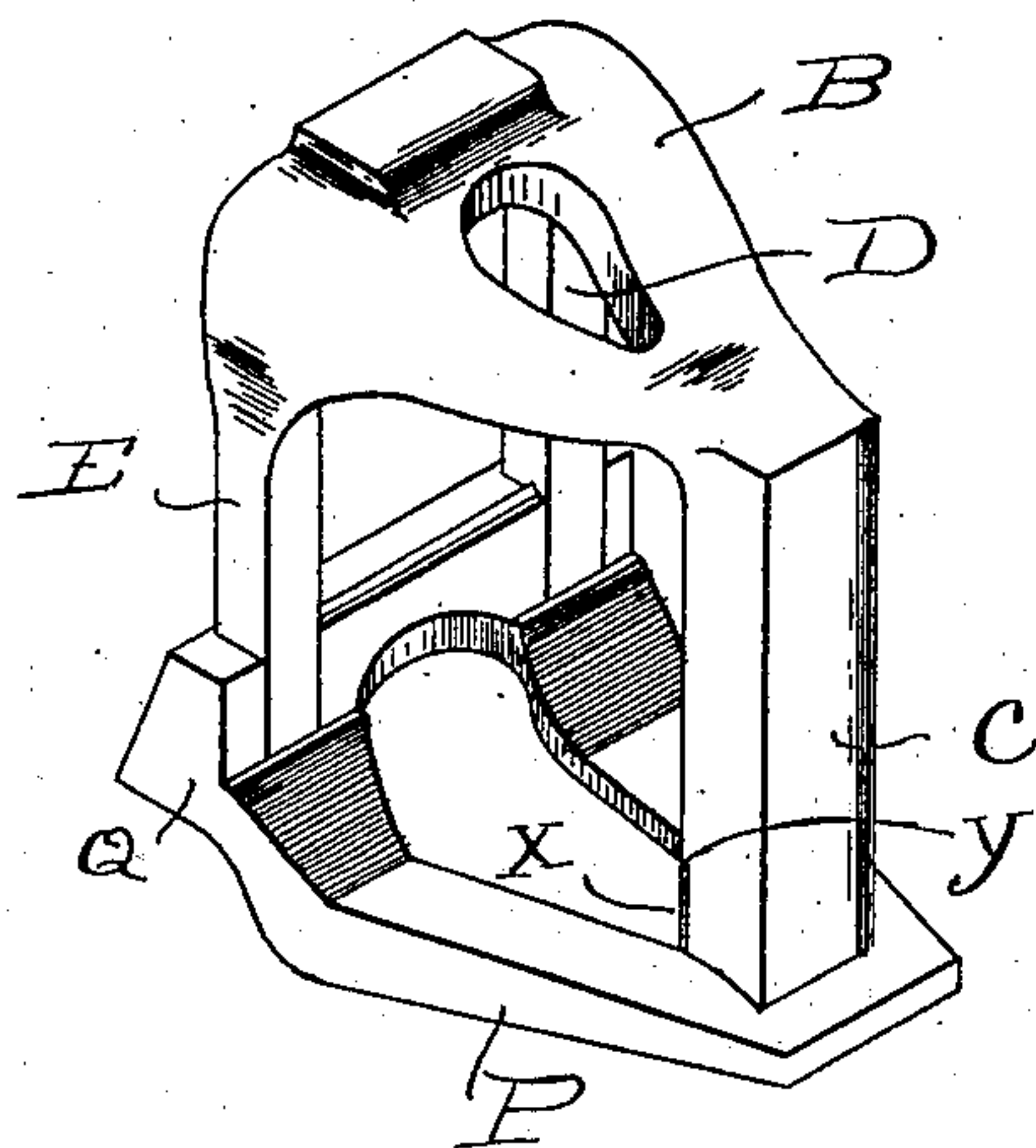


Fig. 5

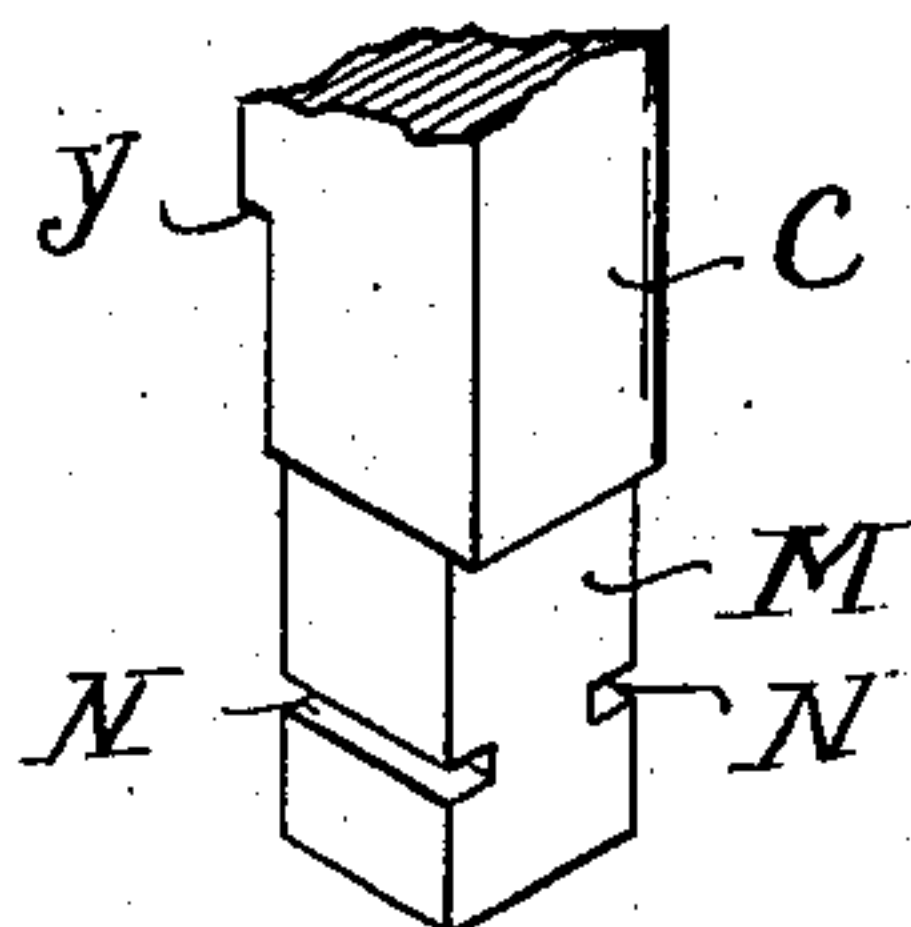


Fig. 6

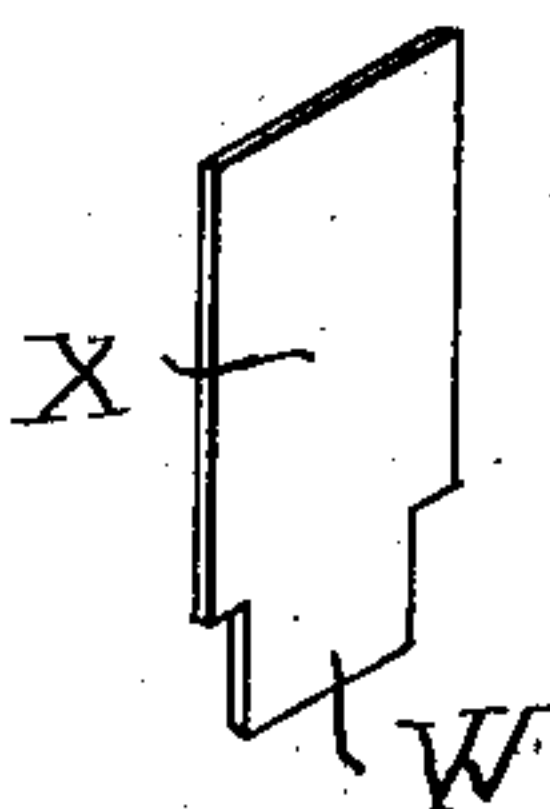
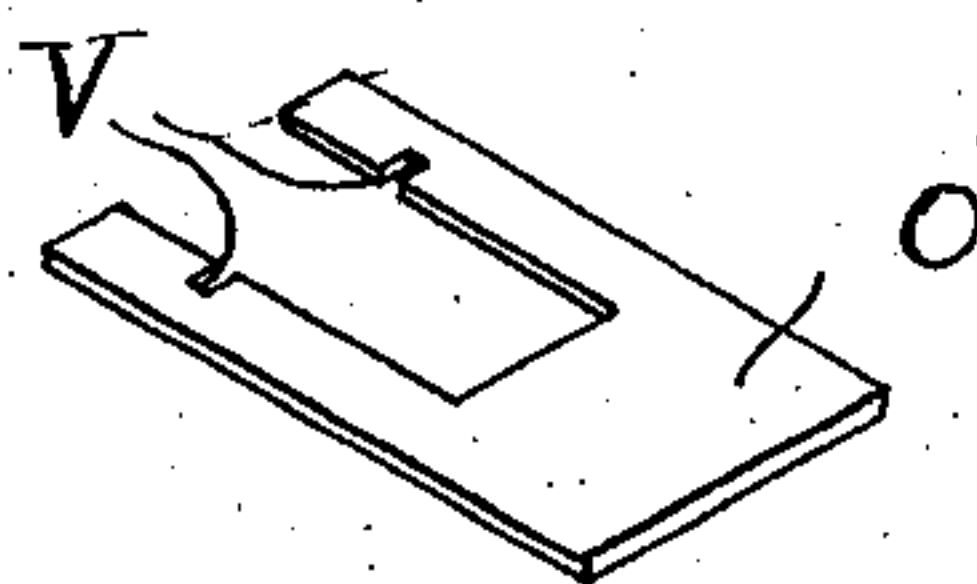


Fig. 7



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UNITED STATES PATENT OFFICE.

OLIVER P. WILHELM, OF MICHIGAN CITY, INDIANA.

DEVICE FOR REPAIRING CAR-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 744,658, dated November 17, 1903.

Application filed March 2, 1903. Serial No. 145,784. (No model.)

To all whom it may concern:

Be it known that I, OLIVER P. WILHELM, a citizen of the United States, residing at Michigan City, in the county of Laporte and State of Indiana, have invented certain new and useful Improvements in Devices for Repairing Car-Couplers; 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.

My invention relates to a novel construction in a repair device for car-couplers, the object being to provide a device which can be mounted upon any of the automatic couplers in use on cars and which will take the place of the broken jaw of a coupler; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a central vertical longitudinal section on the line 1 1 of Fig. 2, showing two couplers, one of which carries my repair device. Fig. 2 is a top plan view of same. Fig. 3 is a fragmentary detail section on the line 3 3 of Fig. 1. Fig. 4 is a perspective view of my device. Fig. 5 is a fragmentary detail perspective view showing the lower end of the coupling-shank of my device. Figs. 6 and 7 are detail perspective views of the keys used to lock my repair device securely in place on the coupler-head.

In the automatic couplers now almost universally used on this continent the breakage of the jaws of couplers is quite frequent, owing to the carelessness of trainmen in failing to properly open the jaws. This breakage most frequently occurs at the outer free end of the jaw, as indicated by the broken line A in Fig. 2, this being the weakest part of the jaw and exposed to the greatest force in shunting. A jaw thus broken becomes useless and renders coupling of the cars practically impossible except by the use of chains, which is very objectionable.

My repair device is designed to obviate any difficulties arising from such breakages, and consists of a casting comprising a plate B, practically triangular in shape, provided at each of its three corners with a downwardly-extending post C, D, and E, respectively.

The forward post C, which I will hereinafter term the "coupling-shank," is adapted to be engaged by the jaw of the coupler of another car. The said plate B is provided at its rear end with a downwardly-extending flange F, which is adapted to extend behind and engage the rear face of the flange G of the coupler-head H, while the posts D and E extend on each side of the draw-bar I of said coupler. The length of said plate B is such as to bring the coupling-shank C just sufficiently far beyond the outer end of the coupler-head to receive the jaw J of the other coupler between it and the body of the broken jaw K of the coupler to which my device is secured, so as to leave as little play room as possible for said jaw J. In other words, the position of said coupling-shank C corresponds as nearly as possible with the position occupied by the free end of the jaw K when in use.

The lower ends of the posts D and E are turned off and threaded to receive nuts L, while the lower end of the shank C is reduced to form a smaller square shank M, which is provided on its side faces with recesses N to receive a key O.

To secure my device in place, I provide a second triangular plate P, provided at its three corners with openings to receive the lower ends of said posts D and E and said shank C, the rear end of said plate P being thicker and raised, as at Q, and provided in its upper face with a lateral dovetail groove R, adapted to receive a triangular steel bar S, which when said plate is drawn up by the nuts L bears against the lower face of the coupler and binds on the latter. Said plate P is provided with a practically-triangular opening T. The thickness of said plate P at its forward end is equal to the distance between the recesses N and the shoulder formed at the lower end of the shank C proper, said plate being provided on its lower face on each side of the rectangular recess with overhanging ribs U, forming guides to receive said key O. The said key O consists of a bifurcated plate of sheet metal, the tongues of which are adapted to enter said recesses N and guides U and are provided on their inner edges adjacent their free ends with recesses V, which when said key is in place register with the rear face of the reduced end of the shank C and receive the tongue W of

a second sheet-metal key X, the latter being adapted to be driven down into position and to spring at its upper end into the recess formed to receive same, so that its upper end
5 engages the upper wall or shoulder Y of said recess, thus preventing said key X from springing out.

My said repair device is thus very firmly secured in position and by the clamping action
10 of the nuts L and bar S binds so firmly on the coupler as to prevent any change of position. It is very easily applied and operates very efficiently.

I claim as my invention—

15 1. A car-coupler-repair device, comprising a collar engaging the coupler-head, and carrying a coupling-shank adapted to occupy the position normally occupied by the free end of the coupler-jaw.

20 2. A car-coupler-repair device, comprising a frame secured to the coupler-head and projecting beyond the latter, and a vertical shank carried by said frame and occupying the position normally occupied by the free end of
25 the coupler-jaw.

3. A car-coupler-repair device, comprising a frame removably secured to the coupler-head and projecting beyond the end of the latter, and a vertical shank carried by said
30 frame and projecting into the path of and adapted to be engaged by the jaw of the coupler of the adjacent car.

4. A car-coupler-repair device, comprising a plate provided at its rear end with a flange
35 adapted to engage the rear end of the coupler-head and posts extending downwardly on each side of the draw-bar of the coupler, a vertical coupling member at the forward end of said plate beyond the end of the coupler-head and lying in the path of the jaw, and a
40 clamping member engaging the lower ends of said posts and coupling member to rein-

force the same and hold said first-named member rigidly in position.

5. A car-coupler-repair device, comprising 45 a plate, devices carried thereby and engaging the coupler-head, a coupling member carried thereby and extending beyond the end of the coupler-head and in the path of the jaw, and a clamping member engaging said 50 coupling member and said first-named devices to clamp said plate and the parts carried thereby rigidly in position.

6. The combination with a coupler, of a repair device adapted to be removably mounted 55 thereon and carrying a coupling member lying in the path of and adapted to take the place of the jaw, and means for clamping said device rigidly in position on said coupler.

7. The combination with the draw-bar and 60 head of a coupler, of a clamp adapted to engage the same, and a coupler member carrying said clamp and lying in the path of the jaw, said coupling member being adapted to occupy the place and perform the functions 65 of said jaw.

8. The combination with the draw-bar and head of a car-coupler, of a member spanning said draw-bar and engaging said head, a coupling device carried by said member, project- 70 ing into the path of and adapted to take the place of the jaw, a clamping member adapted to engage said first-named member and said coupling device and adapted to firmly clamp same on said coupler, and devices car- 75 ried by said coupling device and engaging said clamping member to lock the latter against removal.

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

OLIVER P. WILHELM.

Witnesses:

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ERWIN J. LOTZ.