

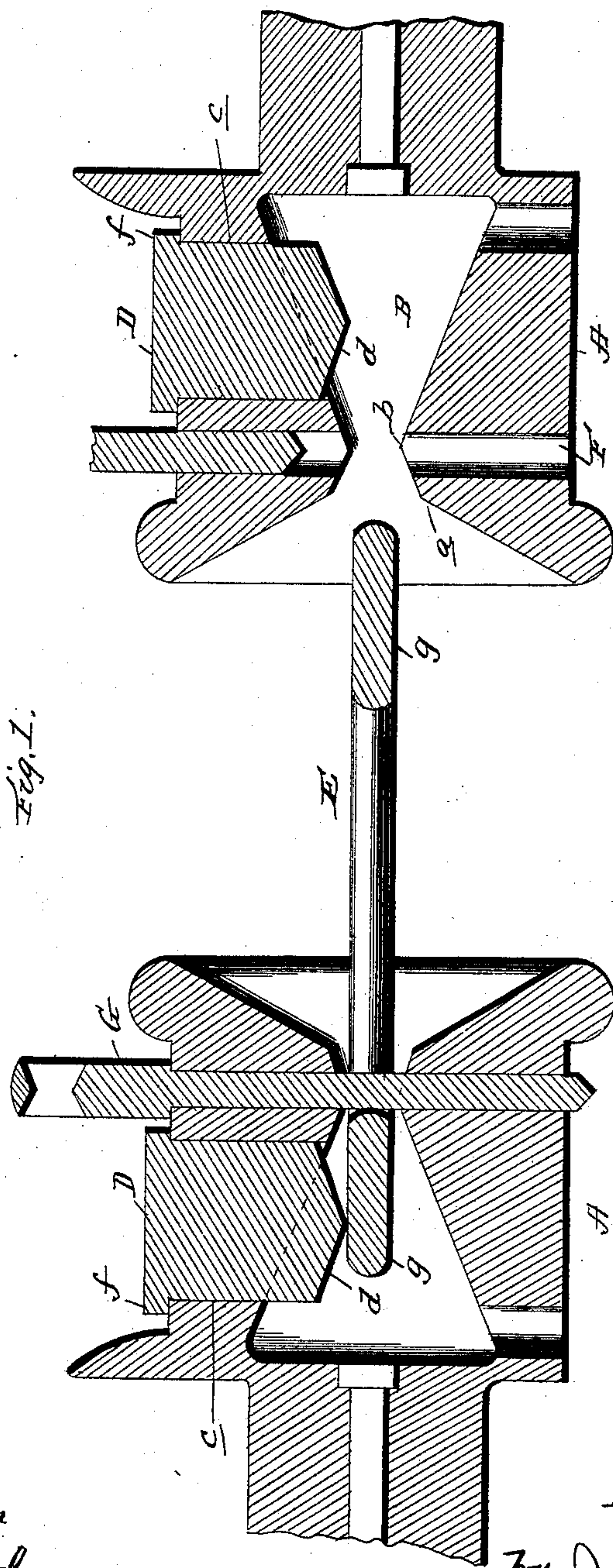
(No Model.)

2 Sheets—Sheet 1.

R. L. GARLICK.
CAR COUPLING.

No. 472,534.

Patented Apr. 12, 1892.



Witnesses:
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H. F. Matthews.

Inventor
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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2

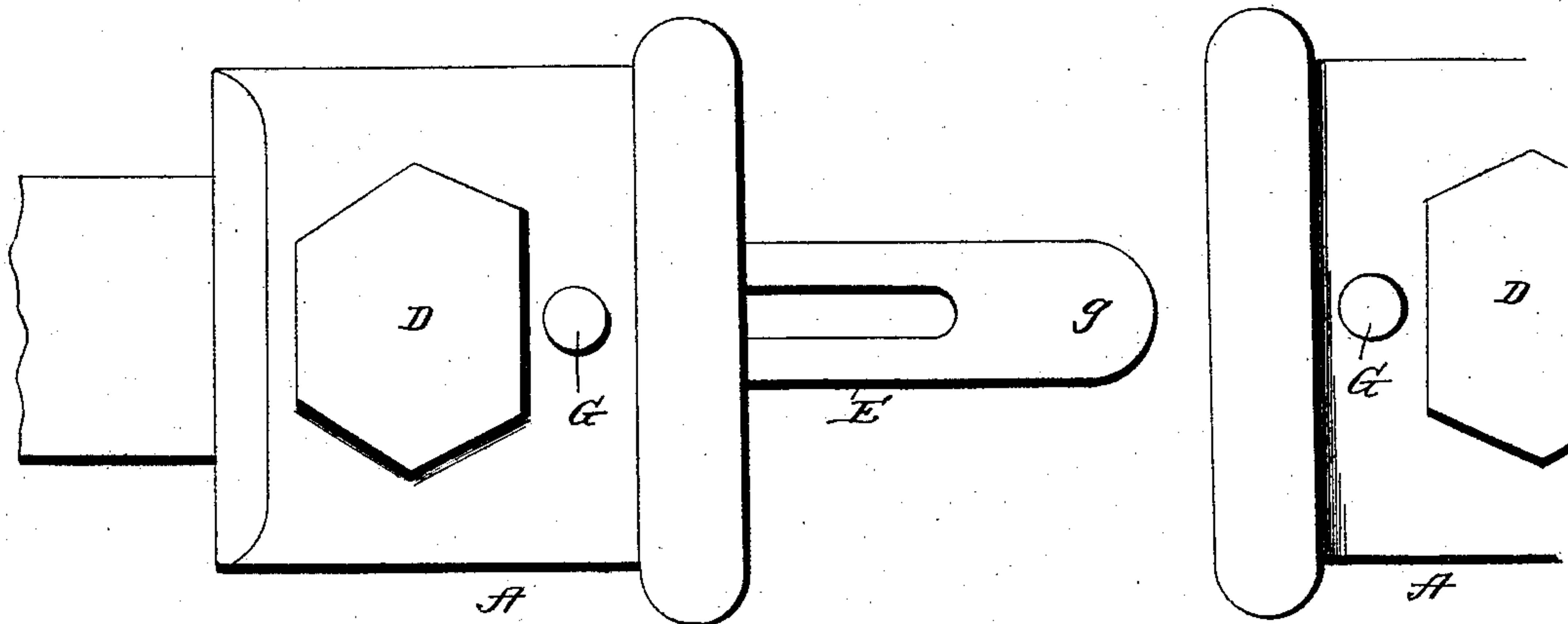
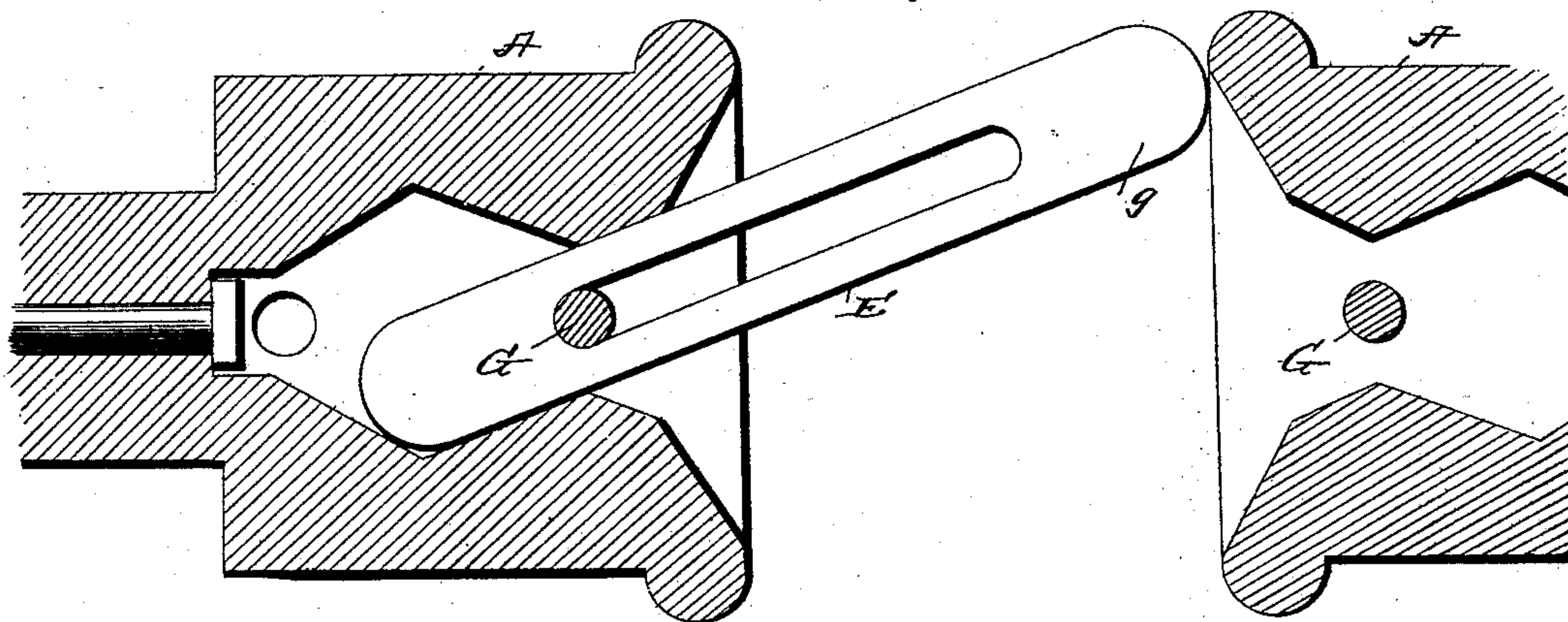


Fig. 3.



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UNITED STATES PATENT OFFICE.

REUBEN L. GARLICK, OF WATERTOWN, SOUTH DAKOTA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 472,534, dated April 12, 1892.

Application filed May 11, 1891. Serial No. 392,412. (No model.)

To all whom it may concern:

Be it known that I, REUBEN L. GARLICK, a citizen of the United States, residing at Watertown, in the county of Codington and State of South Dakota, have invented certain new and useful Improvements in Car-Couplings; and I do 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 has relation to an improvement in devices for coupling cars; and it has for its prime object the provision of means whereby the objectionable necessity of going between the cars to guide the coupling-link may be dispensed with.

A further object of the invention is to so construct the draw-heads as to permit the free end of the link to be raised and lowered as well as moved laterally in either direction, so as to couple with cars of various heights, as well as such cars as may not have their draw-heads truly in the same longitudinal center of the car.

Other objects and advantages will appear from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a longitudinal vertical sectional view of a pair of draw-heads, showing the link coupled in one head and properly guided to enter the opposite head. Fig. 2 is a plan view of the same, and Fig. 3 is a horizontal longitudinal sectional view.

Referring by letter to said drawings, A indicates the draw-head, which is mainly of the ordinary construction. This draw-head has its mouth flaring from the point *a*, and from this point *a* to a point *b* the throat of the draw-head is beveled at an angle of about thirty degrees, although the inclination of such angle may be changed according to the fancy or dictation of the mechanic. The draw-head, beginning from the point of the angle *b*, through which the pin-aperture passes, has a chamber B. This chamber has its walls inclined rearwardly in an opposite direction above and below, so as to permit the free end or the inserted end of the coupling-link to move freely therein and the opposite end be guided in coupling. The roof of this chamber

B, which has its walls inclined rearwardly, as described, is provided in its roof with a vertical aperture *c*.

D indicates a weight. This weight, which is placed in the aperture *c* of the draw-head, has its forward lower end beveled, as shown at *d*, and its rear lower end beveled in an opposite direction, as shown at *e*.

The aperture *c*, as better shown in Fig. 2 of the drawings, has angular walls, and the weight D, which is arranged in said aperture, is of a corresponding form, so that it may be allowed only a vertical movement therein. This weight is provided at its upper end with a head or stop-flange *f*, so as to limit its downward movement in the chamber of the draw-head, and said weight is of a sufficient length to have its lower end enter said chamber and bear upon the coupling-link.

E indicates the coupling-link. This link is provided at opposite ends with a solid portion *g*, designed to engage the lower end of the weight D.

F indicates the aperture for the coupling-pin, and G indicates the coupling-pin, which may be of the construction usually employed.

From the construction described it will be seen that cars of various heights or altitudes might be coupled without the necessity of going between them to guide the link, as by the employment of the weights the link will be sustained in an approximately horizontal position, and in coupling a low car to a high one with the link inserted, it will be seen that the weight in the head carrying the link may rise upon the cars coming together while the connection is being made, while in coupling a low car to a high one the weight in the receiving draw-head will freely rise in its seat when engaged by the link, as the bevel on said weight will offer no obstruction to such movement.

I am aware that it is not broadly new to provide a coupler with side spaces in the head to afford radiation of the rear end of the link above the pin, and therefore do not wish to be understood as claiming only the construction as herein shown and described.

By reason of the bevel *a* it will be seen that the link may be guided into the draw-head and such advantages obtained as a flaring draw-head not having the contracted throat,

and by the employment of the bent portions
b a bearing is formed for the link as it as-
sumes certain material positions in the draw-
head, and the bevels or inclines are particu-
5 larly adapted for use in connection with the
weight having the beveled end.

Having described my invention, what I
claim is—

10 1. A draw-head having its mouth flaring
and its throat beveled at a less angle, and also
having a chamber in rear of the throat formed
with inclined walls, in combination with a
vertically-movable weight entering said cham-
ber and having its lower end beveled to serve
15 with a coupling-link, substantially as speci-
fied.

2. A draw-head having a flaring mouth, and
the inner walls of its throat flaring at a less
angle and opening rearwardly into a chamber
having inclined walls, said draw-head also 20
having a vertical angular aperture in its top
and entering the chamber, in combination
with a vertically-movable weight having its
lower end beveled from a central point for-
wardly and rearwardly to serve in connection 25
with a coupling-link, substantially as speci-
fied.

REUBEN L. GARLICK.

Witnesses:

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