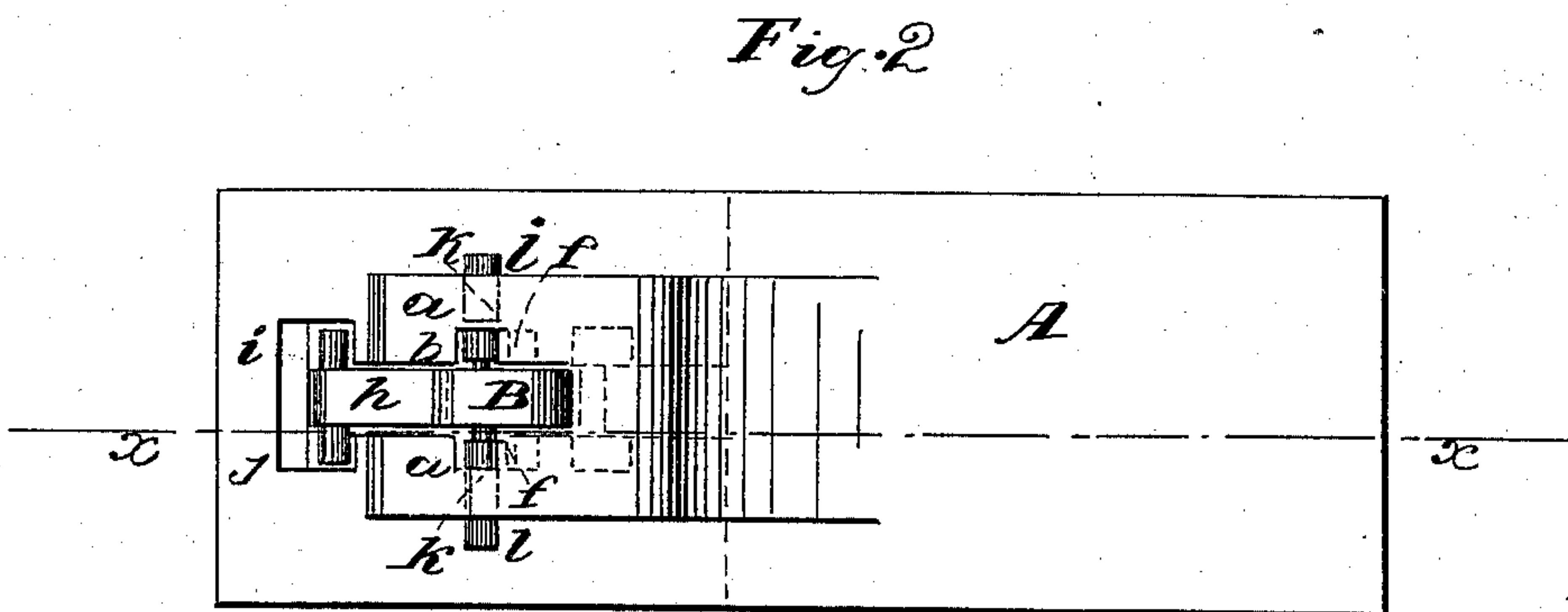
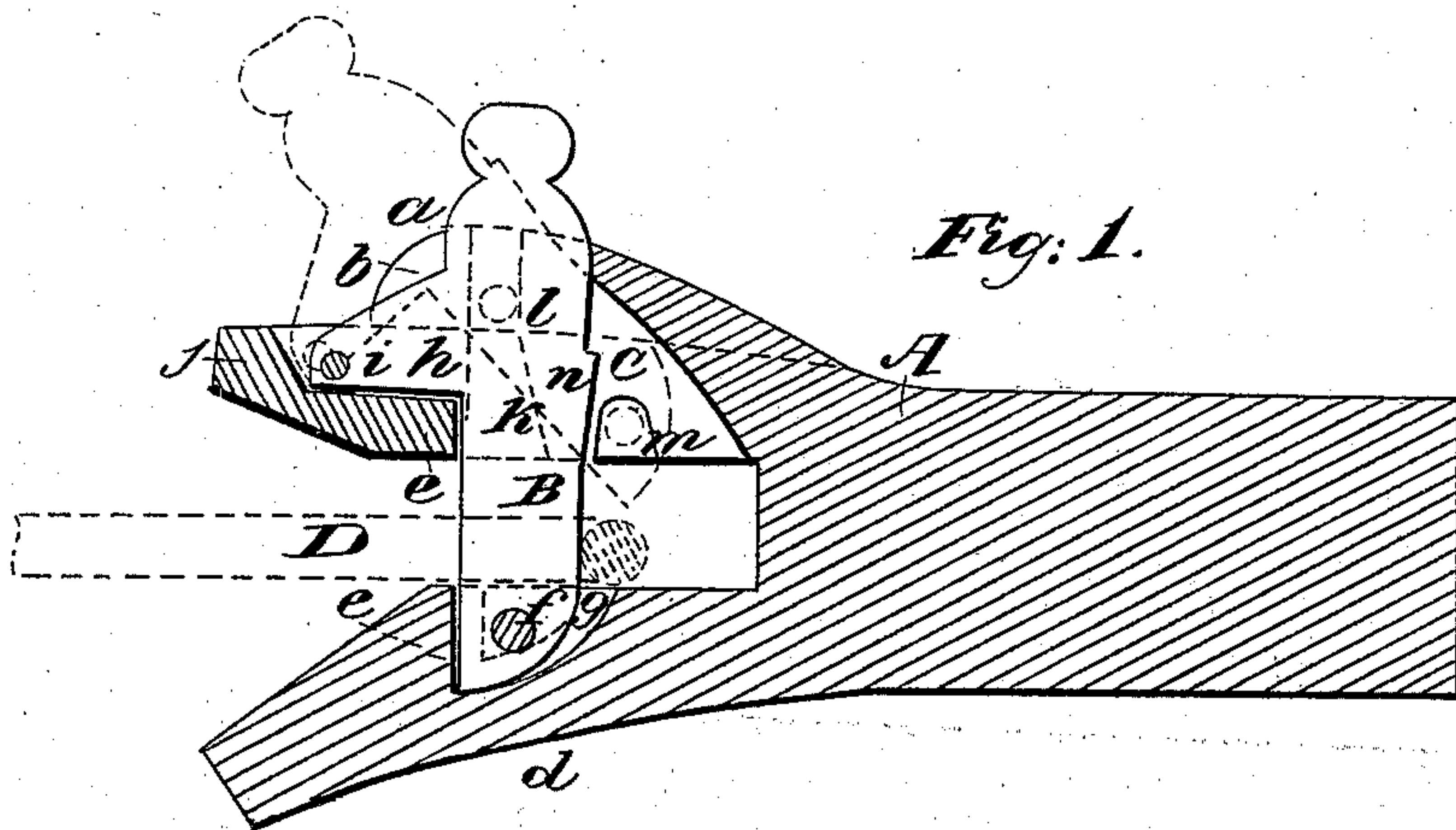


J. M. GOW.
Car Coupling.

No. 43,399.

Patented July 5, 1864.



Witnesses

Henry Hornsby
W. L. S. Pluff

Inventor

James M. Gow
per *Wm. H. C.*
Attorneys

UNITED STATES PATENT OFFICE.

JAMES M. GOW, OF ROCK ISLAND, ILLINOIS.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 43,399, dated July 5, 1864.

To all whom it may concern:

Be it known that I, JAMES M. GOW, of Rock Island, in the county of Rock Island and State of Illinois, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to an improvement on a car-coupling for which Letters Patent were granted to me bearing date February 9, 1864. This patented coupling contains one prominent defect—viz., a comparatively long link or shackle is required in order to admit of the suspended coupling-pin being shoved back sufficiently far for it to engage the link. Besides, the pin itself is slotted, which has a tendency to weaken it. In my present improvement these difficulties are fully obviated, while all the advantages of the original invention are retained, as will be hereinafter shown and described.

A represents the draw-head, which may be of cast or wrought iron, and secured to the car in the usual manner. The upper part of the draw-head is provided with two ears, *a a*, between which there is an opening, *b*, to receive the coupling-pin B. Said pin also passing through a slot or opening, *c*, in the top of the draw-head, and its lower end fitting in a recess, *d*, in the bottom of the same, the pin, when the pull of the link or shackle is upon it, bearing against stops *e e*, formed by the front ends of the slot *c* and recess *d*. (See Fig. 1.) The coupling-pin B has a projection, *f*, at each side of it, near its lower end, and these projections bear upon curved ledges *g g*, at each side of the recess *d*, and at the upper part of the pin B, at its front side, there is an arm or projection, *h*, having a pin, *i*, passing transversely through its front part, said pin *i* being fitted in a recess, *j*, in the top of the draw-head, near its front end, as shown in both figures. At each side of the

opening *b*, between the ears *a a*, there is a vertical groove, *k*, said grooves also extending down at each side of the slot *c* in the top of the draw-head. These grooves *k* admit of the pin B being inserted in the draw-head, as they afford a passage for the projections *f f*. In each ear *a* there is fitted transversely a pin or screw, *l*, in line with the groove *k*. These pins or screws serve as stops for the pin B as the projections *f* come in contact with them, and prevent the pin being casually removed from the draw-head, thereby obviating the use of a chain hitherto employed for that purpose. At each side of the slot *c*, just back of the grooves *k*, there are recesses *m* to receive the projections *f* of the pin when the latter is shoved back, as shown in red in Fig. 1. When the link or shackle D enters the draw-head, the pin B is shoved back and swings from the pin *i*, as a fulcrum, and, as this pin is some distance in front of the pin B, the latter, in being shoved back, will describe but a short arc, much less than if the pin *i* passed through the upper part of the pin B; hence a comparatively short link or shackle may be used. When the end of the link or shackle passes the lower end of the pin B, the latter drops through the former.

In order to disconnect the link or shackle when the pull of the latter is on the pin, the pin is simply raised up out of the link, the pins or screws *l* being sufficiently high to admit of this, and when the pin is thus raised it may be shoved forward so as to rest on the front part of the draw-head, out of the way.

On the back edge of the pin B there is a shoulder, *n*, which is underneath the back end of the opening *b*, and prevents the pin being casually jolted upward out of the link or shackle. This shoulder, however, does not prevent the pin being raised to free the link or shackle, as the former may be shoved a little forward, so that the shoulder may pass the back end of the opening *b*.

The slot in the pin used in the original coupling, it will be seen, is avoided.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The coupling-pin B, provided with an arm or projection *h*, having a pin, *i*, passing transversely through for the pin B to swing upon and describe a short arc under the action

of the entering link or shackle, substantially as set forth.

2. In combination with the pin B, thus suspended, the projections *ff* at the lower parts of the sides of the pin, in connection with the curved ledges *g* at each side of the recess *d*, to serve as a support for the pin, as set forth.

3. The grooves *k k* at each side of the opening *b* and slot *c*, in combination with the pins or screws *ll*, the projections *ff* of the pin B, and the recesses *m* in the sides of the slot *c*,

all arranged substantially as and for the purpose specified.

4. The shoulder *n* on the back part of the pin B, when arranged in relation with the back part of the slot *c*, for the purpose herein set forth.

JAMES M. GOW.

Witnesses:

D. L. ROBINSON,
ALEX. M. GOW.