

(No Model.)

G. KER.
CAR COUPLING.

No. 504,697.

Patented Sept. 5, 1893.

Fig. 1.

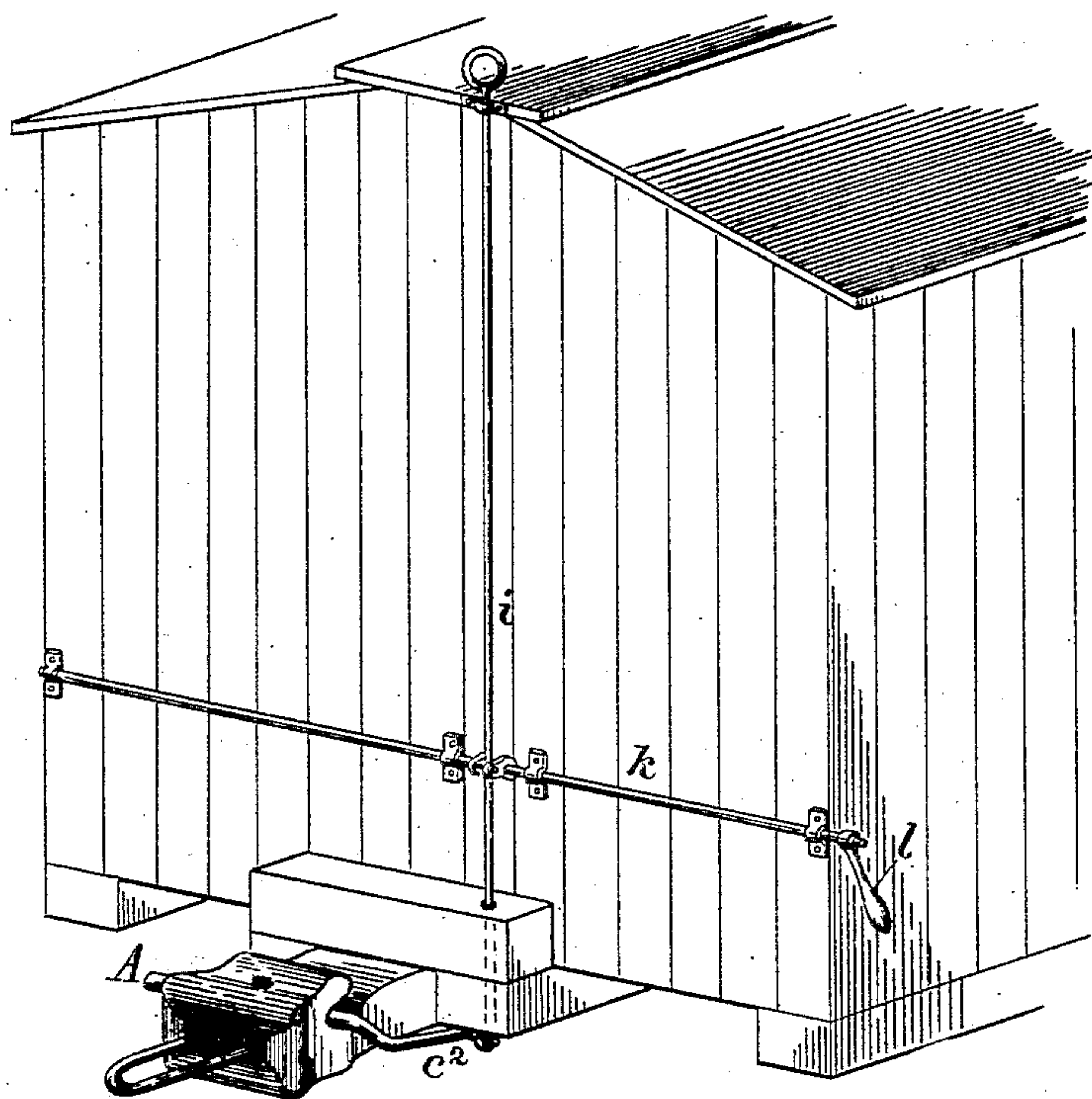


Fig. 2.

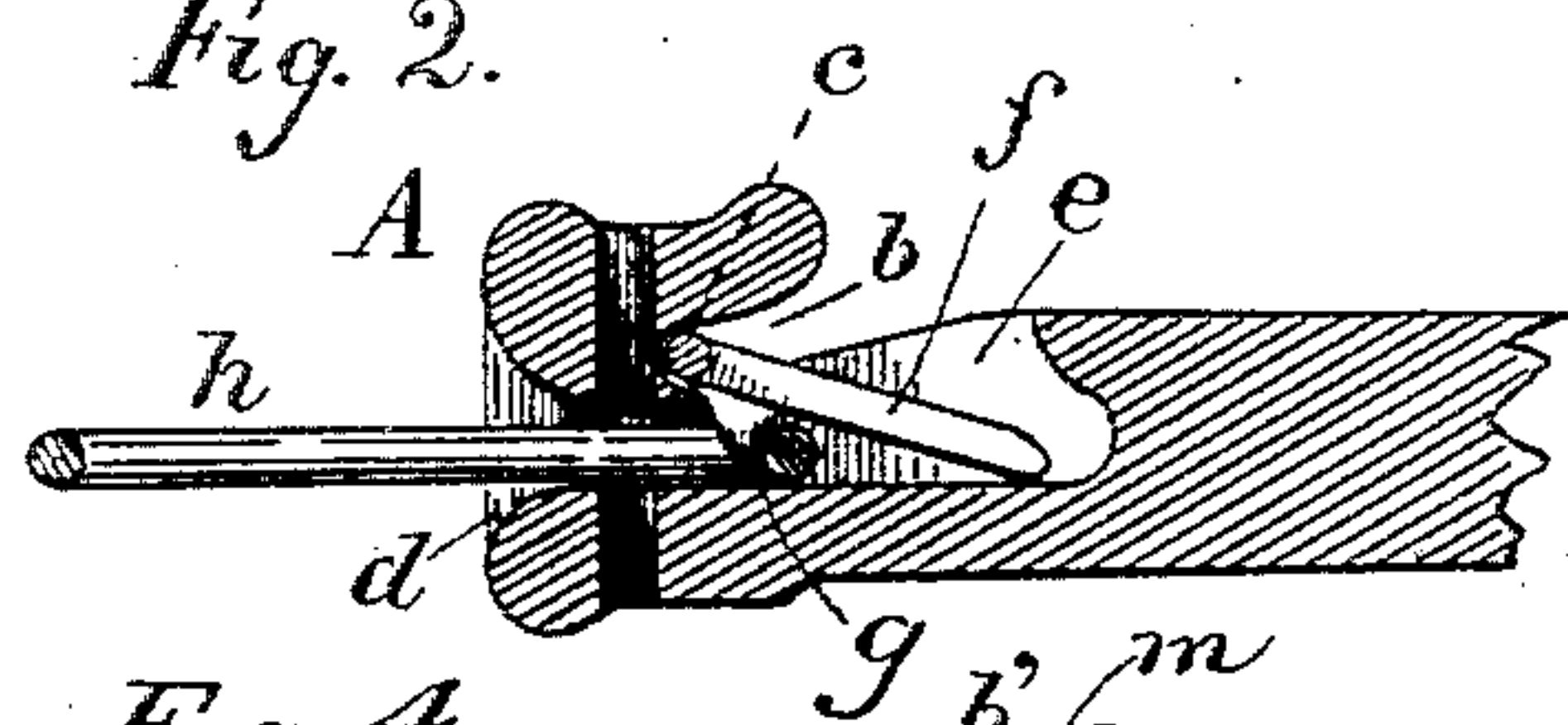


Fig. 4.

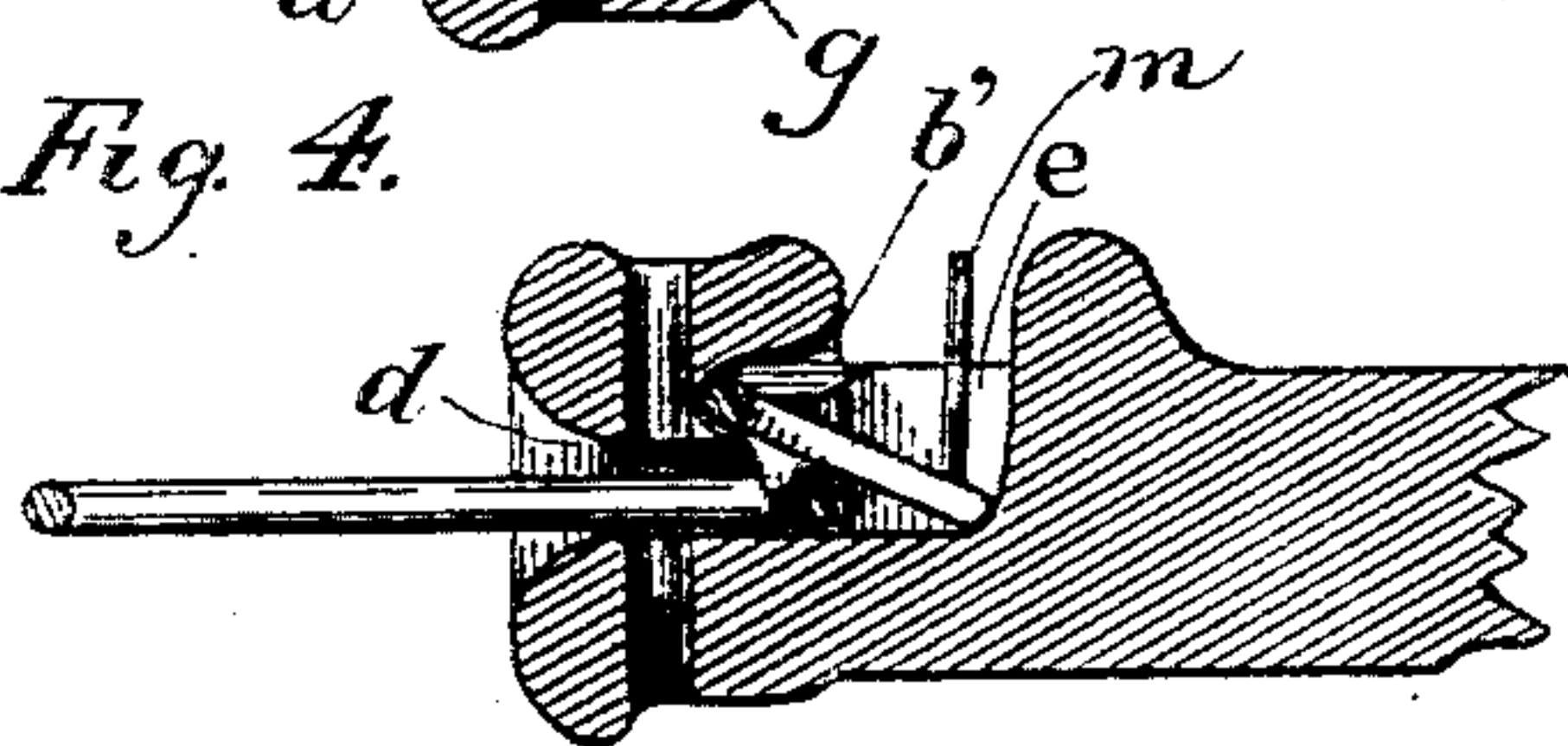


Fig. 3.

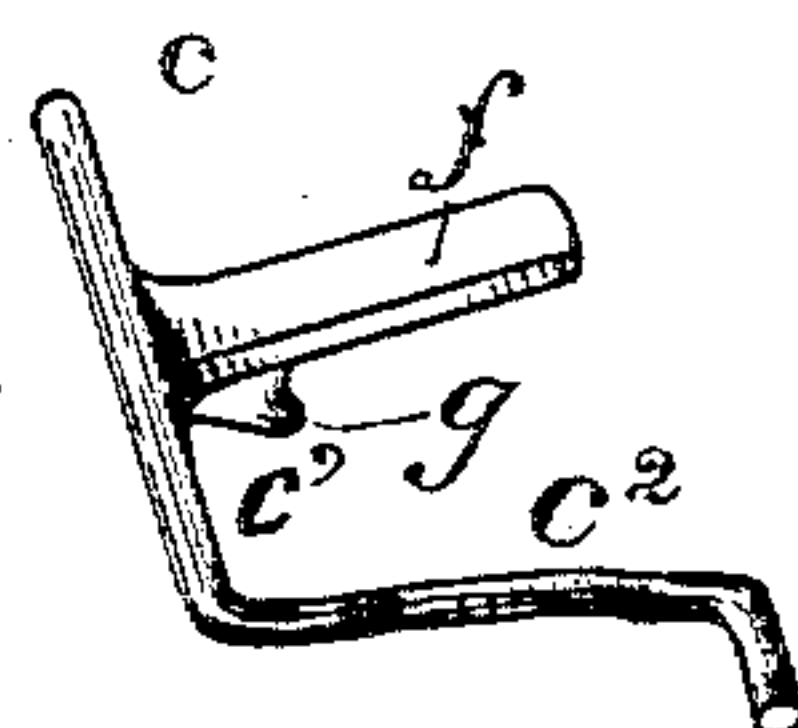


Fig. 5.

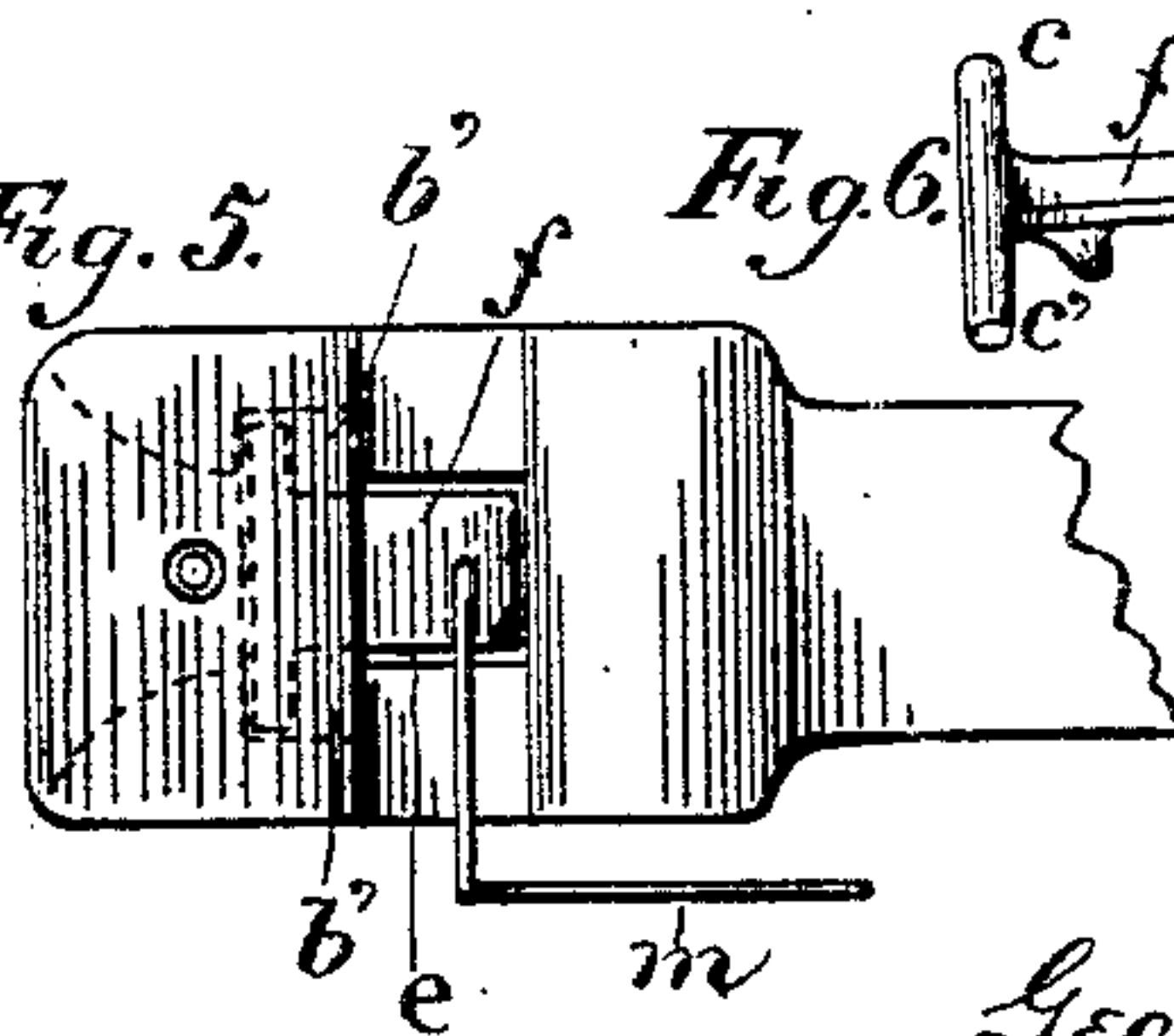
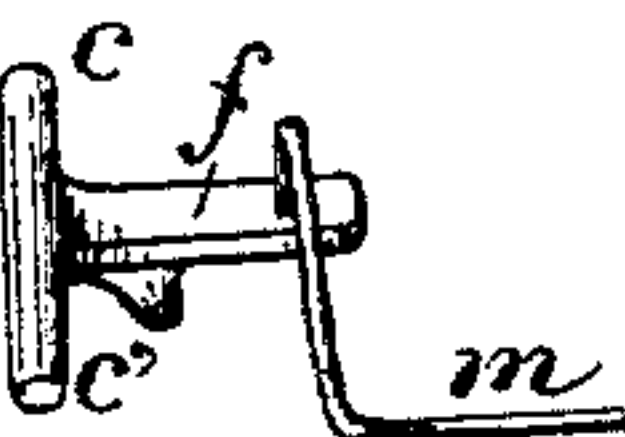


Fig. 6.



Witnesses:

John H. Hall
A. J. Safferty

Inventor,
George Ker
by J. Heisler
his Attorney.

UNITED STATES PATENT OFFICE.

GEORGE KER, OF PORTLAND, OREGON.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 504,697, dated September 5, 1893.

Application filed October 13, 1892. Serial No. 448,783. (No model.)

To all whom it may concern:

Be it known that I, GEORGE KER, a citizen of the United States, residing at Portland, Multnomah county, and State of Oregon, have invented a new and useful Car-Coupler, of which the following is a specification, reference being had to the accompanying drawings as a part hereof.

The object of my invention is to construct a strong yet simple car-coupling device adapted to couple automatically and to be released again either from the top or side of the car, as found convenient.

The features of my invention will be apparent from the accompanying drawings above referred to in which the illustrations shown represent as follows:

Figure 1. shows my invention, and means for operating the same, as applied to a car. Fig. 2. is a longitudinal vertical section of a drawhead and coupling device embodying the principles of my invention. Fig. 3. shows a form of coupling device used by me in combination with the drawhead seen in Fig. 2. Fig. 4. is a longitudinal vertical section of a modification of the drawhead and coupling device seen in Figs. 2. and 3. Fig. 5. shows a top view of the same parts seen in Fig. 4. and Fig. 6. the coupling device seen in Figs. 4 and 5.

Referring to the letters in the illustration: A represents a drawhead provided with slots or recesses *b* cut in the back of the head thereof and extending laterally to the exterior of the sides of the same, such recesses constituting sockets for the arms or axis *c c'* of the coupling device intended to be used in combination with said drawhead A. The bell-shaped mouth of the drawhead leads into the throat *d* and thence into the chamber *e* in which the pawl of the coupling device operates. Said coupling device consists as seen in Fig. 3., of a pawl *f* having arms or axles *c c'* and provided with a lug *g*, the arms *c c'* resting in the sockets *b* and the loose end of the pawl dropping on the floor of the chamber *e*. The link *h* on entering the drawhead coming in contact with the lug *g* pushes by the same, the pawl *f* being raised to permit the

end of the link to pass and then dropping in place again holding the link in a horizontal or coupling position, to facilitate its insertion into the drawhead of another car, while allowing ample play to accommodate the variations in height between the two drawheads to be coupled. The arm *c'* of the coupling device (Fig. 3) continues in the form of a rod or lever, *c²*, which is connected with the vertical rod *i* attached at the end of the car, and such rod *i* being in turn suitably connected with a horizontal rod *k* having a lever *l*, at one or both of its ends, thus furnishing means whereby the coupling device invented by me may be conveniently and safely operated either from the top of the car, or side thereof. The construction of the other drawhead (Figs. 4 and 5) is somewhat modified with a view to obtaining greater strength, the recesses or sockets *b'* not extending through to the exterior of the sides of the drawhead as in the former case, and the arms or axles *c c'* being shortened to fit in such sockets *b'*, and the pawl *f* being operated by a rod *m* extending from the top of such pawl (see Fig. 6.) and then connecting with the rod *i* in similar manner as the lever *c²*. The rods *i* and *k* are adapted to co-operate with each other as shown in Fig. 1.

My invention is more especially designed for use on freight cars.

In addition to the coupling means invented by me I also adapt my drawheads to receive an ordinary coupling-pin for use in case of emergency.

Having thus described my invention, what I claim is—

1. In a car coupler, the combination of a draw-head A, sockets *b* in the rear portion of the head extending downwardly from the upper surface thereof and adapted to receive arms *c c'* of a pawl *f*, a chamber below the sockets to receive the pawl, a lug *g* on the pawl to engage a coupling link, and rods *i* and *k* to operate the pawl, substantially as described and set forth.

2. The combination in a car coupler of a draw-head A with throat *d*, sockets *b* in the upper and rear portions of the draw-head to

receive arms $c\ c'$ of a pawl f , a chamber in the rear portion of the head to receive the pawl, a lug g on the pawl to engage a coupling link, rods i and k , mounted on the car
5 and connected with arms $c\ c'$ to operate the pawl, as and for the purpose set forth.

In testimony whereof I have hereunto sub-

scribed my signature in the presence of two witnesses.

GEORGE KER.

Witnesses:

JOHN H. HALL,
F. S. LAFFERTY.