

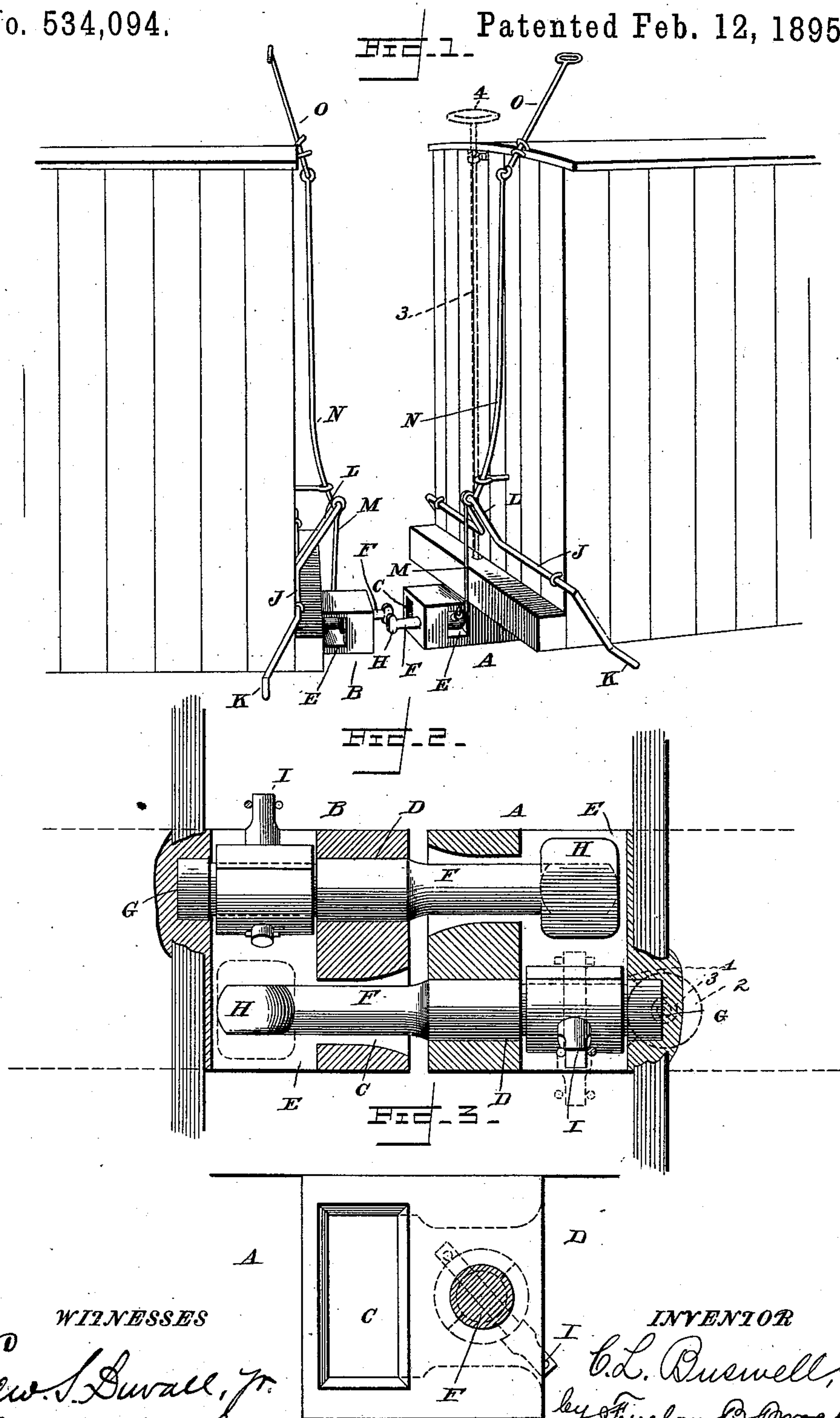
(No Model.)

2 Sheets—Sheet 1

C. L. BUSWELL.
CAR COUPLING.

No. 534,094.

Patented Feb. 12, 1895.



WITNESSES

Edw. S. Duwall, Jr.
Leroy J. Mc Neely

INVENTOR

C. L. Buswell,
by F. L. Brock
Attorney

(No Model.)

2 Sheets—Sheet 2.

C. L. BUSWELL.
CAR COUPLING.

No. 534,094.

Patented Feb. 12, 1895.

FIG. 4.

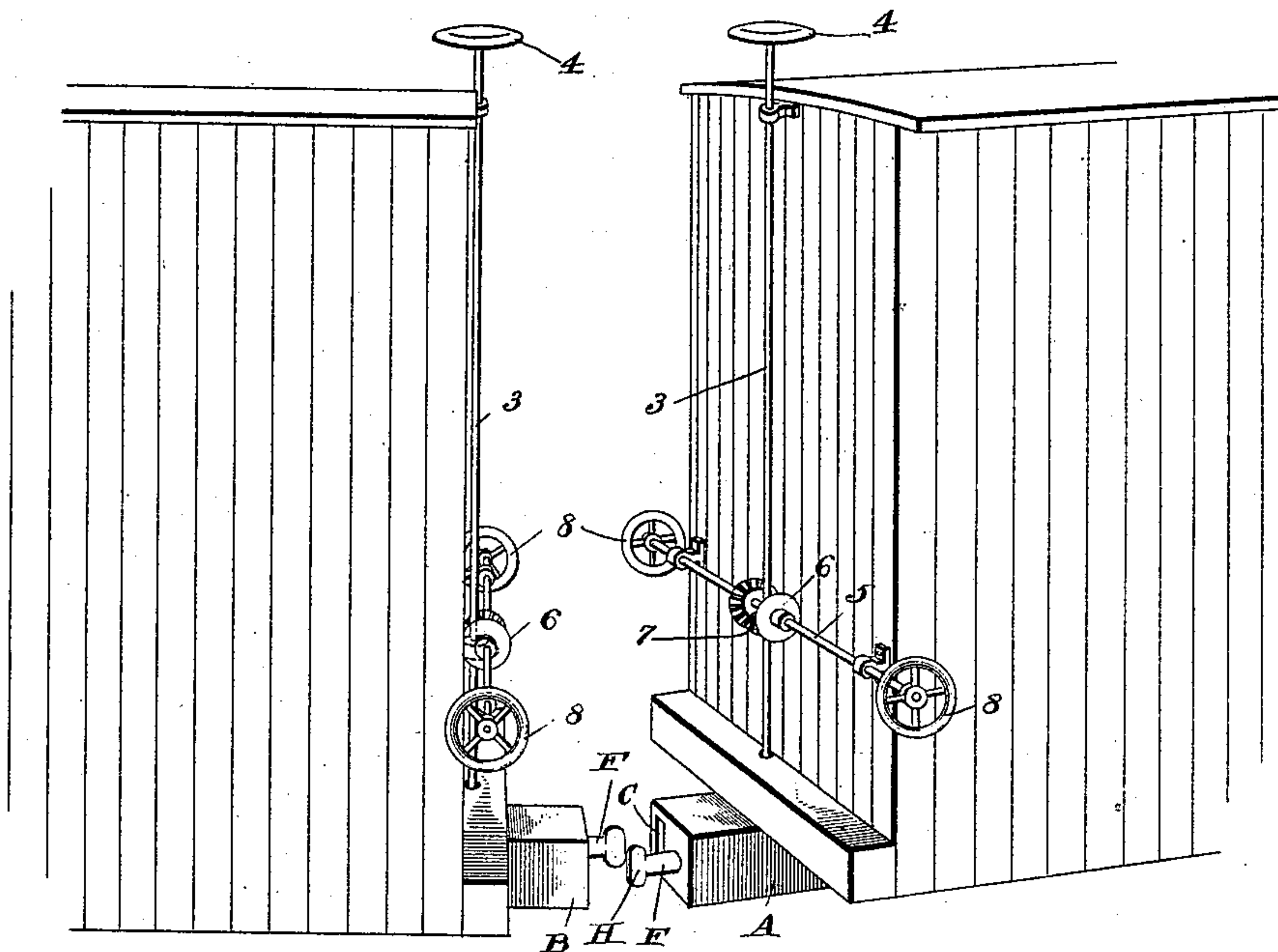


FIG. 5.

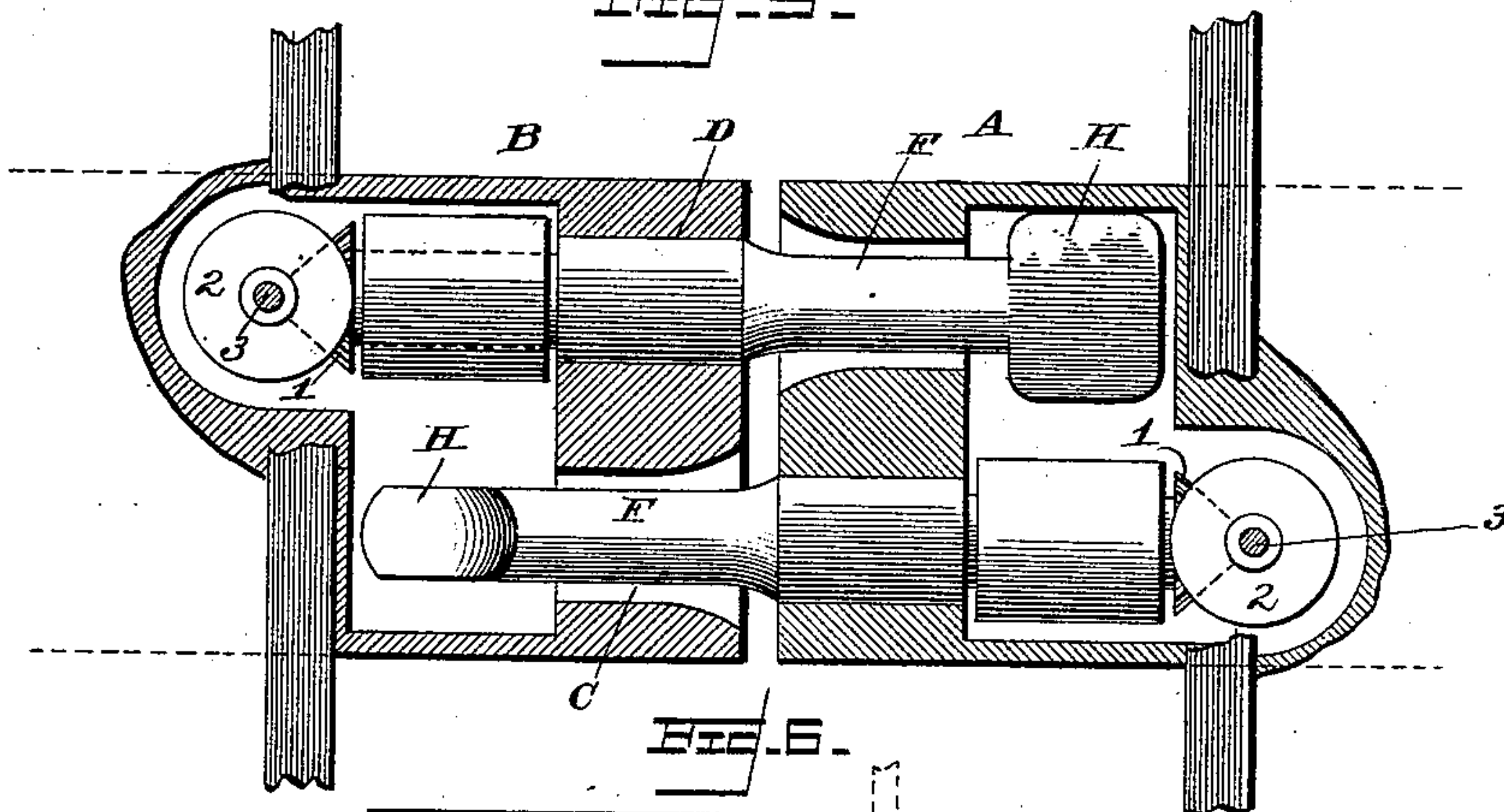
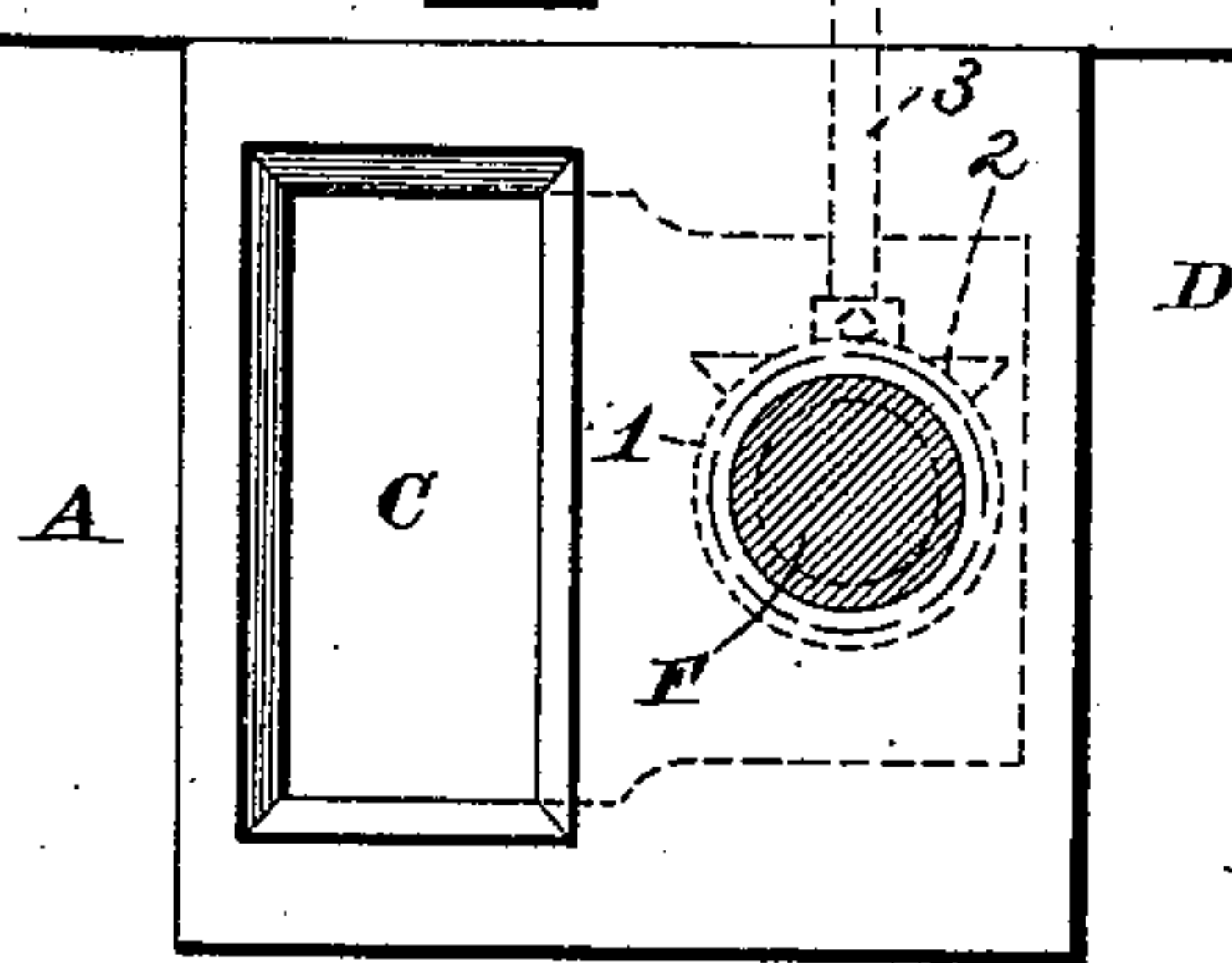


FIG. 6.



Witnesses
Edw. S. Duval, Jr.
L. R. Brock

Inventor
C. L. Buswell
by F. R. Brock
Attorney

UNITED STATES PATENT OFFICE.

CHARLES LINCOLN BUSWELL, OF NIOTAZE, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 534,094, dated February 12, 1895.

Application filed April 26, 1894. Serial No. 509,141. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LINCOLN BUSWELL, a citizen of the United States, residing at Niotaze, in the county of Chautauqua and State of Kansas, have invented certain new and useful Improvements in Car-Couplers; 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, reference being had to the letters and figures of reference marked on the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of the adjoining ends of two freight cars to which I have applied my improvements. Fig. 2 is a horizontal section and plan, on an enlarged scale, of the coupling devices. Fig. 3 is an end view of one of the couplers. Fig. 4 is a perspective view of a modification of my invention. Fig. 5 is a detail horizontal enlarged section, partly broken away, of said modification; and Fig. 6 an end view of said coupler.

My invention consists of the following construction and combination of parts, the features of which will be first fully described and the points of novelty then set forth and claimed.

In the drawings—A represents one of the coupler heads, and B, the opposite or adjacent head. Each coupler head is provided with an oblong opening C at one side thereof, and a journal bearing D at the opposite sides. Both the openings C and D communicate in the rear with a transverse or crosswise opening E extending clear through the coupler heads.

F is a longitudinally projecting coupling pin journaled in the opening D and the bearing G so as to have an oscillating movement therein. The outer ends of these coupling pins F have oppositely projecting lugs H, which when the pin is turned so that they stand in a vertical direction, will permit the coupling pins F passing through the oblong opening C.

I are arms attached to the coupling pins F and projecting outwardly therefrom so that they may be oscillated to bring the lugs H into either a vertical or a horizontal position.

J is a crank bar hung in suitable bearings and extending across the car, where it is provided with crank arms K for oscillating it.

L is a crank formed midway of the bar J, and M a link pivoted to the crank and to the arm I for the purpose of rocking the coupling pin F. Attached also to the crank L for operating the same, is a rod N hung in suitable ways and having a handle O for operating it.

It will be seen that the coupler may be coupled and uncoupled without the train hands having to go between the cars, and it may be operated from either side or from the tops of the cars.

Either one of the pins F will couple the cars, or both may be used.

It will be seen that when the oppositely projecting lugs H are brought from a vertical to a horizontal position they overlap the opposite vertical sides of the oblong openings C and thereby hold the coupling pins firmly in engagement thereby preventing any accidental uncoupling of the cars.

My invention is simple, cheap and not liable to get out of order.

In Fig. 4, is shown in perspective view, my improved coupler with a modified means for rotating the coupling pins F. Fig. 2 is a detail enlarged horizontal section, partly broken away, of the modified apparatus shown in Fig. 4; and Fig. 6 is an end view of the car-coupler shown in Figs. 4 and 5. In these figures the rear end of the coupling pins F have beveled gears 1 keyed fast thereto, which mesh in turn with the gears 2 keyed to the lower end of the vertical staff 3, which staff projects beyond the top of the car, where it is provided with a wheel 4 for actuating it.

5 is a horizontal actuating rod provided with bevel gears 6 meshing with a horizontal bevel gear 7 keyed to the staff 3. The opposite ends of the rod 5 project alongside the car, where they are provided with operating wheels 8 or crank arms K, as shown in Fig. 1.

By turning the wheel 4 at the top of the car, or the wheel 8 at the sides it will be seen that the coupling of the cars may be effected without going between the cars.

If desired I may employ the vertical staff 3

and the wheel 4 for operating the coupling pin on the top of the cars, and the link M, crank L, rod J, and crank K, for actuating the coupling at the sides of the cars.

5 I claim—

The combination, in a car coupler, of a rotary coupling pin having a gear thereon, a rotary staff having a gear on the end of the staff, directly meshing with the coupling-pin gear,

a rotary horizontal side-actuating rod, and a mechanism connecting said rod and coupling-pin, substantially as set forth.

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

CHARLES LINCOLN BUSWELL.

Witnesses:

W. A. WILSON,
GRANT SWANK.