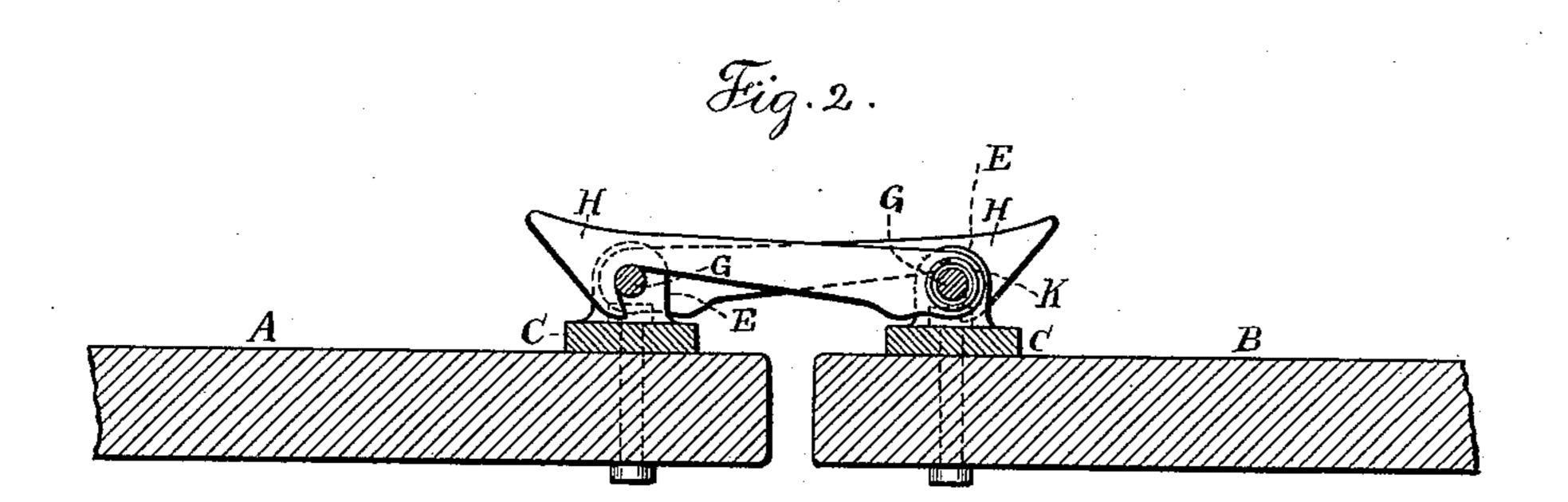
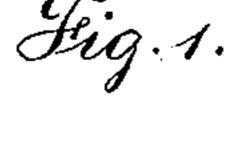
(No Model.)

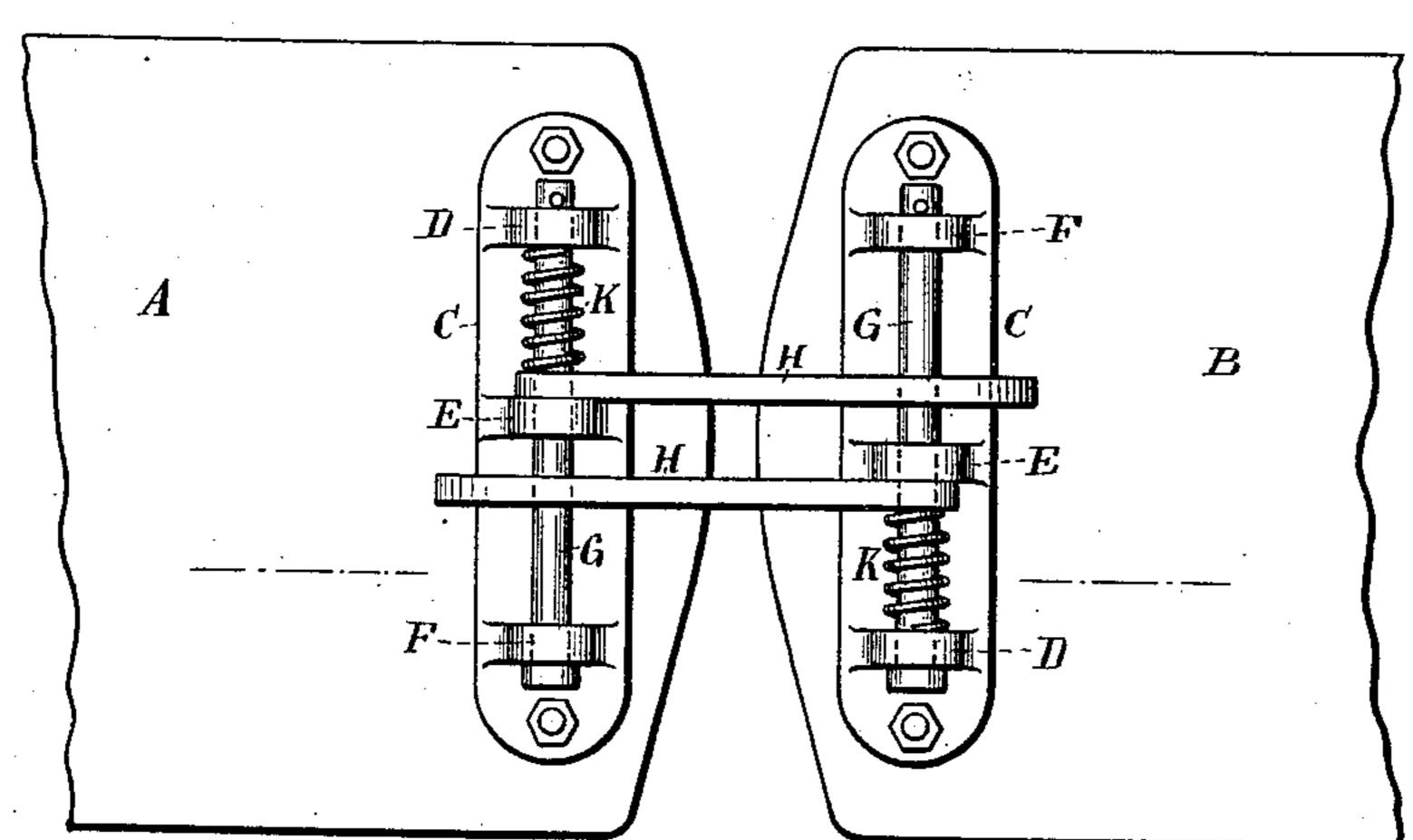
C. W. HUNT. CAR COUPLING.

No. 444,594.

Patented Jan. 13, 1891.







Witnesses: J. Stail-Chock-Smuth

Inventor:
Charles W. Hunt

per Lemmel W. Serrell

atty

## United States Patent Office.

CHARLES W. HUNT, OF WEST NEW BRIGHTON, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 444,594, dated January 13, 1891.

Application filed October 31, 1890. Serial No. 369,946. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. HUNT, a citizen of the United States, residing at West New Brighton, in the county of Richmond and State of New York, have invented an Improvement in Car-Couplings, of which the following is a specification.

Car-couplings have been made use of in which there are hooks standing in opposite directions and swinging vertically so as to be adapted to hook in opposite directions, the swinging end of one hook catching upon a bolt forming the pivot of the other hook.

My present invention is especially adapted to small cars used in the transportation of materials and traveling upon tracks that are curved more or less sharply, and where the hooks heretofore employed for coupling the cars together are liable to become misplaced.

In my present improvement I combine with the hooks acting in opposite directions springs that act to restore the hooks to their normal positions when upon a straight track, and which springs allow the hooks to yield in passing around curves, and at the same time both hooks adapt themselves to the lateral movements of the ends of the cars in relation to each other.

In the drawings, Figure 1 is a plan view of my improved coupling at the adjacent ends of two cars or platforms, and Fig. 2 is an elevation of such coupling.

A and B represent portions of the car or platform, and upon each of these a suitable 35 base-plate is connected, the same having three upright ears or lugs D E F, through which passes the bolt G, and the same is held by a head and nut or by suitable keys; or these lugs may be on the metallic end sills of the 40 cars. The hook H has an eye at one end, through which the bolt G passes, and the spring K, which is preferably a helix, intervenes between the side of the hook H and the lug or ear D, so that this spring K tends to 45 press the hook against one side of the center ear or lug E, and thereby retain the hook in a fixed position, and the bottom of the hook below the eye may rest upon the base C when the car-couplings are disconnected, so as to 50 prevent the moving end of the hook dropping down too far; and the hook end of the coupling H is made with the proper inclination, so that when the cars are run together the

hooks are self-acting and the moving ends run up over the bars G and drop down, so as 55 to engage with the same; and it is now to be understood that the couplings are alike, but as they stand in reverse positions facing each other the hook H on one coupling passes in between the ears or lugs E and F upon the 60 other coupling; and it is preferable to have the ear Enearer to the lug D than it is to the lug F, in order that the ends of the couplinghooks H may be free to hook upon the bars G without coming into contact with the cen- 65 tral ears or lugs E. As the cars may be drawn along, both hooks H, if of the same length, will be under the same tension when on a straight track, but in passing upon a curve the outer hook will have the most tension; 70 but the spring K, forcing the hooks toward each other will keep such hooks close up toward the lugs E, and should the ends of the cars move laterally in respect to each other, either on a straight line or on a curve, the 75 springs K will yield and allow the hooks H to swing laterally to a greater or less extent upon the respective bolts G, and as the tension may be changed from one hook to another by the movements of the cars the spring 80 K will move the hook that is wholly or partly free from tension up to its position. Thus the respective hooks will be restored from time to time to their normal positions and their durability and efficiency are thereby promoted. 85

I claim as my invention—
1. The combination, in a car-coupling, of a horizontal pivot-bolt, a plate with lugs for the bolt, a hook with an eye for the bolt and swinging vertically thereon and engaging the 90 similar bolt upon the adjoining coupling, and a spring to press the eye of the hook toward the center of the car, substantially as speci-

fied.

2. The car-coupling formed of hooks H, act- 95 ing in opposite directions, the pivot-bolts G for the hooks, the plates C and lugs D E F, through which the pivot-bolts pass, and the springs K between the sides of the hooks and the lugs D, to press the hooks toward the lugs 100 E, substantially as set forth.

Signed by me this 28th day of October, 1890. CHAS. W. HUNT.

Witnesses:

GEO. T. PINCKNEY, WILLIAM G. MOTT.