

(No Model.)

F. H. CARR.
CAR COUPLING.

No. 246,078.

Patented Aug. 23, 1881.

Fig. 1

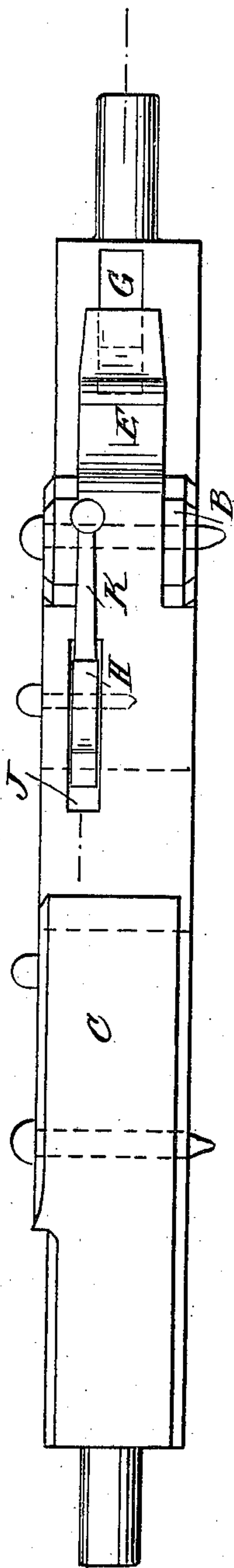


Fig. 2

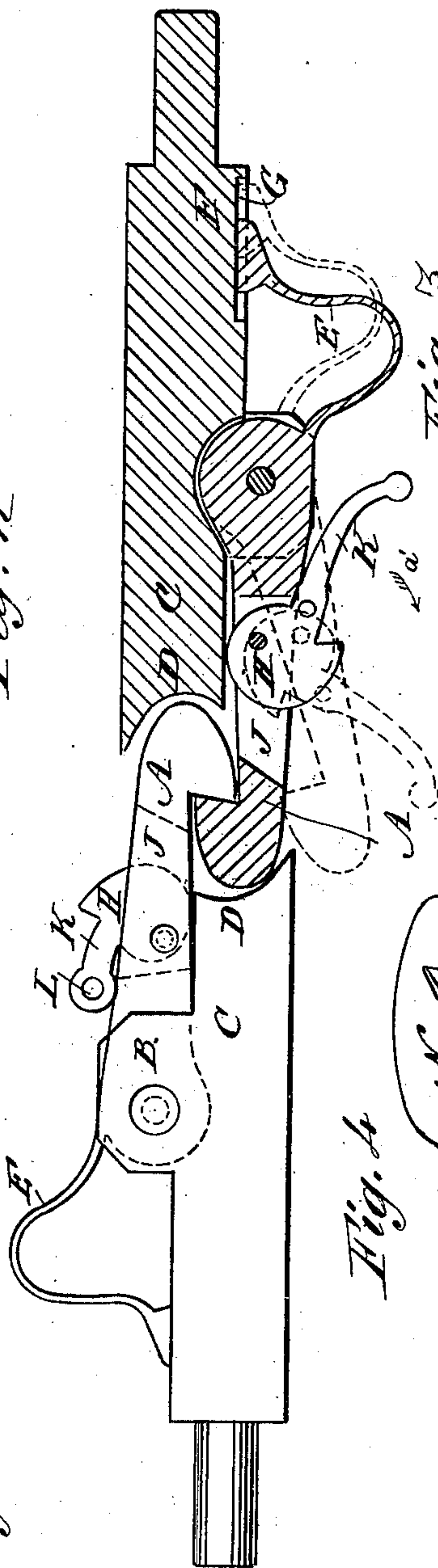


Fig. 3

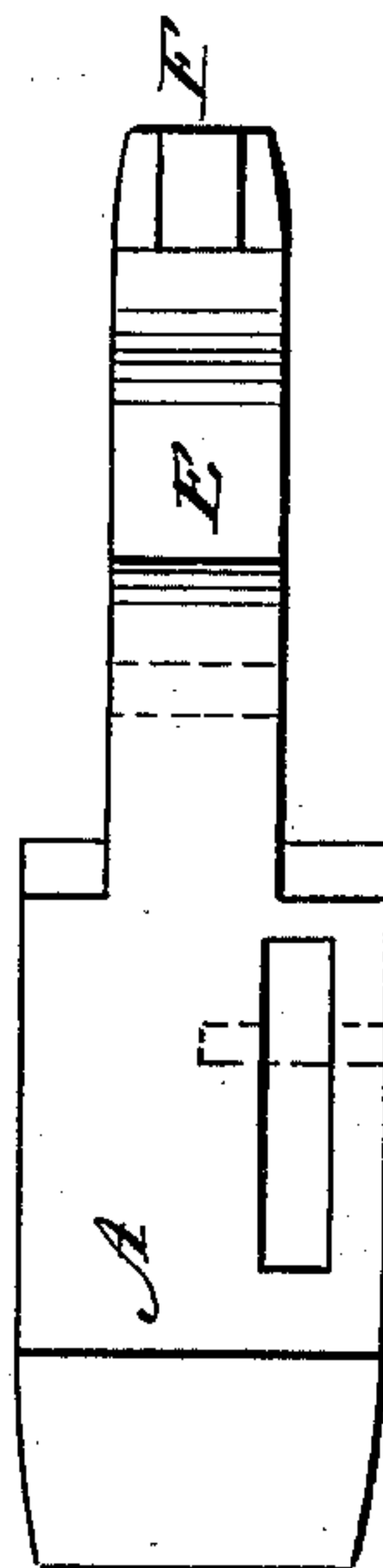


Fig. 4

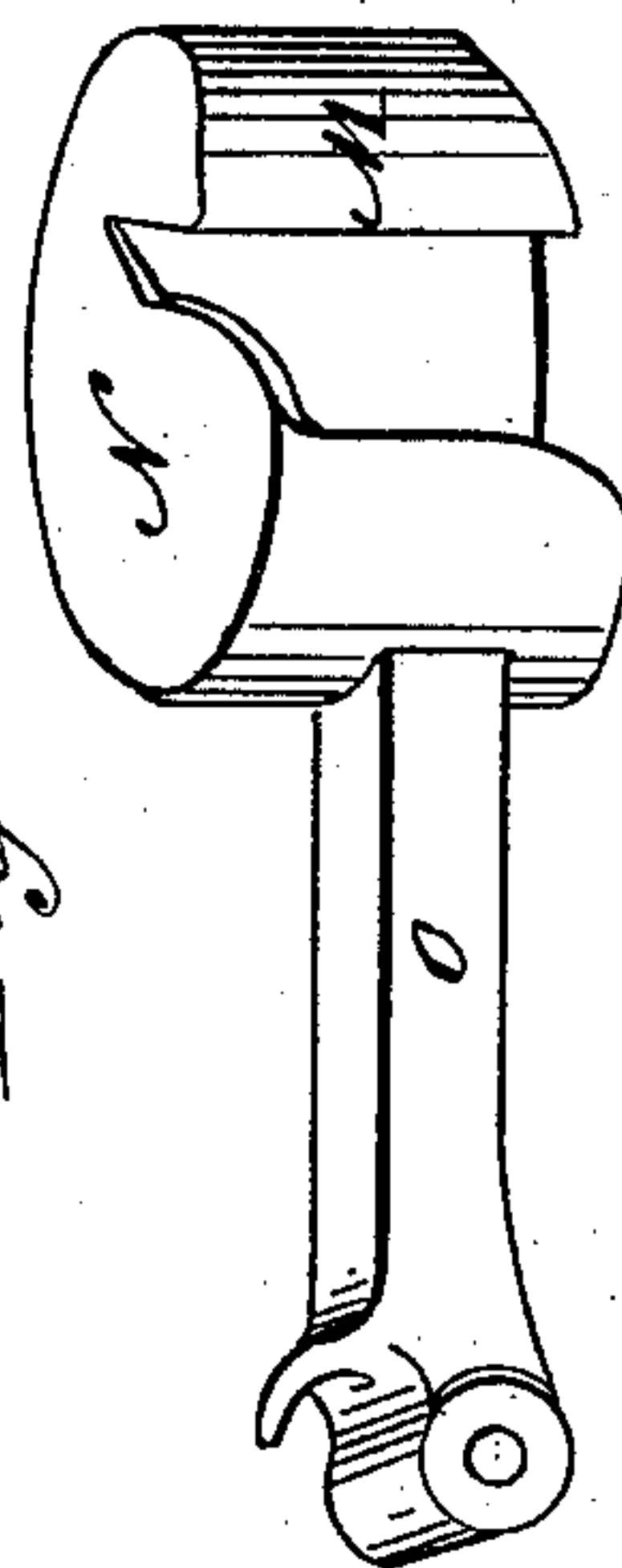
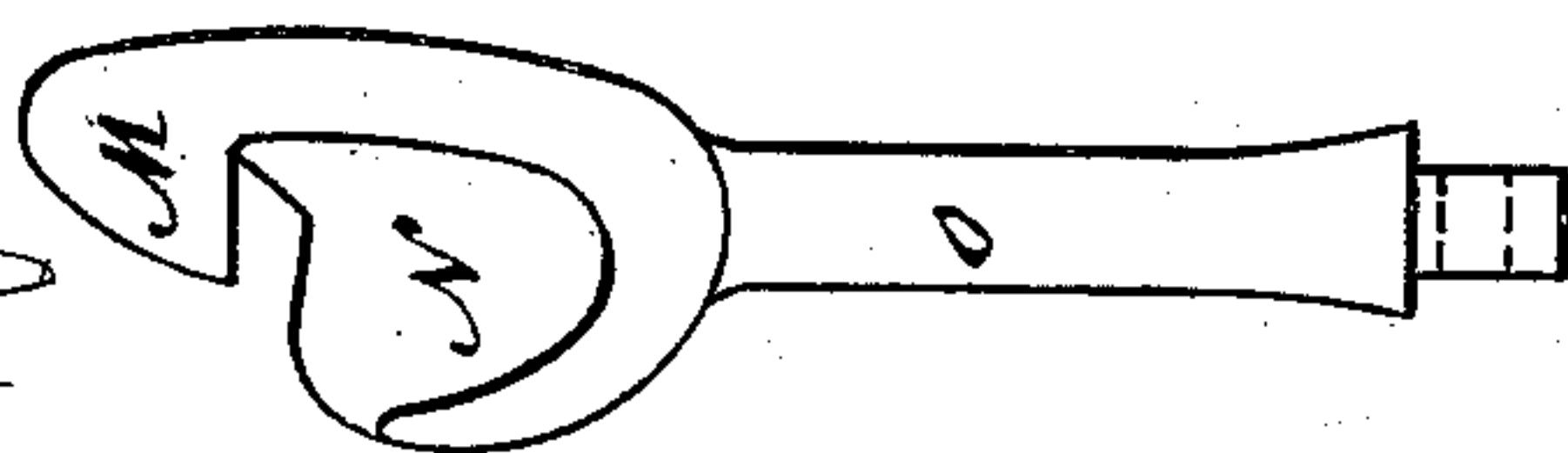


Fig. 5



WITNESSES:

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FRANK H. CARR, OF BANCROFT, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 246,078, dated August 23, 1881.

Application filed March 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. CARR, of Bancroft, in the county of Shiawassee and State of Michigan, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for coupling cars automatically and releasing or detaching them safely and conveniently.

In the drawings, Figure 1 is a side elevation of my improved car-coupling. Fig. 2 is a plan view of the same, one of the draw-bars being shown in horizontal section. Fig. 3 is a longitudinal elevation of the inner side of the hook and its spring. Fig. 4 is a perspective view of the connecting-link for the locomotive, to be used in combination with my improved car-coupling. Fig. 5 is a plan view of the under side of the same.

Similar letters of reference indicate corresponding parts.

A hook, A, is pivoted in suitable jaws, B B, on the side of the draw-bar C, in such a manner that it projects beyond the outer beveled end, D, of the draw-bar. A curved or bent spring, E, is firmly attached to the rear end of the pivoted hook A, and the outer end of this spring rests against the side of the draw-bar, thus pressing the hook against the side of the draw-bar, as shown. The outer end of this spring E is provided with a projection or ridge, F, which slides in a groove, G, in the side of the draw-bar. A cam-dog, H, is pivoted in a slot, J, in the hook A, and is provided with a handle or lever, K, of greater or less length, which lever may be provided with a knob at the end for operating it by hand, or with an eye, L, to receive a crank-pin for operating it.

A hook, M, with a top plate, N, is attached to a bar or rod, O, and forms the connecting-link for the locomotive. The hook M is of the same shape as the hooks A A of the draw-bars. Each draw-bar is provided with a hook A, which is pivoted to the left side thereof.

The operation is as follows: If the cars come in contact, the rounded heads of the hooks strike each other and press each other sidewise until they touch the beveled front ends of the draw-bars, when they snap into each other. To uncouple the cars the hooks must be separated, which is accomplished by turning the levers or handles K K in the direction of the arrows a', either by hand or suitable interposed mechanism, whereby the hooks A are pressed sidewise from the draw-bar and the end of the spring E slides longitudinally, as indicated in dotted lines in Fig. 2. The springs E E prevent all accidental uncoupling of the cars.

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

1. In a car-coupling, the bent spring E, made fast to the rear end of hook A, and having an end ridge, F, sliding in a groove of the draw-bar, as shown and described.

2. In a car-coupling, the combination, with a hook, A, provided with a rear spring, of a cam pivoted in a front slot of hook and working against the draw-bar C, as shown and described.

3. A connecting-link for the locomotive, consisting of the hook M, top plate, N, and bar O, as shown and described.

FRANK HERBERT CARR.

Witnesses:

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WM. S. HUNTINGTON.