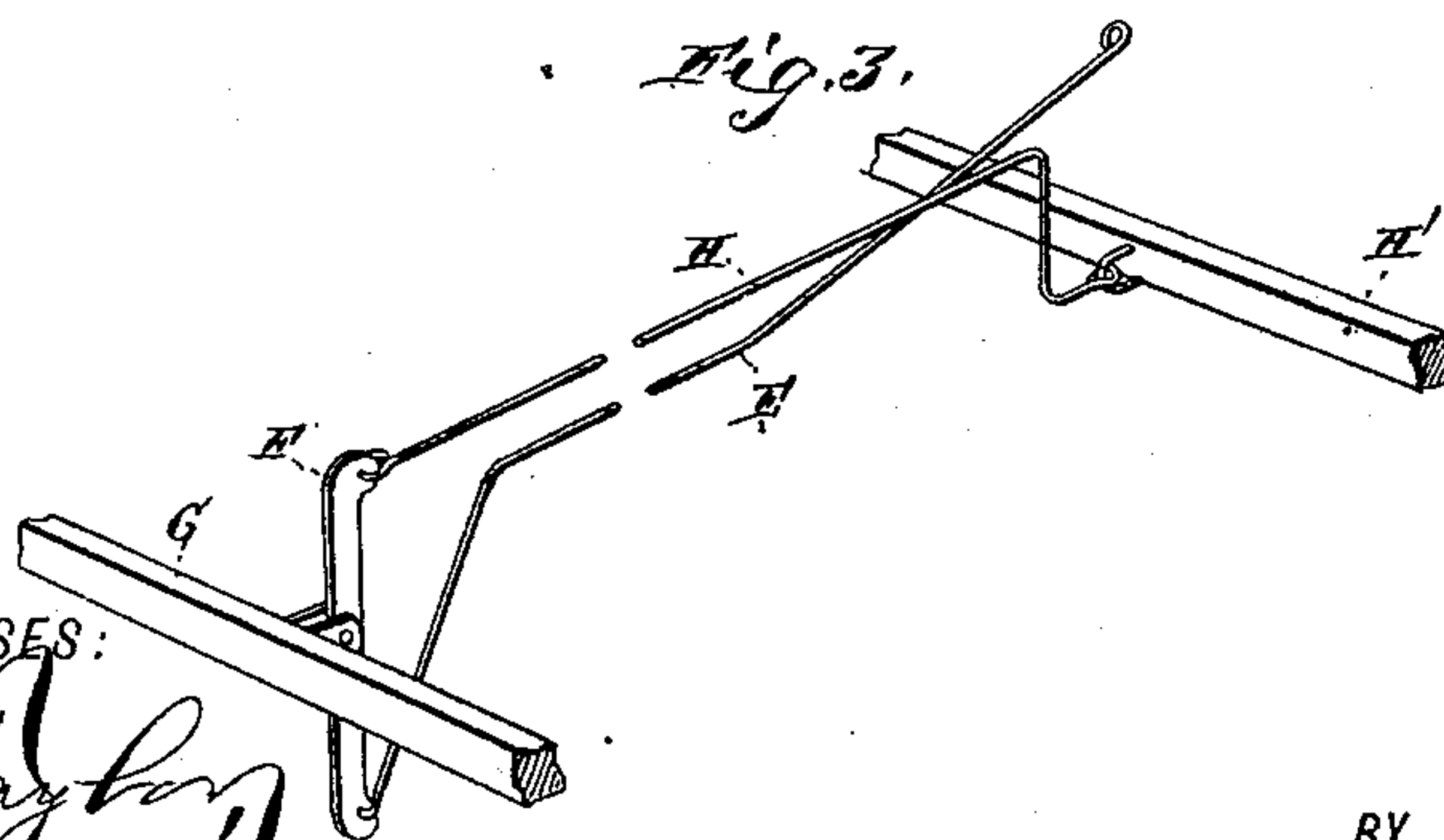
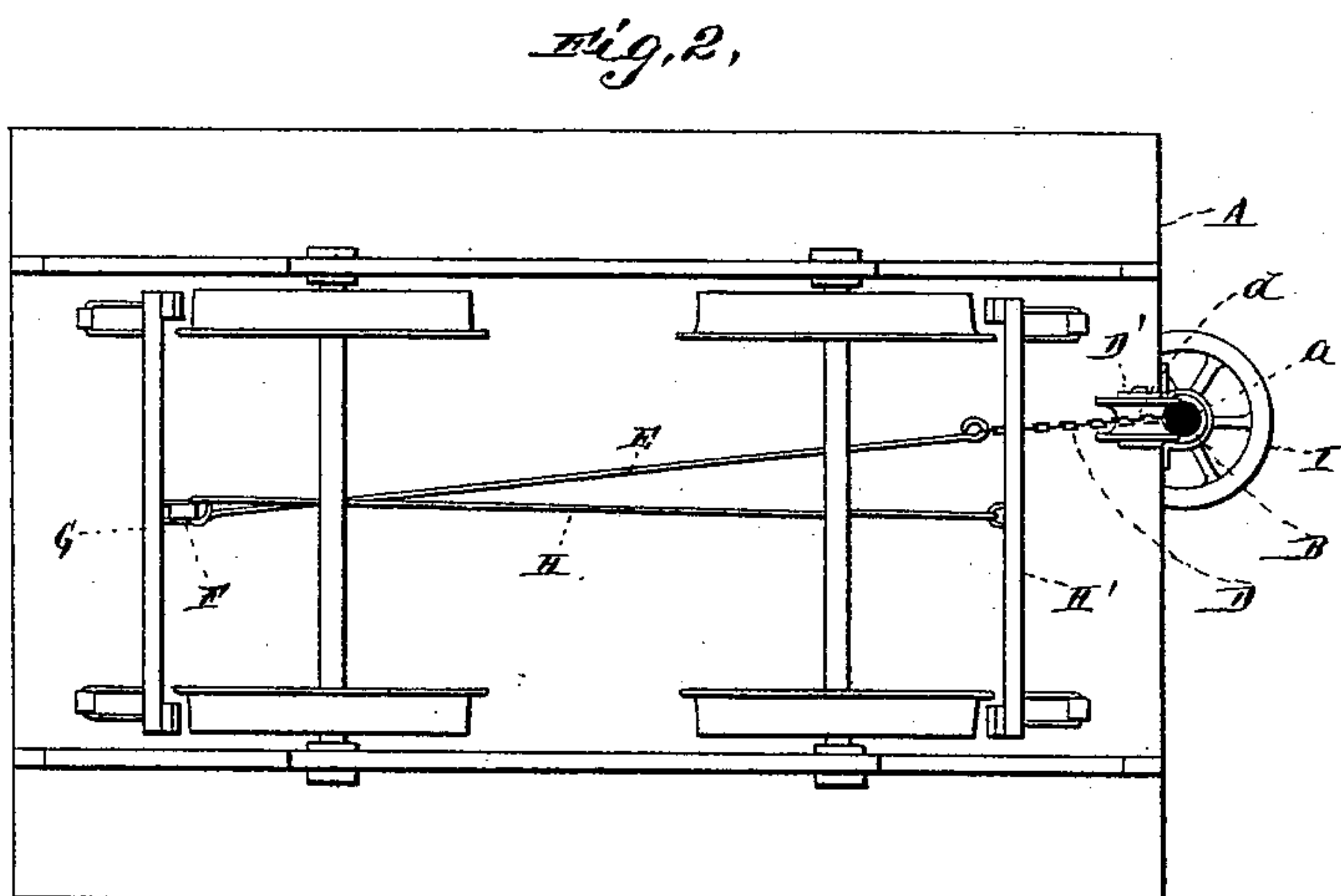
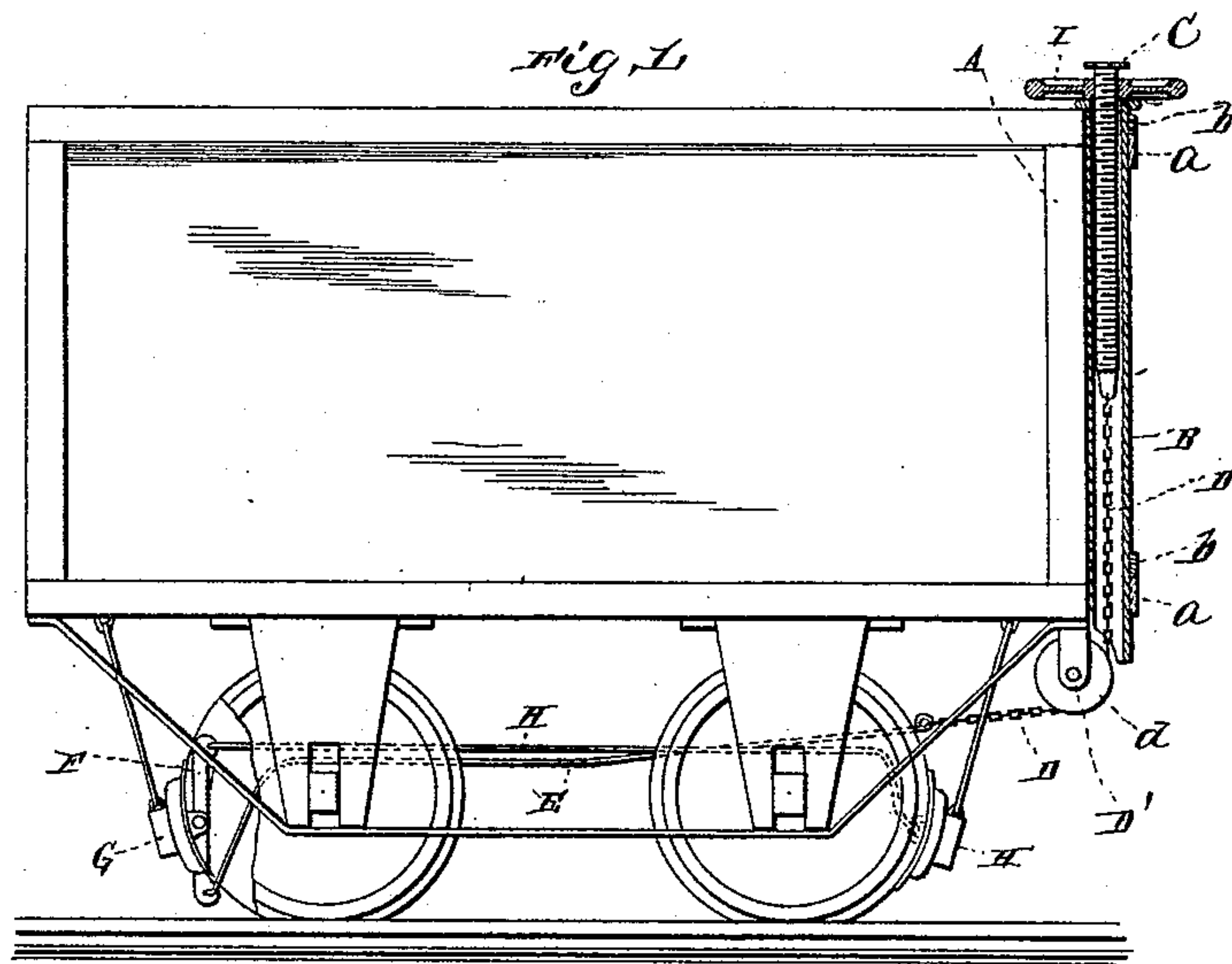


(No Model.)

T. B. JACK.
CAR BRAKE.

No. 453,482.

Patented June 2, 1891.



WITNESSES:

Chas. L. Gayley
Phil. Wasi.

INVENTOR

T. B. Jack

BY *Edw. Anderson*

his
ATTORNEY.

UNITED STATES PATENT OFFICE.

THOMAS B. JACK, OF BRACEVILLE, ILLINOIS.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 453,482, dated June 2, 1891.

Application filed February 28, 1891. Serial No. 383,176. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. JACK, a citizen of the United States, and a resident of Braceville, in the county of Grundy and State of Illinois, have invented certain new and useful Improvements in Car-Brakes; 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 accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side elevation, partly in section. Fig. 2 is a bottom plan view. Fig. 3 is a view in detail of the brake mechanism.

This invention has relation to certain new and useful improvements in car-brakes; and it consists in the novel construction and arrangement of the various parts, as hereinafter described, and pointed out in the claims.

In the accompanying drawings, illustrating the invention, the letter A represents the end frame of a car, to which is secured a vertical sleeve or guide B, of common iron piping, in which loosely works a screw C. This sleeve or tube may be secured in place by means of the keepers or clamps *a*, and prevented from vertical movement by the collars *b* thereon. To the lower end of the screw C is connected a chain or cable D, which passes under a pulley *c*, carried by a bracket *D'*, secured to the under side of the car, and this chain or cable is connected to the brake-rod E, which is connected at its opposite end to the lower end of an arm F, pivoted at its central portion to the rear brake-bar G. To the upper end of this arm F is connected the rod H, which at its opposite end is connected to the forward brake-bar H', so that as the chain D is tightened both bars will be moved to bring the shoes carried thereby against the wheel.

I is the brake-wheel, which has the screw-threaded bearing engaging the screw C and on its under surface working or bearing on

the top of the sleeve or pipe B. It will be seen that as this wheel is turned it will work this screw vertically in the sleeve or guide, tightening on the chain or cable and applying or putting off the brakes. This screw, with its sleeve and operating-wheel, is applicable to any form of brake-bar, all that is necessary being to make the connection therewith, and the form of brake bar and rods which I have shown and above described are designed to illustrate only one form to which it is applicable.

This device is especially applicable to coal and freight cars. In the old style of brakes a ratchet and pawl are provided for holding the brakes in the desired adjustment. This pawl is liable to become broken, shaken out of engagement with the ratchet, or, as is often the case, covered with ice and snow and cannot be operated. By the use of the device above described these difficulties are obviated, as the brakes will remain at the points to which they are adjusted without the use of a holding device until the brake-wheel is operated.

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

1. The combination, with the brake-rods, of the screw, the guide or sleeve therefor, the operating-wheel, and the connection between said screw and the brake-rods, substantially as specified.

2. The combination, with the brake mechanism, of the screw having a flexible connection therewith, the sleeve or guide for said screw, and the operating-wheel engaging said screw and bearing on the upper end of said guide, substantially as specified.

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

THOMAS B. JACK.

Witnesses:

WM. PHILLIPS,
E. D. SCOTT.