

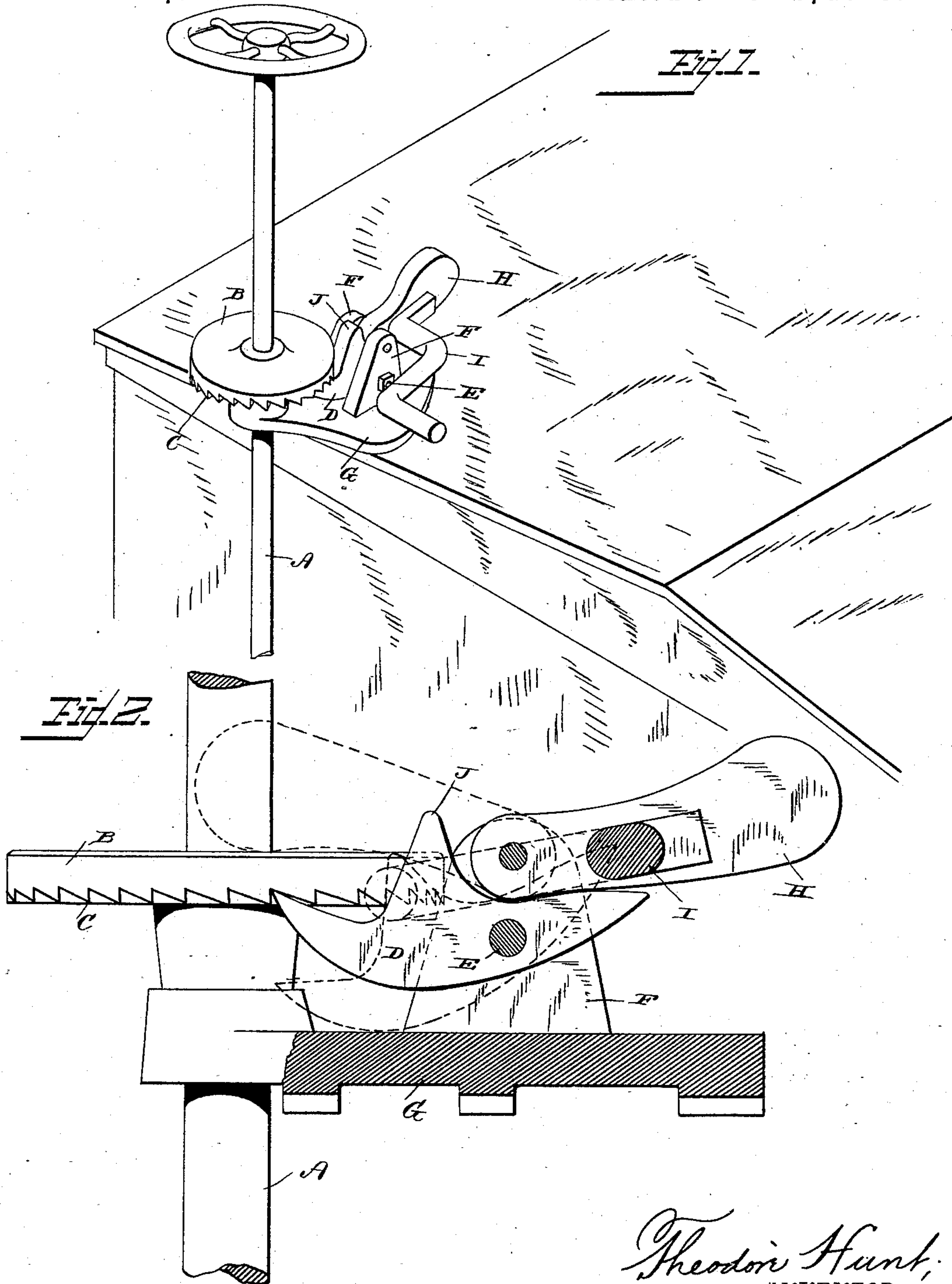
(No Model.)

T. HUNT.

HAND BRAKE FOR CARS.

No. 279,565.

Patented June 19, 1883.



WITNESSES

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UNITED STATES PATENT OFFICE.

THEODORE HUNT, OF ST. LOUIS, MISSOURI.

HAND-BRAKE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 279,565, dated June 19, 1883.

Application filed May 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, THEODORE HUNT, a citizen of the United States, residing at St. Louis, and State of Missouri, have invented a new and useful Hand Car-Brake, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to the operating mechanism for hand car-brakes; and it has particular reference to the pawl-and-ratchet mechanism whereby the vertical brake-shaft may be retained in position when the brake is "set."

My invention consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view, and Fig. 2 is a vertical sectional view.

The same letters refer to the same parts in both figures.

A in the drawings designates the vertical brake-shaft, which carries the ratchet-wheel B, having radial teeth or ratchets, C, on its under side or face, to engage a pawl, D, which is pivoted upon a pin or shaft, E, between a pair of lugs or flanges, F, projecting upwardly from a base-plate, G. The front end of the pawl D is heavier than its rear end, so that it shall be automatically disengaged from the ratchet-wheel.

H is a weight, pivoted between the flanges F F, above the pawl D, and resting upon the rear end of the same, so as to force its front end into engagement with the ratchet-wheel, as shown.

The mechanism just described constitutes the brake-stop mechanism, as now ordinarily used on the latest improved patterns of cars. In operation the weight serves to hold the pawl in contact with the ratchet-wheel, so as to engage the latter when the vertical shaft is turned for the purpose of setting the brakes. To release the brakes, it has been necessary for the operator to throw the weight forward by means of his foot, and then to press the rear end of the pawl in an upward direction by means of his toe, as the tension of the ratchet-wheel would bind it and prevent it from being readily disengaged by its own weight. The object of my invention is to facilitate the operation of these parts, and with this object in view I improve the construction as follows: To the side of the weight is secured a crank, I, extending forwardly in front of the fulcrum or pivoting point

of the weight, so as to enable the latter to be conveniently manipulated by the foot of the operator, and be thrown over in a forward direction over the front end of the pawl. The latter is provided, in front of its fulcrum, with an upwardly-projecting arm, J, which serves not only to increase the weight of the front end of the said pawl, but also to support and receive the impetus of the weight when the latter is thrown in a forward direction, as stated.

The operation will be readily understood. By throwing the weight over in a forward direction, which may be readily done by means of the crank, it is brought in contact with the arm or projection J upon the front end of the pawl, which latter is thereby released from the ratchet-wheel. The operator, by placing his foot upon the crank, may readily return the weight to its former position, when it will cause the pawl to engage the ratchet automatically, as before.

I claim as my invention and desire to secure by Letters Patent of the United States—

1. The combination, with the ratchet-wheel arranged upon a vertical brake-shaft, and having radial teeth or ratchets upon its under side, of a pawl arranged to engage the said teeth or ratchets, and having a weighted front end, and a weight pivoted above the said pawl and adapted to rest upon its rear end, and having secured to its side a crank which extends forwardly in front of the fulcrum of said weight, substantially as set forth.

2. The combination, with the ratchet-wheel arranged upon a vertical brake-shaft, and having radial teeth or ratchets upon its under side, of a pawl arranged to engage the said teeth or ratchets, and having an upwardly-projecting arm in front of its fulcrum, and a weight pivoted above the said pawl and adapted to rest upon its rear end, and having a crank by means of which it may be thrown over in a forward direction in contact with the arm projecting upwardly from the pawl, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THEODORE HUNT.

Witnesses:

RICHARD T. BISHOP,
LOUIS D. PICOT.