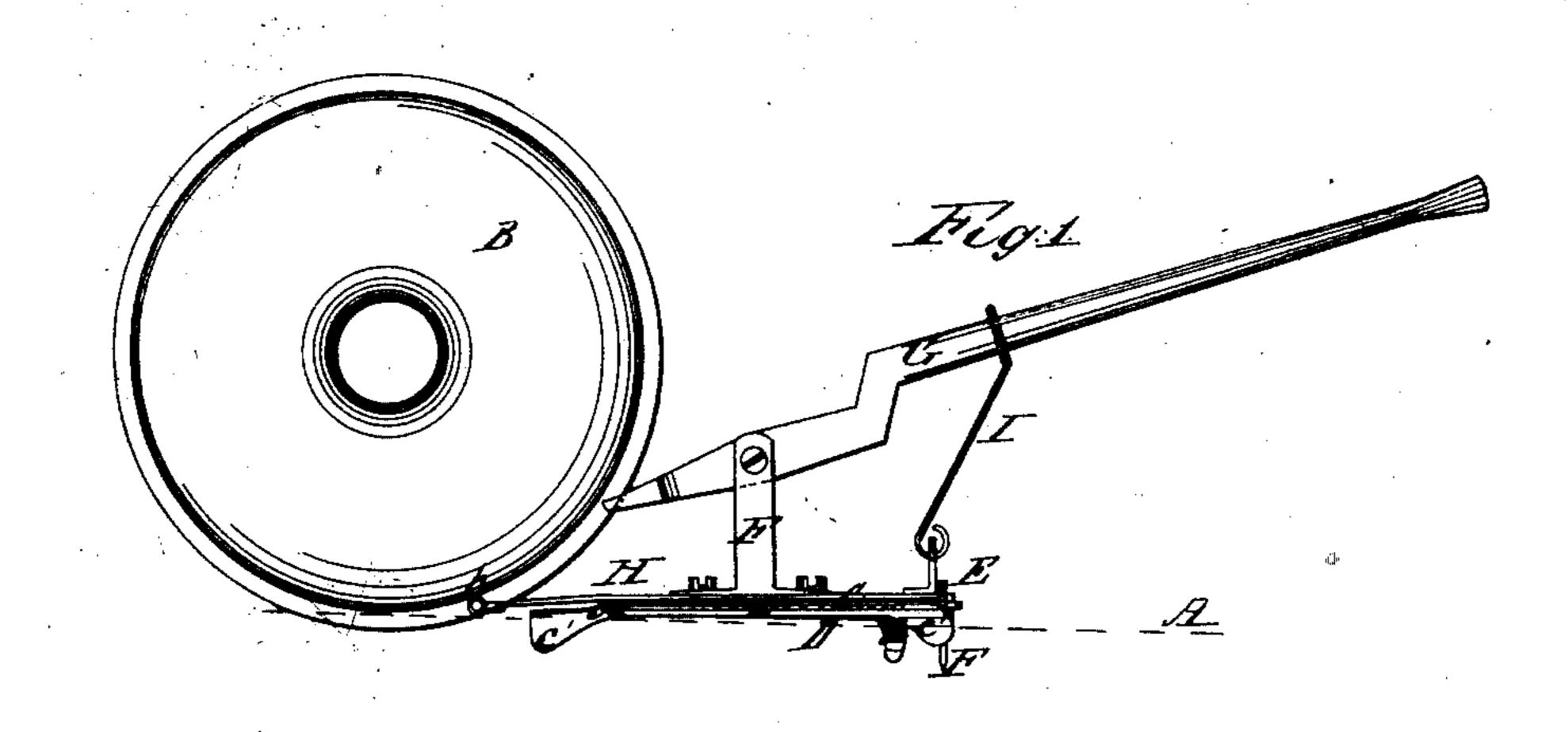
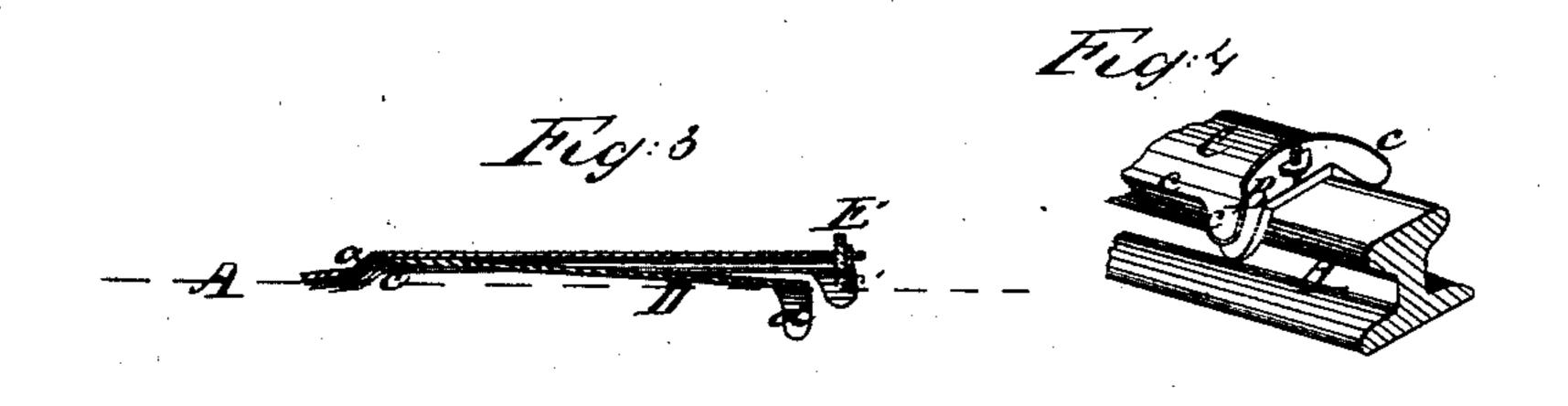
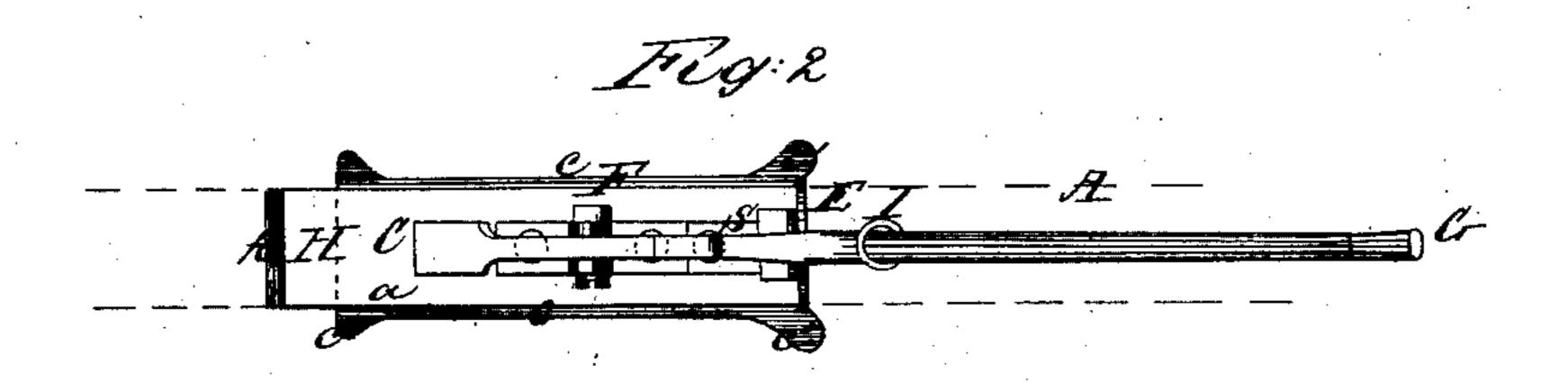


Lifting Jack,

Nº 76,421, Patented Apr. 7, 1868.







Witnesses Solow & Kemmer Chas A. Cetter Joseph Douglass Gy Clum Heo Mitomeys

Anited States Patent Pffice.

JOSEPH DOUGLASS, OF McCONNELLSTOWN, PENNSYLVANIA

Letters Patent No. 76,421, dated April 7, 1868.

IMPROVED DEVICE FOR MOVING CARS.

The Schedule referred to in these Xetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Joseph Douglass, of McConnellstown, in the county of Huntingdon, and State of Pennsylvania, have invented a new and improved Device for Moving Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable those skilled in the art to which my invention appertains to make use of it, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation.

Figure 2 is a top view.

Figure 3 is a detached view of the spring and cap; and

Figure 4 is a detached perspective view, showing the end of the cap in position on the rail.

The object of this invention is to furnish a cheap, durable, and convenient portable instrument, by which heavy cars can be started and moved along the track by hand without difficulty, whether the track be inclined or level.

In the drawings, A represents the rail, and B the car-wheel resting upon it. C is an iron cap, wide enough to cover the top of a rail, and having its side edges slightly turned down, forming flanges cc, which bear against the sides of the rail, and hold the cap in position upon it. At the ends of the cap the flanges may be enlarged into lugs c' c', if thought necessary, to grasp the rail more firmly. The under side of the cap is made slightly concave in order to fit the tread of the rail, and has attached to it a stout spring, D, the movable end of which clasps the tread of the rail by means of lugs dd. The cap C, at the end which is designed to come next to the car-wheel, is slightly depressed, as seen at a. Its opposite end terminates in a stout, sharp blade, E, attached by a tongue and rivet, or other suitable means, which is designed to rest upon the top of the rail when the force is applied to move the car, and by the action of its concave-edged blade, E, upon the rail, to prevent the instrument from slipping back from the wheel.

To the upper or convex surface of the cap C is attached ā stout upright standard, F, forming the fulcrum of a lever, G. The foot of the standard is elongated so as to operate as a guide to direct the motion of a sliding chock, H, which works back and forth longitudinally upon the cap, the elongated foot operating in a slot, s, through the chock. The outer end of the chock is enlarged or provided with a transverse block, h. The inner end of the chock may be connected with the handle of the lever by means of a rod, I, having a ring upon its extremity, through which the lever passes.

The operation of this simple and convenient device is as follows: The instrument is placed upon the rail as seen in figs. 1 and 4, the depressed end of the cap is slid up against the car-wheel, the lever assuming the position shown in fig. 1. By depressing the handle of the lever, the resistance of the spring D is overcome, and the cap is forced down, bringing the sharp blade E in contact with the rail, and confining the instrument in position. At the same time the short arm of the lever forces the car-wheel along upon the track.

If the track is level, the chock H may all the while be retracted and kept out of the way of the wheel, as there will be no danger that the latter will run back as soon as the lever is removed from it. But if the instrument be applied to move the car up an incline, it will be necessary to slide the chock forward so as to scotch the wheel when the lever is removed. The chock being slid forward under the wheel, the handle of the lever is to be raised and the cap C slid forward as far as it will go, when, by depressing the handle, the wheel is again moved forward as before. The whole operation can be performed by means of the handle, without the necessity of stooping to adjust or operate any part of the instrument. On a level road only two movements will be required—first, sliding the cap up to the wheel; secondly, applying the lever to move the wheel forward. On an upward incline there will be three movements—first, sliding the cap up to the wheel; secondly, applying the lever; thirdly, sliding the chock against the wheel. These operations being repeated, will move the car along quite rapidly and with great ease.

The instrument is small, convenient to handle, and can be made at little expense. There is nothing about it that is liable to get out of order.

I do not design to limit myself to a slotted chock guided exactly in the manner described, but wish to be at liberty to use any kind of a sliding chock, attached to and working upon the cap C in any practicable manner.

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

- 1. The combination of the lever G, cap C, and sliding chock H, when arranged so as to operate together substantially in the manner and for the purposes specified.
- 2. The combination of the cap C, spring D, and blade E, for the purpose of supporting and holding the other parts of the instrument in position, substantially as specified.

JOSEPH DOUGLASS.

Witnesses:

PETER SWOOPE,

THEO. H. CREMER.