

CHARLES M. HINCKLEY.

Improvement in Car Brake and Starter.

No. 125,049.

Patented March 26, 1872

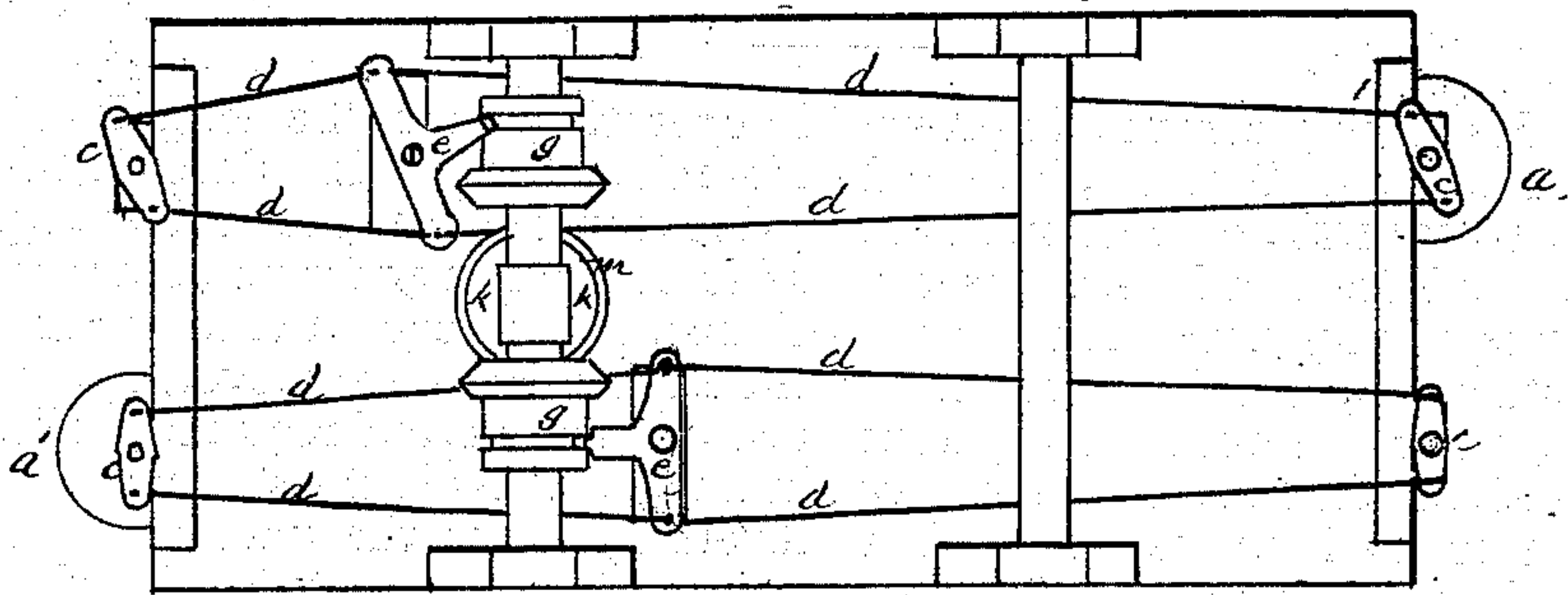


Fig. 1

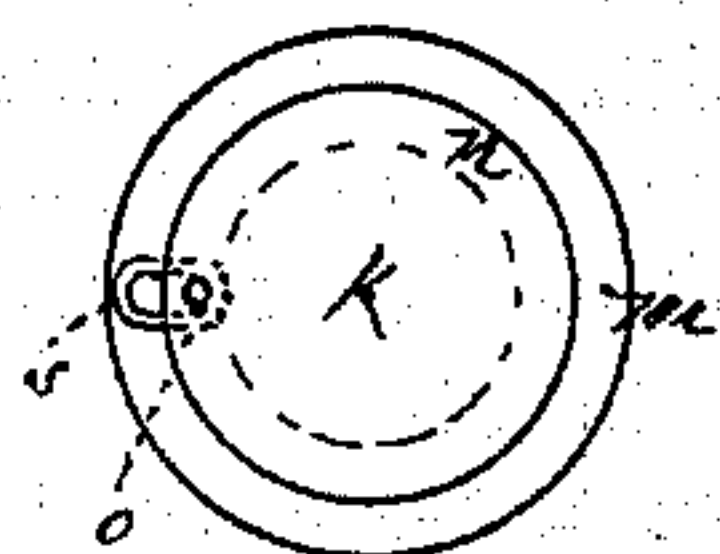


Fig. 3



Fig. 4

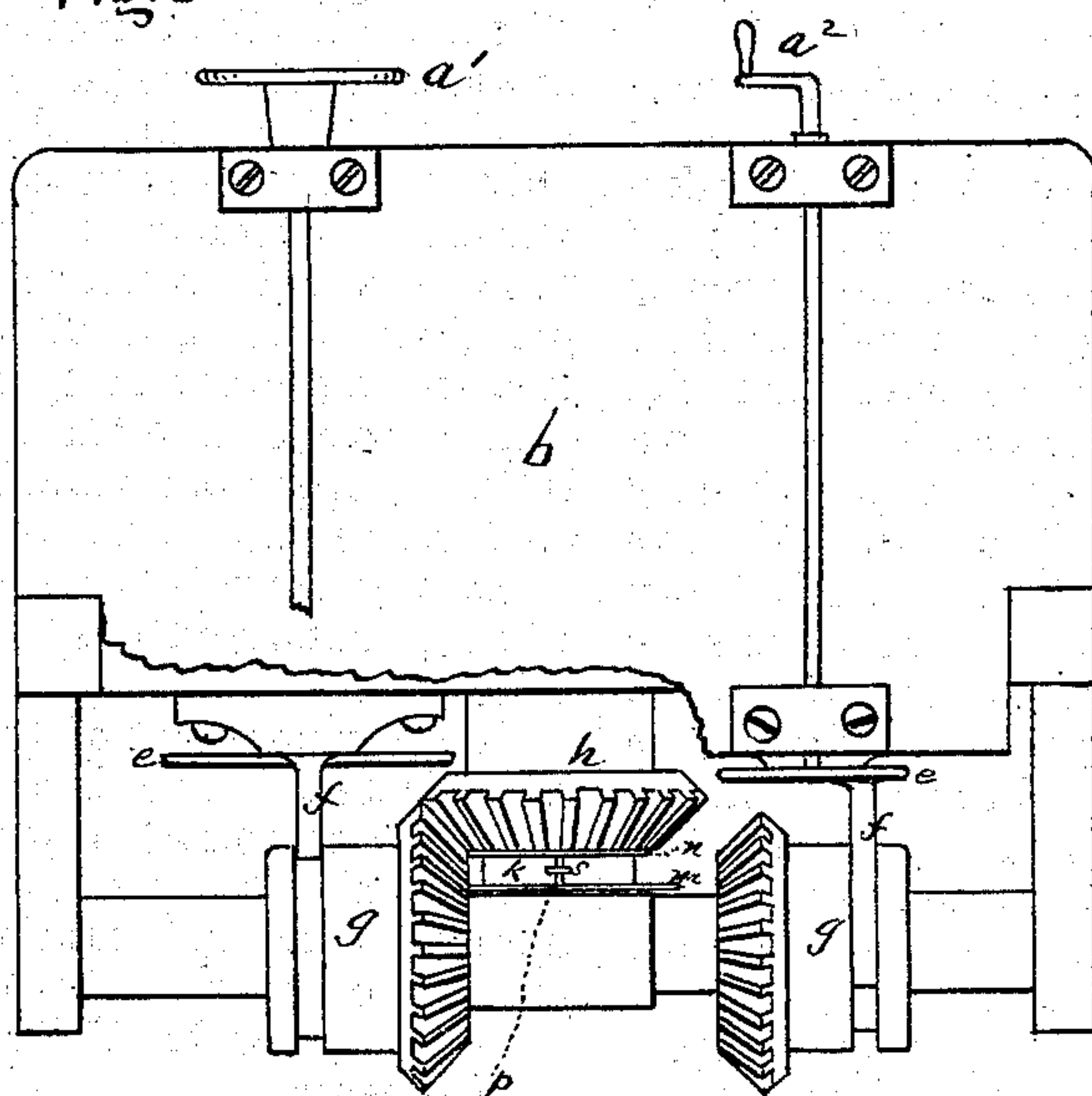


Fig. 2

WITNESSES

V. C. Post
Geo. B. Williams.

Charles M. Hinckley

By his Atty

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UNITED STATES PATENT OFFICE.

CHARLES M. HINCKLEY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN CAR BRAKES AND STARTERS.

Specification forming part of Letters Patent No. 125,049, dated March 26, 1872.

Specification describing certain Improvements in Car Brakes and Starters, invented by CHARLES M. HINCKLEY, of Boston, in the county of Suffolk and State of Massachusetts.

This invention is an improvement upon the car brake and starter invented by David M. Moore, and upon which he obtained a patent dated July 20, 1869, and numbered 92,869. My invention relates to an improved method of shipping and unshipping the gear.

In the accompanying drawing, Figure 1 is a plan of the under side of a car embodying my invention—no car-wheels are shown, as they are not a part of my improvement. Fig. 2 is an elevation, showing the platform, dash-board, &c., with a piece broken out of the latter to show the gearing, &c., under the car to better advantage. Fig. 3 is a plan of the drum. Fig. 4 is an elevation of the same.

Similar letters of reference indicate corresponding parts.

$a^1 a^2$ are two common varieties of brake-handles. b is the dash-board. $c c$ are cranks or levers, to which are attached the wires or chains $d d$. $d d$ are chains, cords, rods, or their equivalents, running from the levers $c c$ to the levers $e e$. $e e$ are levers or cranks bent down into rods $f f$, which lie in slots in the wheels $g g$. $g g$ are the geared wheels, shown in Moore's patent, above referred to. h is the wheel, shown in Moore's patent, into which the wheels $g g$ mesh. k is the drum, as shown in said patent. $m n$ are flanges extending from the drum k . o is a slot or cut in the drum k , to allow room for the first link of the chain. p is a short rod or bridge running across the slot o , in which or around which is placed the first link of the chain. s is the first link of the chain.

To place the wheels $g g$ in or out of gear with the wheel h , a partial turn of one of the brake-handles is all sufficient. These handles are much more convenient, and take less room

in operating than the long levers shown in Moore's patent. In place of stiff shippers (which must be made of such strength and size as to be too heavy for use) I substitute cords, chains, or their equivalents, in connection with the cranks $c c$ and bent levers $e f$. This gives a drawing motion, and requires but little strength and no stiffness in the shippers $d d$. The bent levers $e f$ move the wheels $g g$ perfectly and easily. Handles may be placed at each end of the car.

In connection with my drum k I have two flanges, $m n$, both of which are attached to and a part of the drum. Moore has no flange upon the drum itself, unless a slight rim at the top might be termed a flange. I propose to make my flanges as large as possible without interfering with the gear, so that there shall be no danger of the chain slipping off the drum. The slot, in which the link s is placed, may be made deeper, if desired, and the rod or bridge p will, probably, be set further in the slot o . Thus there will be no obstacle to the smooth winding of the chain. The drum will be made as thin as practicable, using as little stock as possible, thus giving opportunity for wide flanges.

This invention works finely, practically, and is, in my opinion, a valuable improvement upon Moore's patent, above referred to.

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

The arrangement of the cranks or levers $c c$, shippers $d d$, and bent levers $e f e f$, when placed in combination with the geared wheels $g g$, and playing in slots or their equivalents upon the same, substantially as described, and for the purposes set forth above.

CHARLES M. HINCKLEY.

Witnesses:

HENRY W. WILLIAMS,
B. W. WILLIAMS.