

W. BURT.
Car Door.

No. 60,340.

Patented Dec. 11, 1866.

Fig. 1.

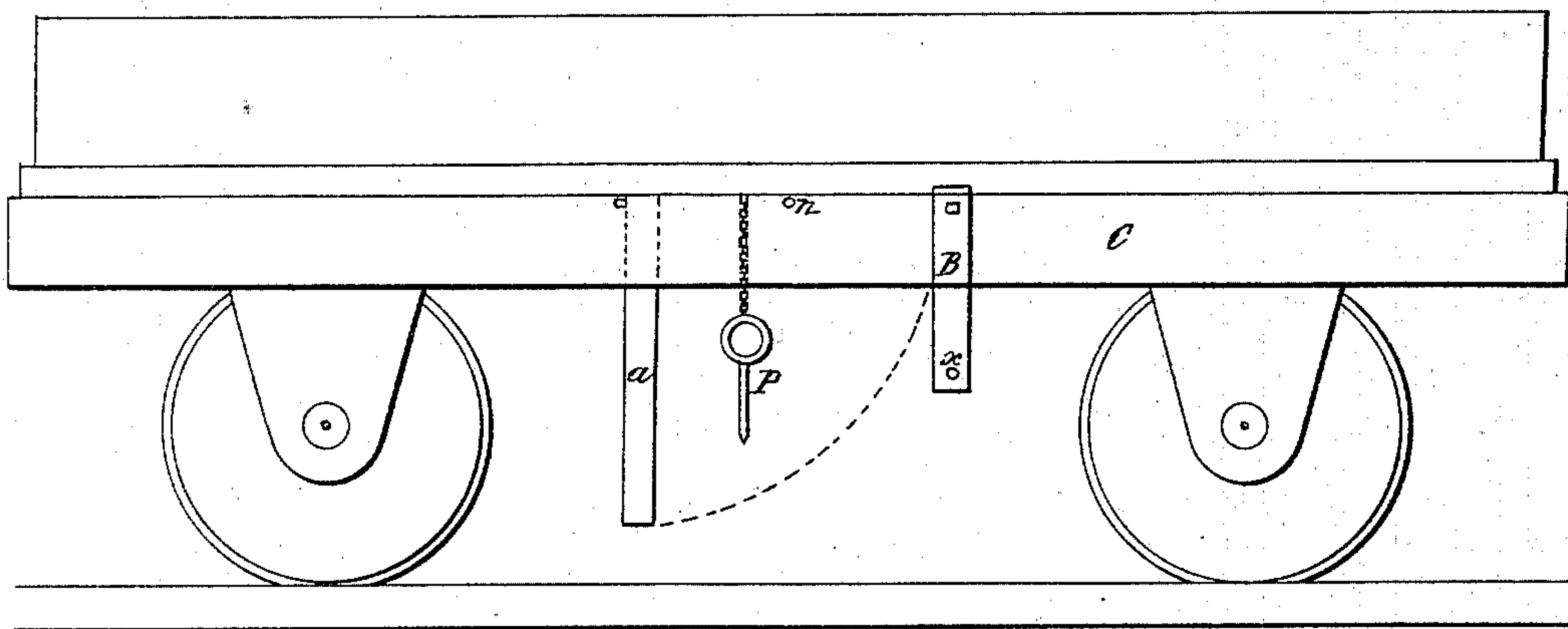
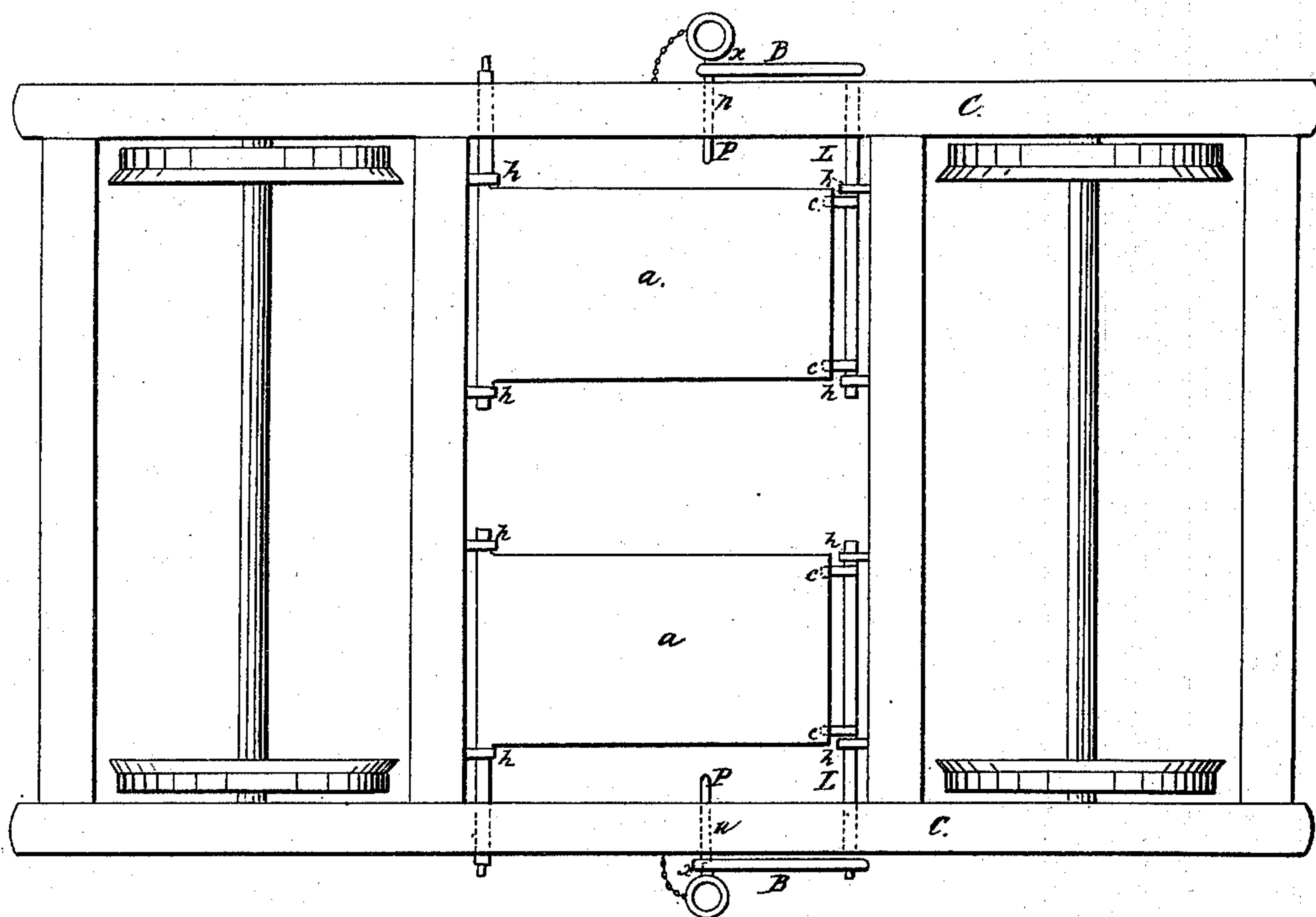


Fig. 2.



Witnesses:

Isaac Cole
P. G. Holler

Inventor:

William Burt

United States Patent Office.

IMPROVED MODE OF FASTENING AND UNFASTENING DROP-DOORS IN COAL CARS.

WILLIAM BURT, OF MARQUETTE, MICHIGAN.

Letters Patent No. 60,340, dated December 11, 1866.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM BURT, of Marquette, in the county of Marquette, in the State of Michigan, have invented a new and useful Improvement for Fastening and Unfastening the Drop-Doors of Ore and Coal Cars; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical section of ore or coal car.

Figure 2 is a plan of that part of the car essential to a proper understanding of the working of the drop-doors in connection with my improvement.

In the drawings, the car frame is shown at C, the drop-doors *a*, eye-pins P, lever or bar B, hole through bar *x*, cam shafts L, cams *c*, hinges *h*, hole through car frame *n*. In general, I make the lever or bar and eye-pin of wrought iron.

The drop-doors, *a*, are shut by lifting them to their places, as in fig. 2, and turning the lever or bar, B, so as to bring the cams, *c*, in contact with the under side of the drop-doors, and then fastening the lever or bar by inserting the eye-pin, P, through the hole, *x*, and the car frame at *n*, inclining the point downward, which, by its gravity, retains its place and thus secures the drop-doors from falling. The drop-doors are opened by simply withdrawing the eye-pin, P, as in fig. 1.

I do not claim fastening the drop-doors of ore or coal cars by means of ratchet-wheels and catches, neither do I claim the slotted wheels and pins, both of said methods being old and objectionable on account of the breaking of the catches and ratchet-wheels and the pressing off of these wheels by the car sides, thus causing the doors to fall with their loads, and consequently the "blocking" of the drop-doors at the mines.

What I claim as my improvement is—

The combination of the lever B, shaft L, cams *c*, attached to the said shafts L, pins P, with the drop-doors *a*, when the same are constructed and arranged in the manner and for the purpose set forth.

WILLIAM BURT.

Witnesses:

LESTER McKNIGHT,
F. G. HOLTON.