

J. PENDERGAST.

Improvement in Carriage Steps.

No. 124,697.

Patented March 19, 1872.

fig. 1.

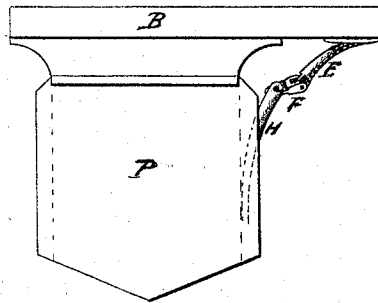


fig. 2.

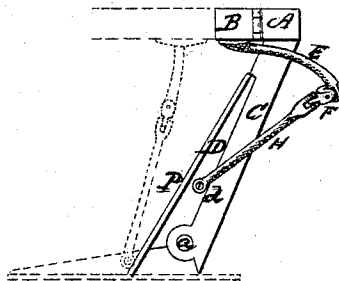
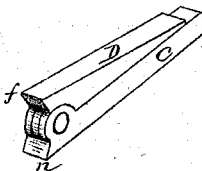


fig. 3.



Witnesses.

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JAMES PENDERGAST, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN CARRIAGE-STEPS.

Specification forming part of Letters Patent No. 124,697, dated March 19, 1872.

To all whom it may concern:

Be it known that I, JAMES PENDERGAST, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Carriage-Steps; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents, in—

Figure 1, a front view; Fig. 2, a side view; and in Fig. 3, a perspective view of the frame.

This invention relates to an improvement in mechanism by which a carriage-step is opened or closed in the act of opening and closing the carriage-door; and it consists in a mechanism, substantially as herein described, connecting directly to the door from the step, whereby the object of the invention is accomplished.

A is the lower portion of a carriage-body at the door; B, the lower portion of the door. At the sill or bottom of the carriage the frame C is secured, and to this the step D is hinged, as at *a*, so that the step may be turned down, as denoted in broken lines. To the door an arm, E, is firmly attached, and this is connected, through a link, F, and rod H, directly to the step above the pivot, as seen in Fig. 2. The arm E is curved, and the link F pivoted to both the rods E and H, and the rod H pivoted to the step at *d*.

Thus connected, as the door B is opened, as in Fig. 2, the arm E swings around to the front,

causing the rod H to carry the step D forward and downward until fully open, as denoted in broken lines, Fig. 2. Closing the door, the movement of the arm E draws the step back to its closed position. Hence I am enabled to operate the step without connecting the mechanism in any way to the carriage-body, consequently reducing the cost of the step and liability to get out of order.

As shown in Fig. 3, the two parts C D are forged from bar-iron into the required size and shape, and hinged together to form a complete article of manufacture; and in this shape are placed in market, a pair of these parts forming the frame of a single step, the step or plate P applied thereto by the consumer. The end *f* of the part D is formed to take its bearing against a shoulder, *n*, on the part C, and there support the step in an open position.

I claim as my invention—

1. The arm E, attached to the door of a carriage, and connected to the folding step by the link F and rod H, constructed and arranged to operate substantially in the manner herein set forth.

2. The frame for a carriage-step, consisting of the two parts C D hinged together, and constructed with a bearing, *f n*, substantially as set forth.

JAMES PENDERGAST.

Witnesses:

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