(No Model.)

E. S. STEVENS.

CAR STEP.

No. 534,293. Patented Feb. 19, 1895.

Fig. 1.

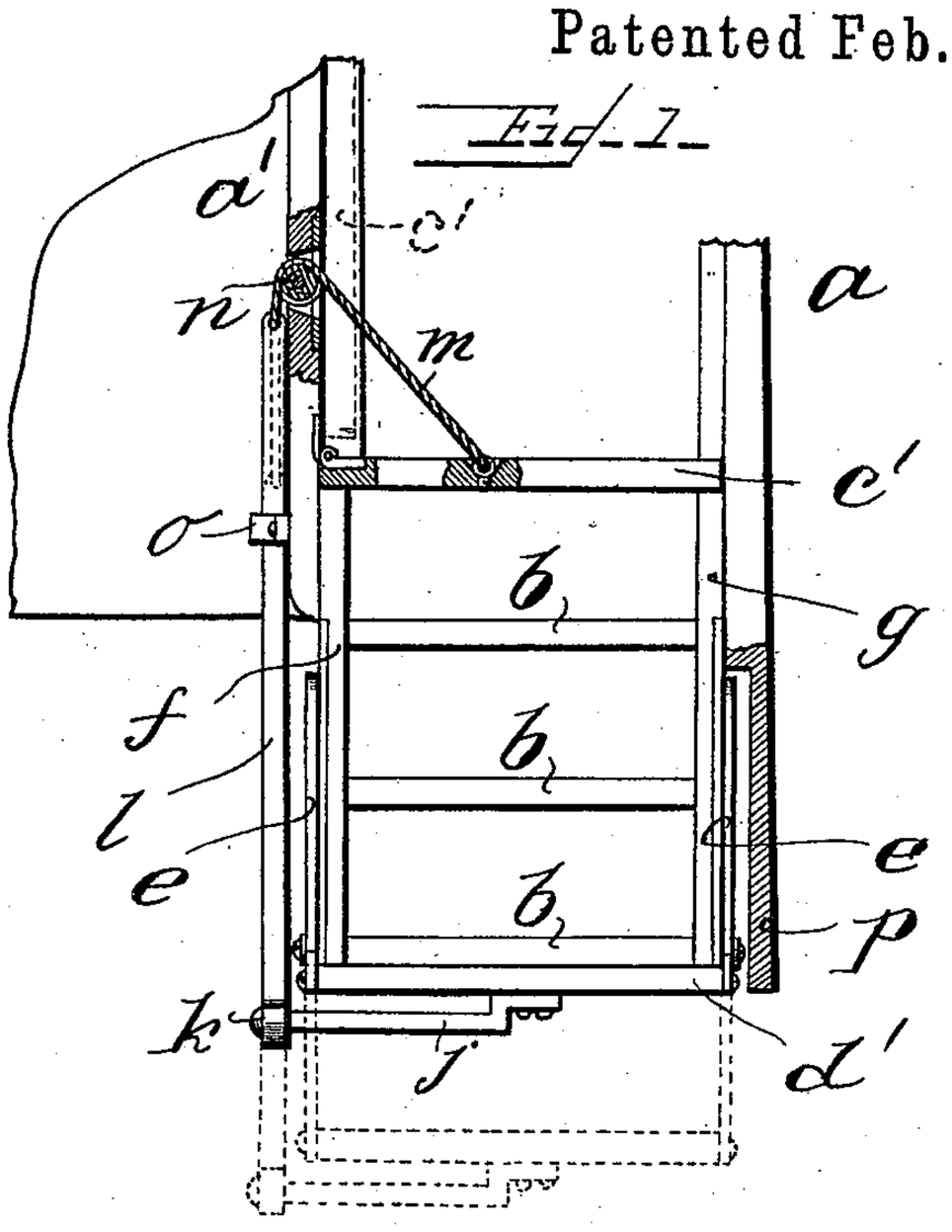
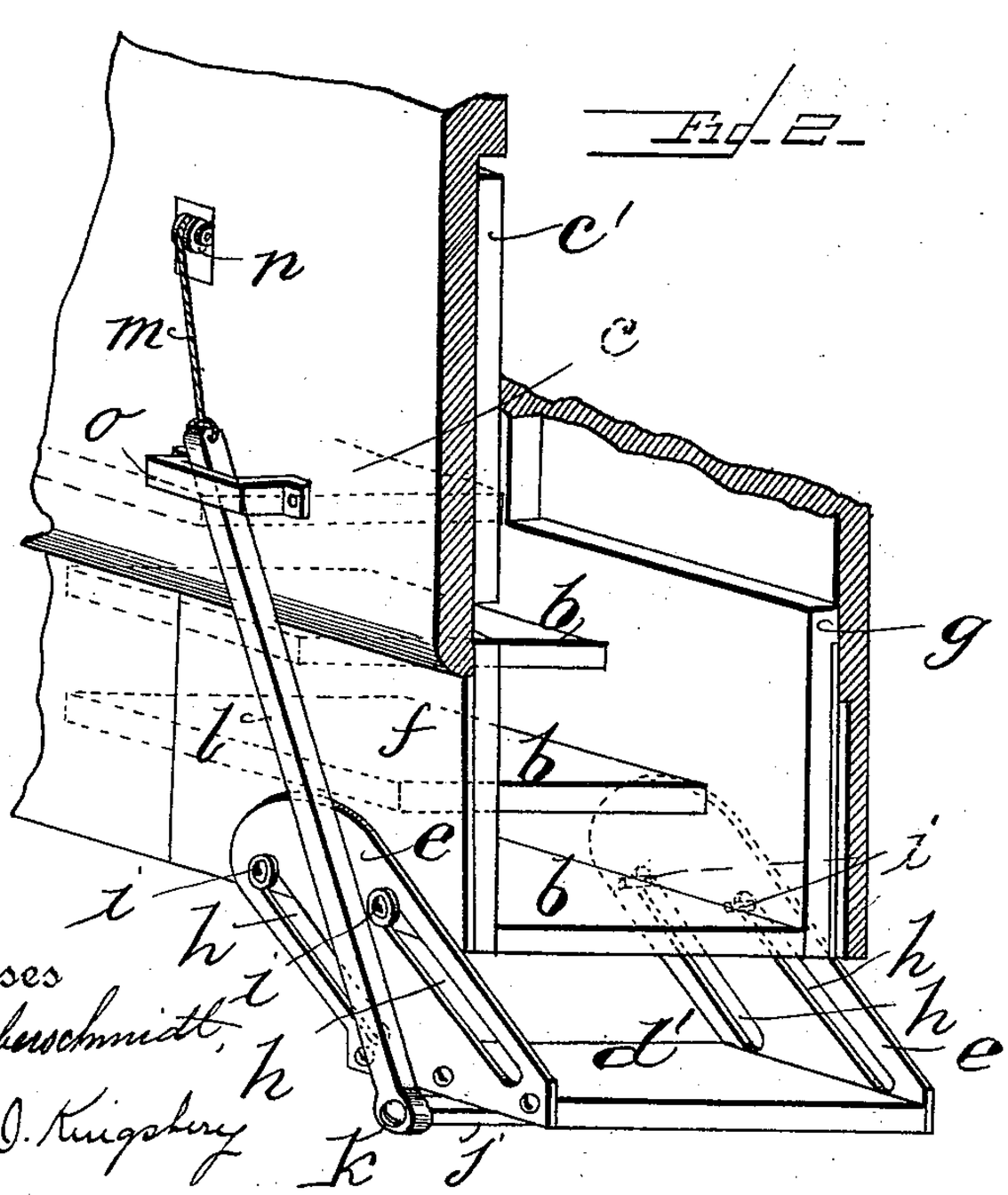


Fig. 2.



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EDWIN S. STEVENS, OF CORNISH, MAINE.

CAR-STEP.

SPECIFICATION forming part of Letters Patent No. 534,293, dated February 19, 1895.

Application filed May 11, 1894. Serial No. 510,898. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. STEVENS, a citizen of the United States of America, residing at Cornish, in the county of York and State of Maine, have invented certain new and useful Improvements in Car-Steps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in a combined car step and platform and is specially designed for vestibuled cars.

It consists in a supplementary adjustable step in addition to the ordinary fixed steps of a car, a pivoted supplementary platform which covers the steps and forms a part of the platform and mechanism connecting said trap and movable step whereby said step is lowered by opening and raised by closing the supplementary platform.

It further consists in certain details of construction hereinafter fully set forth.

Heretofore an adjustable supplementary step has been used and a pivoted supplementary platform each operated by mechanisms entirely independent of each other and I do not claim either of these devices when operated independently.

In the drawings herewith accompanying and making a part of this specification, Figure 1 is a side elevation showing supplementary platform closed and step raised, and Fig. 2 is a perspective view showing supplementary platform raised and step lowered.

Same letters refer to like parts.

In the said drawings *a* represents the end of the car; *a'*, the end of the vestibule; *b*, the fixed steps, and *c* the fixed part of the platform.

In vestibuled trains, it is found desirable when the train is in motion to extend the platform out over the steps. This is accomplished by pivoting to the end of the vestibule a supplementary platform *c'* adapted to be raised against the wall as seen in Fig. 2, or let down over the steps as shown in Fig. 1. It is also desirable to have a step lower when passengers are getting on and off than is practicable when the train is running. This has heretofore been accomplished by means of a step *d'* having sides *e* extending upward over the sides *f*, *g* of the stationary steps, said sides *e* having diagonal slots *h* therein and said sides *f*, *g* having supporting guides *i* projecting through said slots in such manner that when the step is raised it is drawn back under the lowest of the fixed steps and when lowered it is thrust outward into the position shown in Fig.-2, said step being operated by a crank lever. It is evident that when the step *d'* is down, the supplementary platform should at the same time be raised and vice versa. The object of the present invention is to accomplish both of these results simultaneously and from the inside of the vestibule. This I do by attaching to the bottom of the movable step a lifting lever having a horizontal part *j* and a vertical part *l* loosely joined at *k* and connecting the free end of said lever with a flexible cable *m* passing through the wall over a pulley *n* and attaching the other end of said cable to the pivoted supplementary platform. The lever arm *l* may pass through a guiding bracket *o* attached to the outside of the vestibule as seen in Fig. 2.

The sides of the movable step may be inclosed by a shield formed in any convenient manner to keep moisture and dust from the slots and thus prevent obstruction to the free and easy movement of the step. In Fig. 2 such a construction is shown on one side the shield being formed by the end wall *p* of the car.

The operation of my improved device will be manifest from the drawings and description. When the train stops the brakeman standing on the fixed part of the platform simply raises the supplementary platform to the position shown in Fig. 2 and the step will of its own weight drop down and outward, thus accomplishing both results by a simple movement.

The weight of the pivoted supplementary platform will be sufficient to keep it normally down in position.

Although I have described my invention as applied to a vestibuled car, I do not intend thereby to limit its use to vestibule cars as the same principle can be applied to the ordinary passenger cars.

Having thus described my invention and its use, I claim—

1. The combination with the fixed platform

and fixed steps of a railway car, of a pivoted supplementary platform, a movable supplementary step and a link connecting said supplementary platform and supplementary step whereby said supplementary platform and step are operated simultaneously, in manner as and for the purpose set forth.

2. The combination with the fixed platform and steps of a railway car, of a pivoted supplementary platform, a movable supplementary step, an angular lifting lever having its horizontal part firmly secured to the bottom of said supplementary step and its vertical part connected to said supplementary platform by a flexible link whereby said supplementary platform and step can be operated simultaneously in manner and for the purposes, substantially as hereinbefore set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN S. STEVENS.

Witnesses:

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