

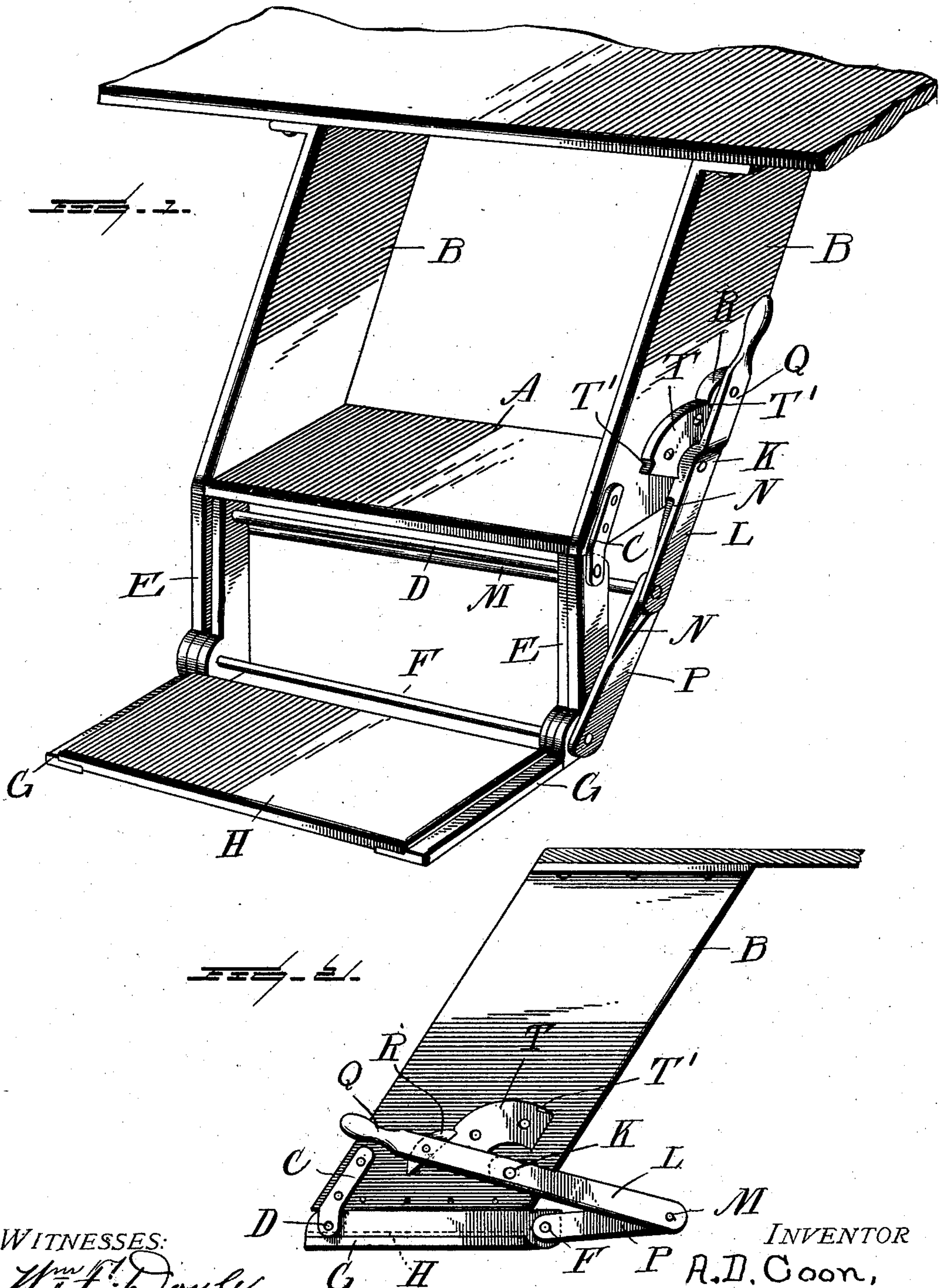
No. 691,895.

Patented Jan. 28, 1902.

A. D. COON.
FOLDING CAR STEP.

(Application filed Nov. 1, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

ARTHUR D. COON, OF BALLSTON SPA, NEW YORK.

FOLDING CAR-STEP.

SPECIFICATION forming part of Letters Patent No. 691,895, dated January 28, 1902.

Application filed November 1, 1901. Serial No. 80,808. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR D. COON, a citizen of the United States, residing at Ballston Spa, in the county of Saratoga and State of New York, have invented certain new and useful Improvements in Folding Car-Steps; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in folding steps for cars in which provision is made for moving the folding step horizontally underneath the lower end of the fixed steps, means being provided to hold the folding step extended for use, or folded, and lever connection for operating same.

The invention will be hereinafter more fully described, and then specifically defined in the appended claim, and is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which—

Figure 1 is a perspective view showing the car-step extended for use. Fig. 2 is a view showing the step folded underneath the fixed steps.

Reference now being had to the details of the drawings by letter, A designates the bottom of the fixed steps having the side pieces B B. To the bracket-arms C, projecting below said side pieces B, is journaled a rod D, and on this rod is mounted, near each end, a hinge-arm E, the outer face of each being cut away or recessed. A pivotal rod F is journaled in the bifurcated ends of said hinged arms E, and to said rod F are journaled the contracted ends of the hinged members G, the upper face of each of said members being recessed to receive the step H. For holding said step H horizontal the upper edge of the contracted portion of said hinged members above their bearing portions contact with the inner walls of the bifurcated ends of the hinged arms E.

Secured to the lower ends of the side pieces B, on the outer faces thereof, are pins K, on

which are journaled the ends of the strips L, each of which is cut away on its inner face, as shown at N, and to the opposite ends of said strips is journaled a rod M. Connecting-links P are journaled at corresponding ends to said rod M, and their other ends to the projecting ends of the rod F. Said links P are recessed or cut away on their outer surfaces, having diagonal shoulders, forming stops against which the edges of strips L contact as the step is folded. Fastened to one of said strips L, longitudinally therewith and projecting beyond its pivoted end, is a lever Q, to which a pawl R is pivoted, said pawl being double-ended and convexed on its upper surface or edge. Fastened to the outer face of one of said side pieces B is a curved bar T, which is recessed on its convex surface, as at T', near each end, said recessed portions being provided to receive one end or the other of said pawl when the operating-lever is thrown to one or the other of its limits. Said pawl is so positioned that the fingers of the hand of the operator may conveniently tilt same to release the pawl when it is desired to swing the lever to fold or extend the step.

The manipulation of my folding step is easy, and when folded all parts will be out of the way, and the various parts are held against rattling and prevented from swinging when held by the locking-pawl against the bottom of the fixed step.

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

A folding step for cars, comprising in combination with the fixed step, the angle-plate C, the strips E pivotally mounted thereon, each strip E having a recess along its outer edge, the rod F mounted in the lower ends of said strips, the folding step H having end pieces pivotally mounted on said rod F, the tread of said folding step H being slightly above the strips G, at the end thereof, and adapted when folded, to enter the recessed portions of said strips E, the lever L pivoted to the side pieces of the fixed step, a pawl R pivoted to said lever, a segment T fastened to the side pieces of the step, and having two notches at its opposite ends, adapted to be engaged by one or the other ends of said pawl

to hold the step either extended or closed, the
link P pivotally connecting the end of said
lever with the rod F, said links and levers P
being cut away or recessed, as shown, where-
5 by they will not interfere with each other in
the folding of the step, substantially as shown
and described.

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

ARTHUR D. COON.

Witnesses:

W. J. KNICKERBOCKER,
T. W. NICHOLS.