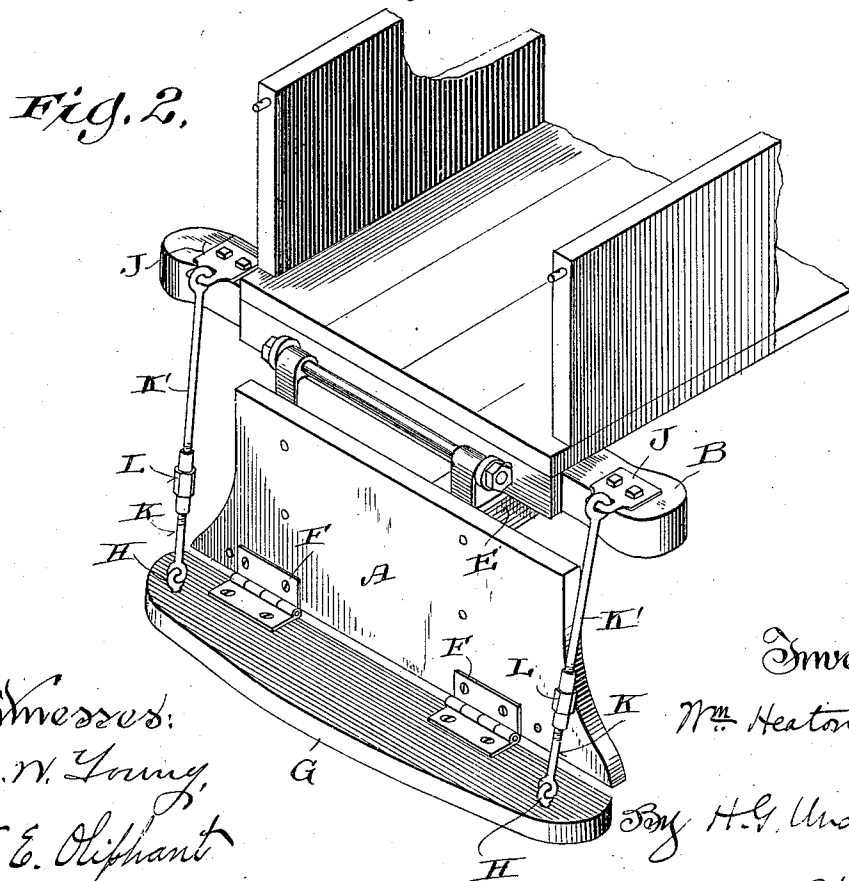
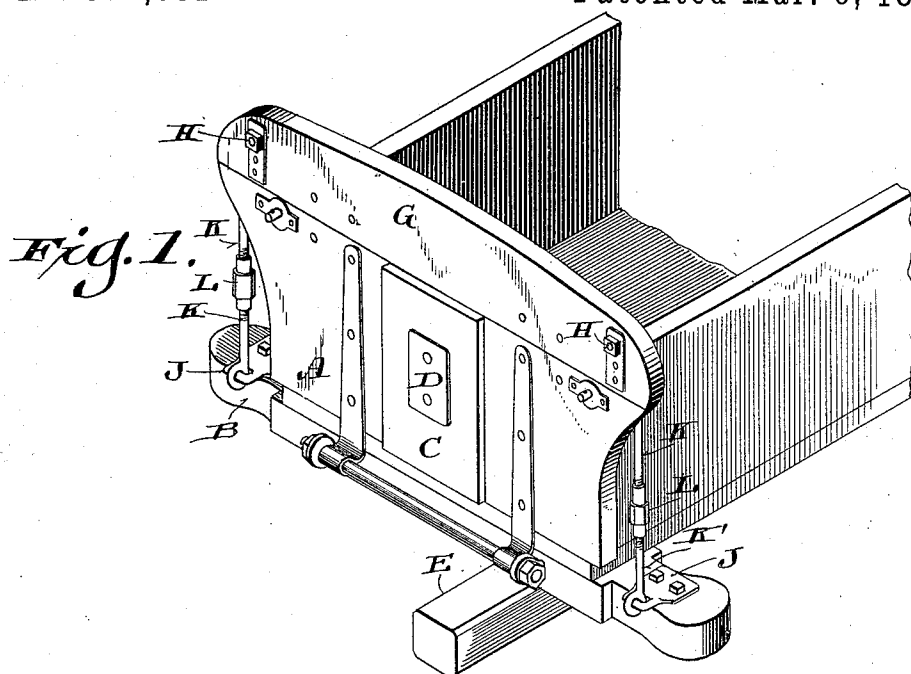


(No Model.)

W. HEATON.
END GATE STEP FOR WAGONS.

No. 578,332.

Patented Mar. 9, 1897.



Witnesses:
Geo. W. Young,
N. E. Oliphant

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UNITED STATES PATENT OFFICE.

WILLIAM HEATON, OF NEW BERLIN, WISCONSIN, ASSIGNOR OF ONE-HALF
TO CHARLES BENSENE, OF TESS CORNERS, WISCONSIN.

END-GATE STEP FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 578,332, dated March 9, 1897.

Application filed November 27, 1896. Serial No. 613,471. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HEATON, a citizen of the United States, and a resident of New Berlin, in the county of Waukesha and State of Wisconsin, have invented certain new and useful Improvements in End-Gate Steps; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide simple economical step attachments for use in connection with wagon end-gates; and it consists in certain peculiarities of construction and combination of parts hereinafter set forth with reference to the accompanying drawings and subsequently claimed.

Figure 1 of the drawings represents a perspective view of my step attachment as it appears in connection with a wagon end-gate when the latter is swung up into normal position, and Fig. 2 represents a similar view of the step attachment as it appears when the end-gate is swung down.

Referring by letter to the drawings, A represents an ordinary end-gate hinged to the rear sill B of a wagon-body and provided with a rear central panel C, to which a metal wear-plate D is attached, this wear-plate being arranged to abut against the rear end of a running-gear reach-pole E when the end-gate is swung down.

Joined by hinges F to the end-gate is an upper extension G in the form of a head-piece provided with eyebolts H, having link connection with eye-plates J, fast on the sill B, where the latter projects from the sides of the wagon-body, the union of the links and eye-plates being at a greater elevation than the hinge connection of said end-gate with said sill.

In order to provide for fine hinge adjustment of the end-gate extension G, each of the aforesaid links is preferably two screw-threaded rod-sections K K', united by a turn-buckle L, as herein shown.

When the end-gate is swung down, the hinged extension G thereof comes from a vertical to a horizontal position and is held in the latter position by the links connecting it with the rear end sill, the wear-plate D on said end-gate being then opposed to the rear

end of reach-pole E, above specified. The reach-pole prevents the end-gate from swinging forward under the wagon-body, and the extension G of said end-gate being brought and held in a horizontal position serves as a step in rear of the wagon to facilitate loading or unloading of the same. The end-gate being swung up the extension G thereof automatically resumes its vertical position, and the eyebolts H, connected to this end-gate extension, are so arranged as not to interfere with rear ends of upper flare-boards, such as are sometimes employed in connection with the sides of the wagon-body.

From the foregoing it will be understood that head-boards G and necessary fittings may be furnished to the trade for application to new or old wagons.

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

1. A head-piece for hinge connection with an end-gate having like connection with a wagon-body, and links for attachment to the head-piece and wagon-body as a means for bringing said head-piece from vertical to horizontal position when said end-gate is swung down.

2. A head-piece for hinge connection with an end-gate having like connection with a wagon-body, and turnbuckle-links for attachment to the head-piece and wagon-body as a means for bringing said head-piece from vertical to horizontal position when said end-gate is swung down.

3. As an attachment for a hinge-drop end-gate of a wagon, a head-piece having hinges for connection with the gate and provided with eyes, link-rods having ends thereof joined to the eyes, and eye-plates engaging the other ends of the link-rods for connection with the rear end sill of the wagon, said head-piece constituting a normally-vertical extension of the end-gate convertible to a horizontal step when said gate is swung down.

4. A hinged end-gate of a wagon-body, a head-piece hinged to the end-gate and provided with eyes, other eyes in connection with the projecting ends of the rear wagon-body sill, and link-rods connecting the head-piece eyes with the sill-eyes, said head-piece

constituting a normally-vertical extension of the end-gate convertible to a horizontal step when said gate is swung down.

5. A hinged end-gate of a wagon-body provided with a wear-plate for contact with the rear end of a running-gear reach-pole, a head-piece hinged to the end-gate, and links in eye connection with the head-piece and rear sill of the wagon-body.

In testimony that I claim the foregoing I do have hereunto set my hand, at New Berlin, in the county of Waukesha and State of Wisconsin, in the presence of two witnesses.

WM. HEATON.

Witnesses:

GEO. S. ROSENBERG,
HENRY ROSENBERG.