

No. 634,385.

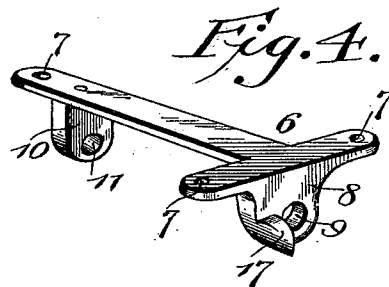
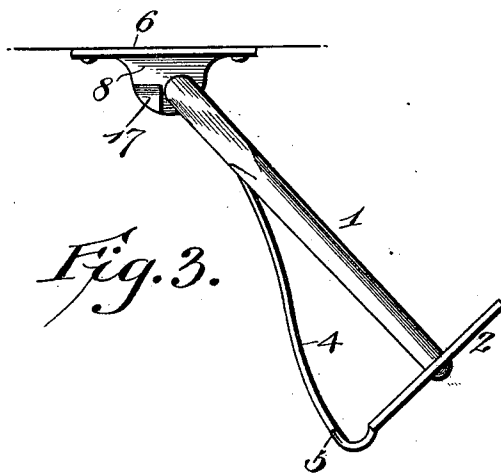
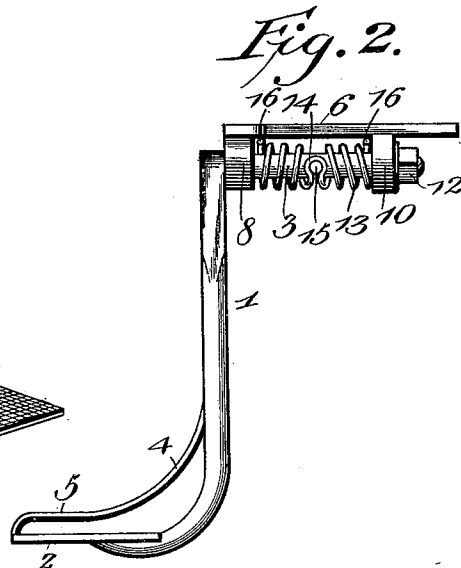
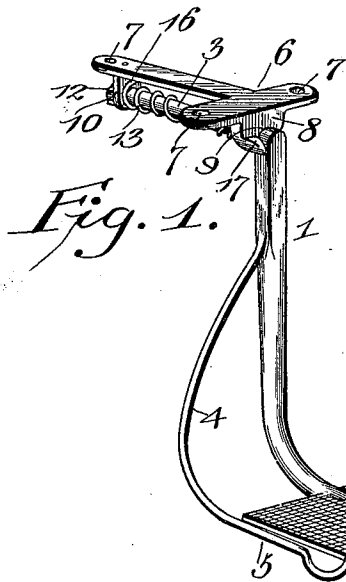
Patented Oct. 3, 1899.

R. H. & I. B. WOLFE.

VEHICLE STEP.

(Application filed Mar. 29, 1899.)

(No Model.)



Witnesses

A. Roy Appleman
W. B. Shepard

By their Attorneys,

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UNITED STATES PATENT OFFICE.

ROBERT H. WOLFE AND IRA B. WOLFE, OF TILLAR, ARKANSAS.

VEHICLE-STEP.

SPECIFICATION forming part of Letters Patent No. 634,885, dated October 3, 1899.

Application filed March 29, 1899. Serial No. 711,012. (No model.)

To all whom it may concern:

Be it known that we, ROBERT H. WOLFE and IRA B. WOLFE, citizens of the United States, residing at Tillar, in the county of Drew and State of Arkansas, have invented a new and useful Vehicle-Step, of which the following is a specification.

The invention relates to improvements in vehicle-steps.

The object of the present invention is to improve the construction of vehicle-steps, more especially the construction shown and described in Patent No. 610,697, granted September 13, 1898, and to increase the strength, durability, and efficiency of the same and also to lessen the cost of construction.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a vehicle-step constructed in accordance with this invention. Fig. 2 is a rear elevation of the same. Fig. 3 is a side elevation showing the step swung backward. Fig. 4 is a detail perspective view of the bracket.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an arm or standard of a step 2, which extends outward from the lower end of the arm or standard, its outer portion being connected with the said arm or standard by a guard 4. The upper end of the standard is provided with a horizontal pivot extending inward from and formed integral with the said standard and journaled in bearing-openings 9 and 11 of inner and outer ears 8 and 10 of a bracket 6. The bracket 6, which is substantially T-shaped, is designed to be secured to the bottom of a vehicle-body, and it is provided at the terminals of its arms with perforations 7 for the reception of bolts or other suitable fastening devices. The horizontal pivot 3 hinges the step to the bracket to permit the former to swing rearward to enable it when it comes in contact with a stump or other obstruction to pass over the same without injury. The standard is normally arranged in a vertical position, its forward movement being limited by a lug 17,

formed integral with the outer ear of the T-shaped bracket 6 and located on the exterior of the outer end of the same, in position to be engaged by the front edge of the standard, and the latter is held normally in engagement with the outwardly-extending lug or stop 17 by a spring 13. In order to protect the spring and prevent it from being injured by brush and the like, it is coiled around the shaft or pivot 3, as clearly illustrated in Fig. 2 of the accompanying drawings, and it consists of a central loop 14 and opposite coils, having their outer terminals 16 bearing against the lower face of the T-shaped bracket and arranged in the space between the same and the spindle or pivot, the openings 9 and 11 of the ears 8 and 10 being located a sufficient distance from the body portion of the bracket to provide such a space. The central loop 14 of the spring 13 engages a projection or stud 15, consisting of a pin or other suitable fastening device mounted on the pivot 3 in a perforation thereof and having a projecting head portion to engage the central loop of the coiled spring. The coiled spring is adapted to swing the standard 1 forward, and it holds the same normally in engagement with the stud or projection 17; but when the step comes in contact with an obstruction it will permit the same to swing rearward and pass over the said obstruction without injury, and after it has left the obstruction the spring will return it to its normal position. The end of the horizontal pivot of the step is threaded and projects beyond the inner perforated ear 10, and it receives a nut 12, which detachably connects the step to the bracket.

The invention has the following advantages: The vehicle-step, which is simple and comparatively inexpensive in construction, possesses great strength and durability, and the spring which returns the step to its normal position after the same has been swung rearward through coming in contact with an obstruction is coiled around the integral pivot of the standard and is compactly arranged within the bracket, so that there is no liability of its becoming injured by catching in brush and the like, and it is also concealed from view and is out of the way.

Changes in the form, proportion, size, and

the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

5 What is claimed is—

1. A device of the class described comprising a bracket designed to be arranged transversely of the body of a vehicle, a rearwardly-swinging step having a pivot journaled on
10 the bracket, a coiled spring disposed on the pivot and adapted to swing the step forward, and means for limiting the forward swing of the step, whereby the latter is maintained normally in proper position, substantially as
15 described.

2. A device of the class described comprising a bracket designed to be arranged transversely of a vehicle-body and provided at its outer end with a lug or projection forming an
20 outerstop, a rearwardly-swinging step having a standard provided at its upper end with a pivot journaled on the bracket, said standard being arranged to abut against the lug or projection, and a coiled spring disposed on the

pivot and normally holding the standard in 25 engagement with said lug or projection, substantially as described.

3. A device of the class described comprising a bracket provided with inner and outer perforated ears, the outer one being provided 30 with a stop, a standard carrying a step and provided with a horizontal pivot journaled in the said ears, a coiled spring disposed on the pivot and having its terminals engaging the bracket and provided between its ends with 35 a loop, and a stud or projection mounted on the pivot and engaging the loop of the spring, the latter being adapted to hold the standard normally in engagement with the said stop, substantially as described. 40

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

ROBERT H. WOLFE.
IRA B. WOLFE.

Witnesses:

H. T. SLEMONS,
A. C. STANLEY.