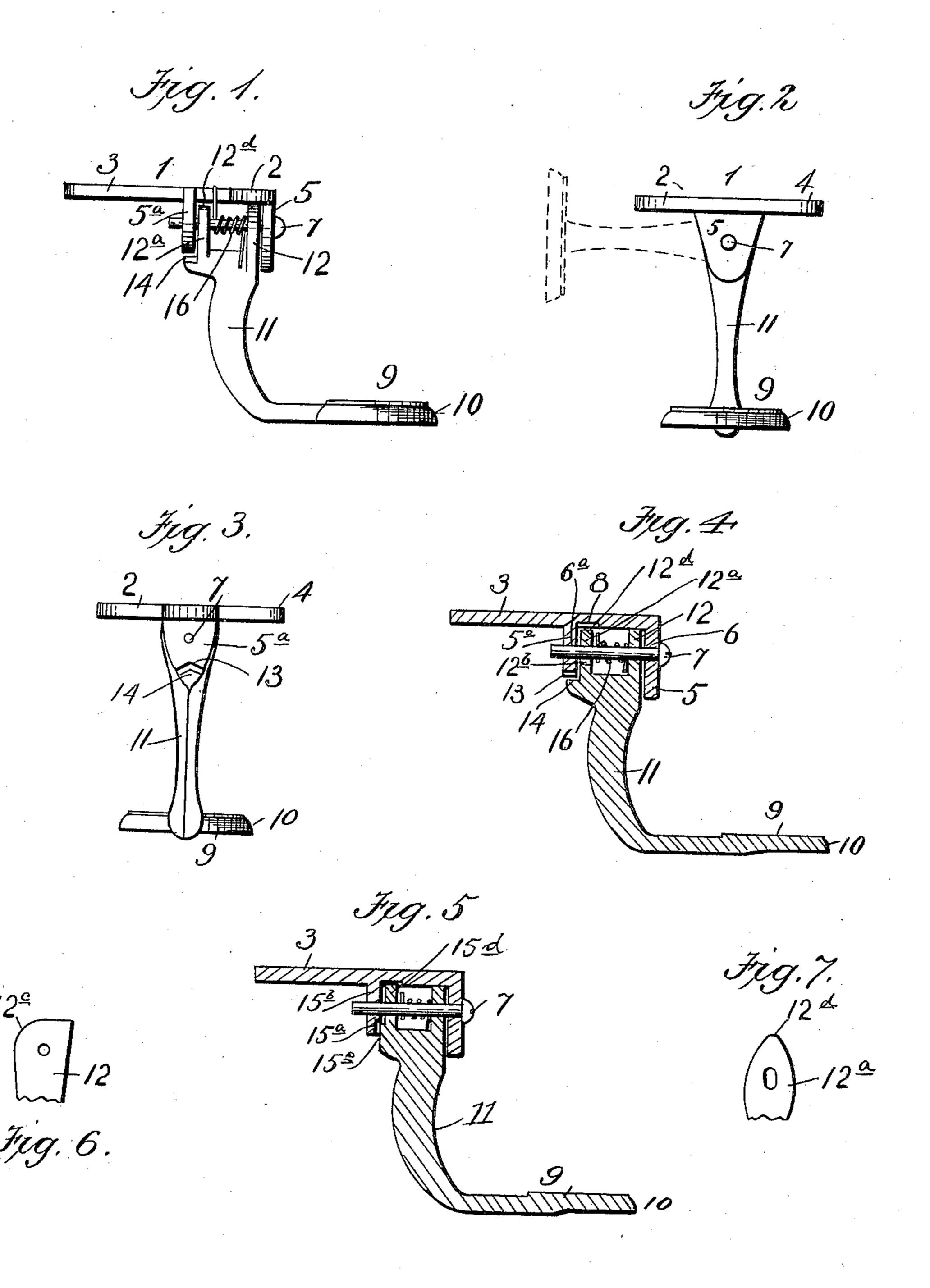
## A. & B. H. SANDERS. BUGGY STEP.

(No Model:)

(Application filed Sept. 12, 1900.)



Witnesses: Franck L. Ourand. ERBannyea Alexander Sanders.

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## UNITED STATES PATENT OFFICE.

ALEXANDER SANDERS AND BENJAMIN H. SANDERS, OF POPLARBLUFF, MISSOURI.

## BUGGY-STEP.

SPECIFICATION forming part of Letters Patent No. 672,289, dated April 16, 1901.

Application filed September 12, 1900. Serial No. 29,784. (No model.)

To all whom it may concern:

Be it known that we, ALEXANDER SANDERS and BENJAMIN H. SANDERS, citizens of the United States, residing at Poplarbluff, in the 5 county of Butler and State of Missouri, have invented new and useful Improvements in Buggy-Steps, of which the following is a speci-

fication.

Our invention relates to steps for buggies or other vehicles; and one of the objects of the same is to provide simple and efficient means for hinging the step to the vehicle-body in such a manner that should it be struck by an obstacle like a stump or other object project-15 ing from the ground in the path of the vehicle the step would yield, ride over the obstacle, and return to its original position again.

Another object is to provide a step with a spring-hinge which will lock the step in po-20 sition for use when a person's foot is placed on said step and which when relieved of the weight will unlock and permit the step to

yield when met by an obstacle.

We attain these objects by means of the 25 construction shown in the accompanying

drawings, in which—

Figure 1 is a side elevation of a buggy-step made in accordance with our invention. Fig. 2 is a front elevation of the same, showing 30 in dotted lines the position which the step would assume if struck by an obstacle. Fig. 3 is a rear elevation of the step. Fig. 4 is a sectional view through the spring-hinge for the step. Fig. 5 is a similar view of a modi-35 fied form of our invention. Fig. 6 is a side view of the upper end of the lug 12. Fig. 7 is a similar view of the end of lug 12a.

Like numerals of reference designate like parts wherever they occur in the different

40 views.

In said drawings the numeral 1 designates a bracket which consists of the three arms 2 3 4, adapted to be secured under the body of the vehicle, and the downwardly-project-

ertures 6 6° for the pintle 7, which pivots the step to said bracket. This bracket 1 has a recess 8 in its under face, near one of the lugs 5<sup>a</sup>, for a purpose which will be hereinafter referred to.

The step consists of a round tread-plate 9, having a beveled outer edge 10, a curved shank 11, and the pintle-bearings 12 12<sup>a</sup> at the upper end of the shank 11. The pintlelug 5<sup>a</sup> has a notch 13 at its lower end, and a 55 V-shaped projection 14 on the lug 12<sup>a</sup> fits said notch 13 when a person applies weight to the step 9. The aperture 12<sup>b</sup> in the lug 12<sup>a</sup> is elongated. The lug 12 is curved at one side, as at 12°, the top of said lug being straight 60 to fit up against the under side of the bracket 1 to form a stop for the movement of the step. The lug 12<sup>a</sup> has a projecting point 12<sup>d</sup>, which engages the recess 8 when weight is applied to the step. A pin 7 passes through the alined 65 apertures in the lugs 5 5a 12a 12a, and a spring 16 encircles the pin 7, one end of said spring engaging the bracket 1 and the opposite end engaging the shank 11. This spring exerts its tension to hold the step in a position for 70 use, as shown in full lines, Fig. 2.

As shown in Fig. 5, the notch 15<sup>a</sup> is formed in the side of the lug 15<sup>b</sup>, and a rib 15<sup>c</sup> on the lug 15<sup>d</sup> fits the notch 15<sup>a</sup> when weight is applied to the step. It will be understood from 75 the foregoing that when a person places his foot upon the step 9 the step is locked against. pivotal movement by the engagement of the notch 13 and the projection 14 and the recess 8 and the point 12<sup>d</sup>. When the weight 80 is removed from the step, it is free to be swung toward the rear end of the vehicle, as shown

in dotted lines in Fig. 2.

Having thus fully described our invention, what we claim is—

1. A step for vehicles, comprising the combination, substantially as described, of a bracket provided with lugs, a recess or notch in said bracket, a step having a shank, said 45 ing pintle-lugs 5 5°, provided with alined ap- | shank being pivoted at its upper end to said 90

lugs, a projection on said shank, constructed to fit into said recess or notch on said bracket, when weight is applied to the said step.

2. A step for vehicles consisting of a bracket secured to the vehicle-body and provided with pintle-bearings, and a recess near one of said bearings, a step provided with a curved shank, lugs at the end of said shank, a pin passing through said pintle-bearings and lugs, a spring surrounding the pin, and projections on one of the lugs to engage notches in the bracket for locking the step in position when weight is applied to the step, substantially as described.

In testimony whereof we have hereunto 15 set our hands in presence of the subscribing witnesses.

## ALEXANDER SANDERS. BENJAMIN H. SANDERS.

Witnesses as to signature of Alexander Sanders:

ARMON WALKER,

D. L. CHEEK.

Witnesses as to signature of Benjamin H. Sanders:

HENRY W. HAHS, THEADORE HAHS.