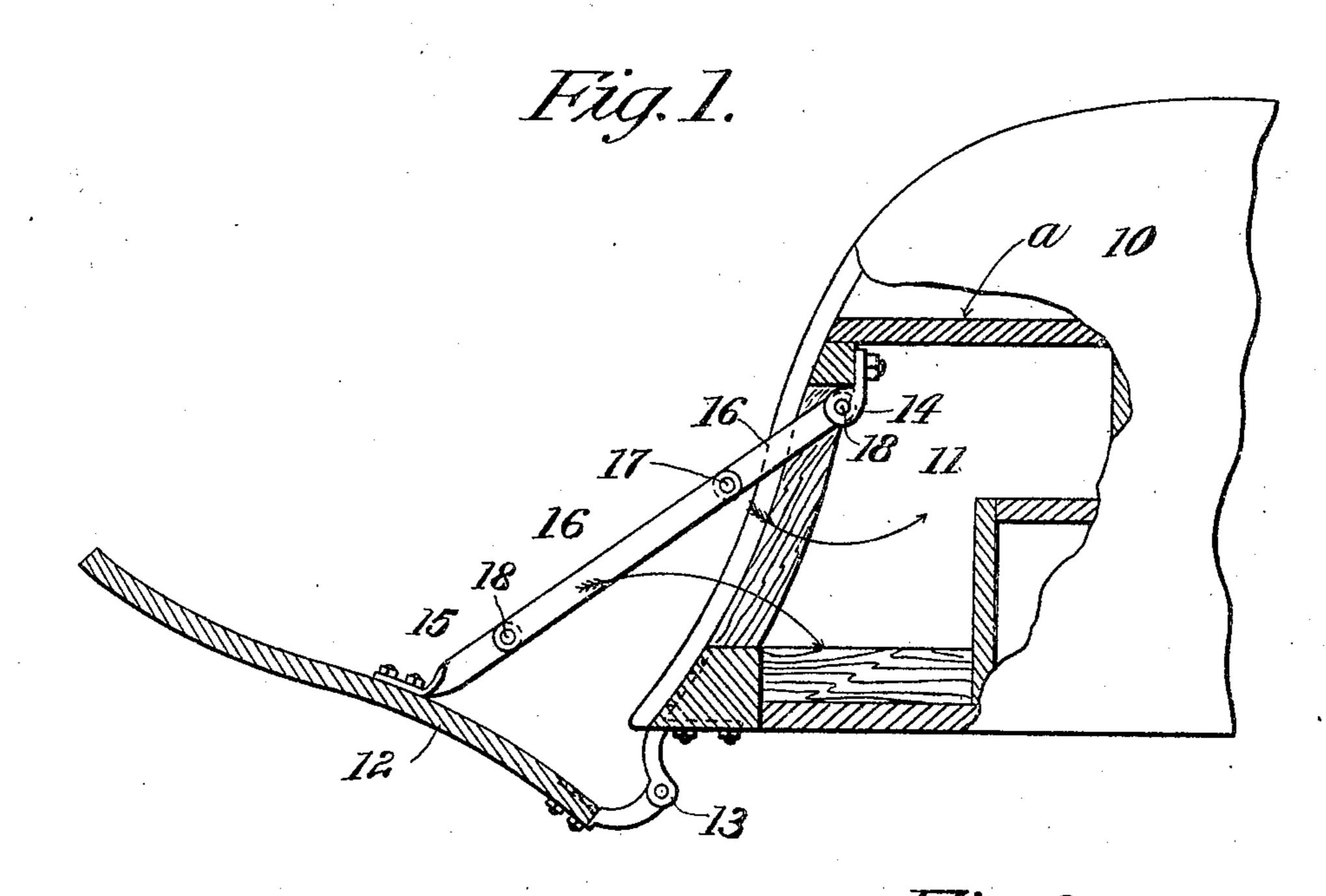
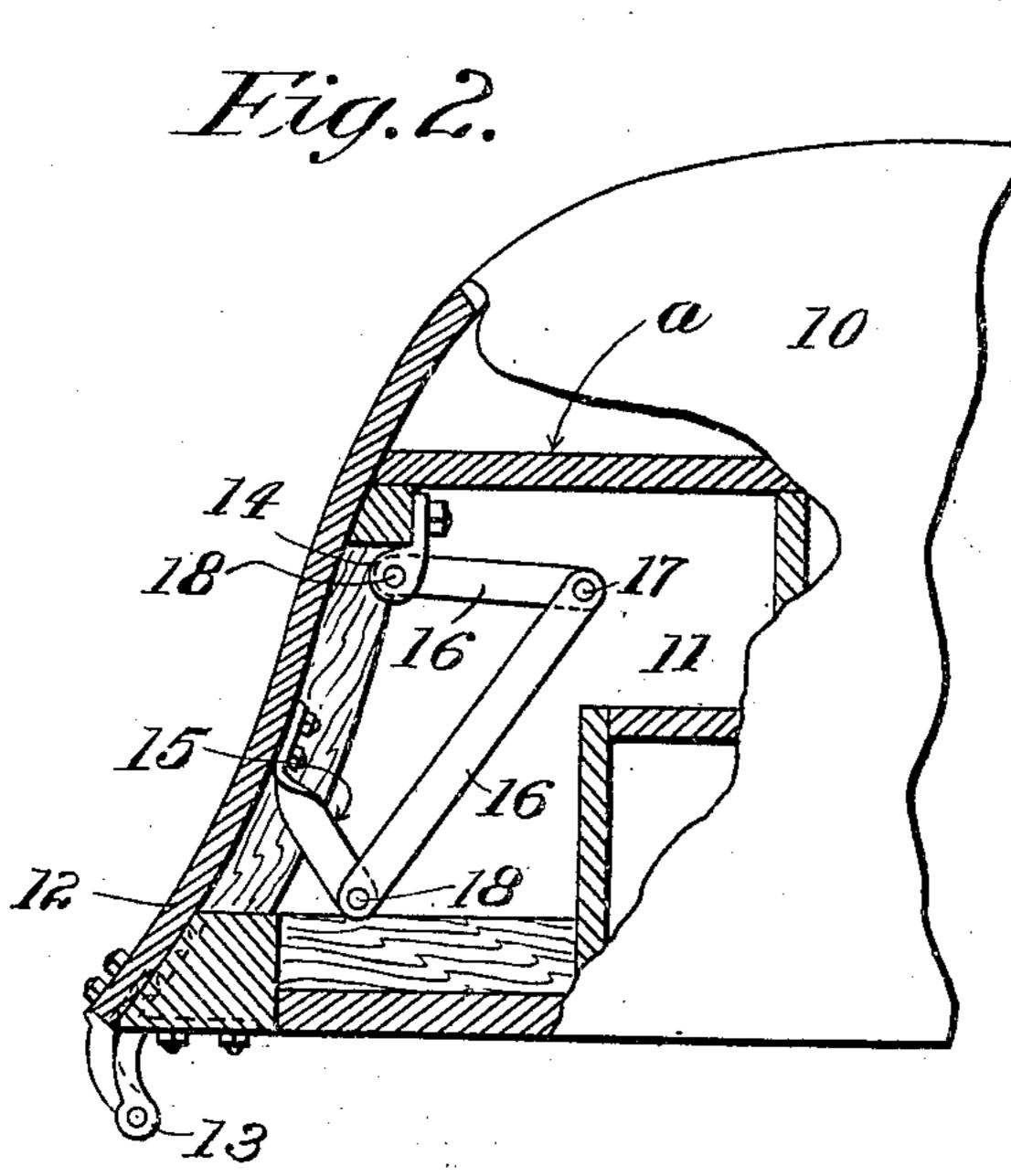
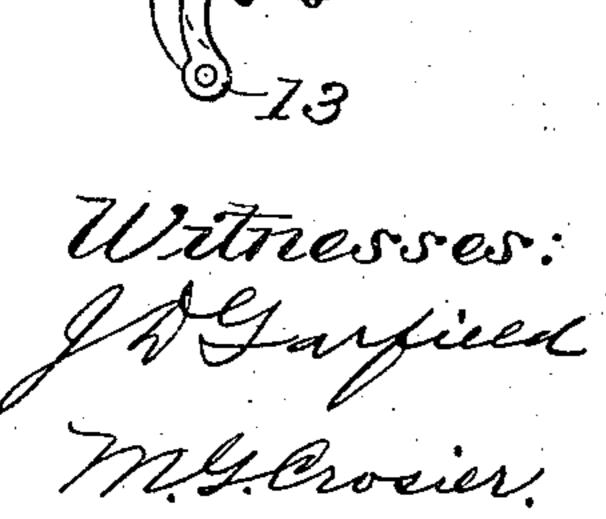
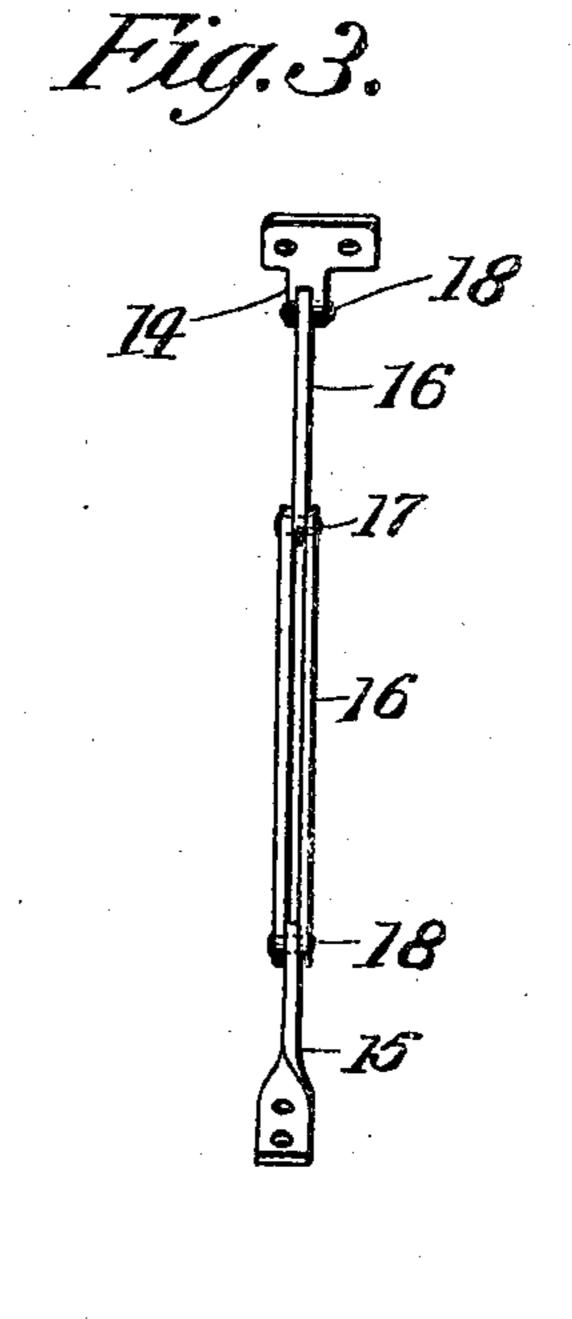
## H. A. KNOX. FOOTBOARD SUPPORT FOR MOTOR VEHICLES. APPLICATION FILED MAY 4, 1903.









Triveritor. Harry A Know By Chapicorles Attorneys.

## UNITED STATES PATENT OFFICE.

HARRY AUSTIN KNOX, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO KNOX AUTOMOBILE COMPANY, OF SPRINGFIELD, MASSACHUSETTS, A CORPORATION.

## FOOTBOARD-SUPPORT FOR MOTOR-VEHICLES.

No. 802,995.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed May 4, 1903. Serial No. 155,642.

To all whom it may concern:

Be it known that I, HARRY AUSTIN KNOX, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Footboard-Supports for Motor-Vehicles, of which the follow-

ing is a specification.

This invention, while particularly designed for use on automobiles or self-propelled vehicles, is capable of employment upon carriages of various sorts. Heretofore it has been customary to support folding footboards by means of straps or chains inclosed in a flexible casing. This arrangement has proven objectionable, because said straps or chains often become caught between the body and board when the latter is elevated, thus causing the breakage of the hinges or injury to the board.

Moreover, the connection being flexible the board will jump up and rattle when passing over a rough pavement or road.

The aim of this invention is to overcome the

above-noted objections.

The preferred embodiment is illustrated in the accompanying drawings and described in the following specification; but the right is of course reserved to make such changes as may fall within the scope of the claims.

In the drawings, Figure 1 is a sectional view through a portion of a vehicle, showing the improved support and the footboard in operative position. Fig. 2 is a similar view, but illustrating the footboard elevated. Fig. 3 is a view in elevation of the support detached.

Similar numerals of reference are employed to designate similar parts in the various fig-

ures.

In the embodiment herewith illustrated the body is designated generally by the reference-numeral 10 and may be of any desirable or well-known form, having, however, a space 11. The footboard (designated by the reference-numeral 12) is hinged, as shown, at 13, to the lower edge of the body and is arranged to be supported in dropped position, as shown in Fig. 1, or elevated, as illustrated in Fig. 2, in which latter position it covers the space 11. A drop-

hinge connection is shown in the present instance; but any other form may be employed, 50 if desired. No particular claim is made to the parts so far described, the invention residing in the support for the footboard, which will now be set forth.

The body 10 is provided with a depending 55 ear 14, secured within the space 11, and an upstanding ear 15 is secured to the upper face of the footboard. This ear 15, extending as it does above the surface of the footboard, is, in effect, a short rigid lever whereby when the 60 board is let down the lower end of the links will be carried past the dead-center and into toggled position, necessitating the pushing inward of the links before the board can be swung up to closed position again. A link 65 connection is employed between these two ears, said connection comprising sections 16, hinged together, as shown at 17, and respectively to the adjacent ears, as illustrated at 18. The lower section is preferably longer than the 70 upper and consists of a pair of members, as shown in Fig. 3, these members embracing the lower end of the upper section and the lower ear 15.

Now when the footboard is dropped, as illus-75 trated in Fig. 1, the sections 16 are in alinement and the various hinge connections are likewise alined. As a result the footboard cannot jar upwardly or rattle, as it is locked in its operative position. Therefore it has 80 this important advantage over the ordinary support. At the same time it can be readily folded by pressing the link-sections inwardly as the footboard is raised. During this movement the parts cannot become caught between 85 the body and board, as they have a fixed path of movement. Thus it will be seen that the structure fully accomplishes the aim of the invention pointed out in the preliminary portion of the specification.

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

In a vehicle, the combination with a body having an open space, of a footboard arranged 95 to cover the space, and a linked connection between the body and board comprising a link pivotally attached to the body and an upstanding ear constituting a rigid lever secured to the footboard, and a double center link consisting of parallel bars between which said upstanding ear and a link attached to the body may swing, said upstanding ear serving to

swing the lower end of said double link into toggle relation with the other parts.

## HARRY AUSTIN KNOX.

Witnesses:

A. E. SMITH, Wm. H. CHAPIN. 10