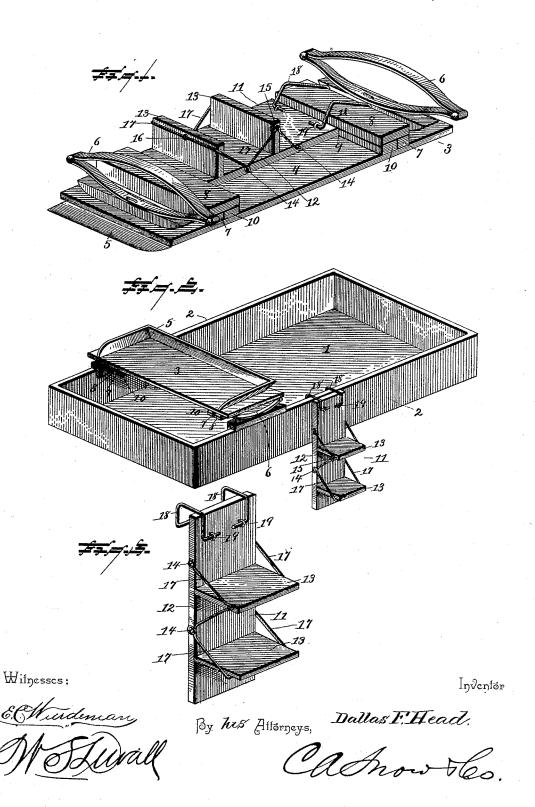
(No Model.)

D. F. HEAD.

STEP LADDER ATTACHMENT FOR WAGON SEATS.

No. 418,023.

Patented Dec. 24, 1889.



UNITED STATES PATENT OFFICE.

DALLAS FRANKLIN HEAD, OF MOUNT LEBANON, LOUISIANA, ASSIGNOR OF ONE-HALF TO NATHANIEL W. WARREN, OF SAME PLACE.

STEP-LADDER ATTACHMENT FOR WAGON-SEATS.

SPECIFICATION forming part of Letters Patent No. 418,023, dated December 24, 1889.

Application filed June 11, 1889. Serial No. 313,871. (No model.)

To all whom it may concern:

Be it known that I, DALLAS FRANKLIN HEAD, a citizen of the United States, residing at Mount Lebanon, in the parish of Bien-5 ville and State of Louisiana, have invented a new and useful Step-Ladder Attachment to Wagon-Seats, of which the following is a specification.

This invention has relation to improve-10 ments in wagon-seats, and has special reference to an attachment for the same, and is designed as an improvement over my patent, No. 398,252, granted February 19, 1889.

Among the objects in view are to provide a 15 wagon-seat with a removable step adapted for connection with the sides or end-board of a wagon, whereby passengers may mount or dismount from the wagon by the step, which step may be afterward inserted under the 20 seat; to reduce the cost of the step and adapt the same for application to any ordinary seat without the necessity of materially altering the seat or destroying the same, and withal to provide a strong and serviceable step that 25 may be easily manipulated, placed in, and withdrawn from position.

Referring to the drawings, Figure 1 is a perspective of the under portion of a seat provided with a step attachment constructed 30 in accordance with my invention. Fig. 2 is a perspective of a wagon-body, the step being mounted at the side thereof in operative position. Fig. 3 is a detail in perspective of the step detached.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 represents an ordinary wagon-body, upon the sides 2 of which is supported an ordinary seat 3. The seat 3 consists of the seat-board 40 4, the side and rear rails 5, and the supporting-springs 6, which springs, as usual, rest upon the upper edges of the sides 2 of the body. Upon the under surface of the seat-board and adjacent to the springs or near 45 each end of said board are provided transverse bars 7, and upon the same are secured overlapping cleats 8, thus forming opposite inwardly-opening grooves or ways 9, at the front ends of which are provided stop-50 blocks 10.

same consists of a back board 12 and a series of two or more steps 13, projecting from the face of the board and arranged at a suitable distance apart, and preferably being formed 55 larger as they approach the lower end of the board. Suitable screws or other fastening devices are inserted through the rear end of the board into the steps; or said steps may be rabbeted and set in grooves in the board 60 or otherwise secured thereto, as desired. Between each of the steps and projecting from the edges of the board 12 at opposite points are pins, pegs, or staples 14, and from each of the opposite edges of the steps near their 65 outer ends are inserted staples or eyes 15, the lower step having a central eye 16 upon its under surface. From the upper of the series of pegs 14 there extends a heavy wire brace 17, the same being carried forward 70 through the eye 15 at that side of the step 13 and downward to the next peg or pin 14, and, if more than two steps be used, to the next staple or eye 15. In this instance, however, where only two steps are employed, af- 75 ter the wire leaves the second pin 14, the same is carried under the lower step of the series and through the staple or eye 16, arranged about the center of said step; from thence over to the opposite edge of the step 80 and around the pin or peg 14 intermediate the two steps; from thence up and outward to the eye 15 of the upper step 13, and from thence rearwardly to the opposite peg 14, at which place said wire preferably terminates. 85 By this arrangement I secure an exceedingly rigid and practically non-yielding step attachment.

The means employed for securing the step to the side of the wagon are the same as in 90 my previous patent-namely, a U-shaped double bail 18, the terminals of which are bent and engage with eyes 19, projecting from the face of the rear board 12 near its upper end, said bail being adapted to take 95 over the edge of the side-board 2 of the

To insert the attachment under a seat, the ends of the board 12 are entered within the grooves 9 at the rear end of the seat until the 100 stop-blocks 10 arrest the movement of the at-11 represents the step attachment, and the | tachment. An ordinary turn-button 19, secured to the rear edge of the seat-board, may be provided to prevent the accidental displacement of the attachment, or I may provide any other well-known means.

The bail 18 is of such proportion with rela-

tion to the cleat 8 as to be adapted to take over the same, as shown, when the attachment is arranged under the seat, and thereby obviate any rattling or unpleasant noises.

Having thus described my invention, what

I claim is-

1. The combination, with a wagon-seat provided with opposite ways upon its under surface, of a step attachment adapted for inser-15 tion within the ways and withdrawal there-

from, substantially as specified.

2. The combination, with a wagon-seat provided with ways upon its under surface having a stop, of a step attachment adapted for 20 insertion within the ways and against the stop, and a fastening device secured to the rear edge of the seat and adapted to secure the attachment within the ways, substantially as specified.

3. The combination, with a wagon-seat provided with opposite ways formed of oppositely-arranged cleats, of a step attachment having a supporting latch or bail adapted to take over the cleat and secure the attach-30 ment against rattling, substantially as speci-

4. The combination, with a wagon-seat pro-

vided with opposite cleats forming grooves or ways, of the herein-described step attachment, consisting of a rear board of a length 35 agreeing with the distance between the ways and provided with a series of steps, a zigzagarranged bracing-wire connecting alternately the sides of the board and the step, and a supporting U shaped bail adapted to take 40 over the cleat forming the groove, substantially as specified.

5. The herein-described attachment for wagons, consisting of the rear board 12, having the series of steps 13, pins 14, projecting 45 from the sides of the board 12, and eyes 15, projecting from the side of the steps, and an eve 16 from the under surface of the bottom step, and the brace-wire 17, extending from the first series of pegs 14 to the first series of 50 eyes 15, thence to the next peg, and so on throughout the series, and finally under the step last in the series through the eye thereon, and throughout the series of pegs and staples at the opposite side of the board, and having 55

substantially as specified. In testimony that I claim the foregoing as my own I have hereto affixed my signature

the opposite eyes 19 and U-shaped bail 18,

in presence of two witnesses.

DALLAS FRANKLIN HEAD.

Witnesses:

H. A. McFarland,

G. W. RABORN.