No. 623,004. Patented Apr. 11, 1899.

R. T. GILLESPIE.

THILL SUPPORT.

(Application filed May 5, 1898.)

(No Model.)

Fig. 1.

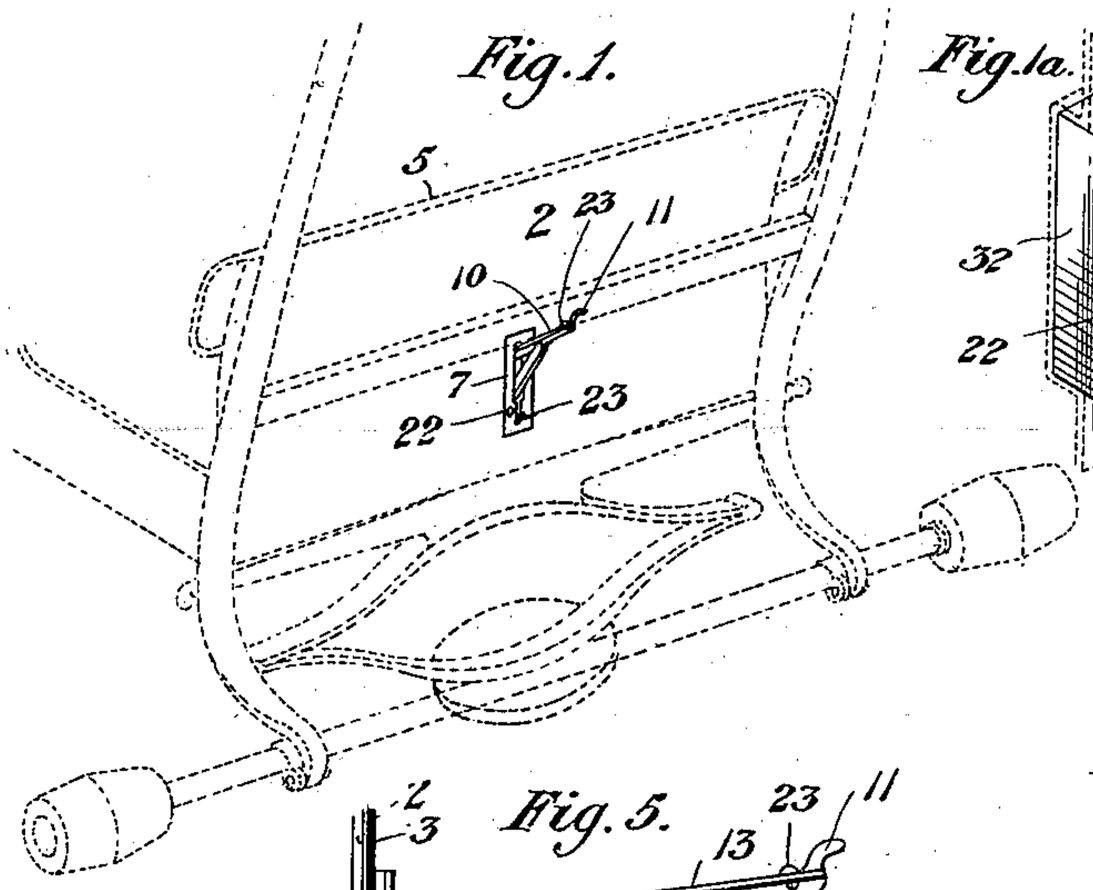


Fig. 1a.

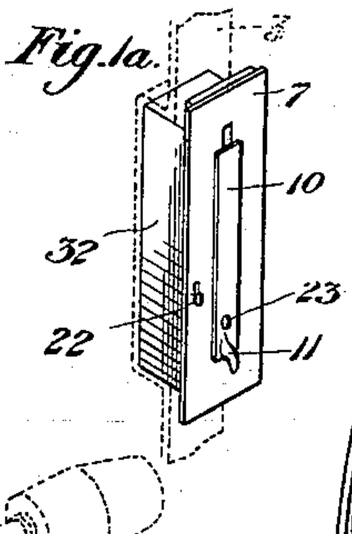


Fig. 4.

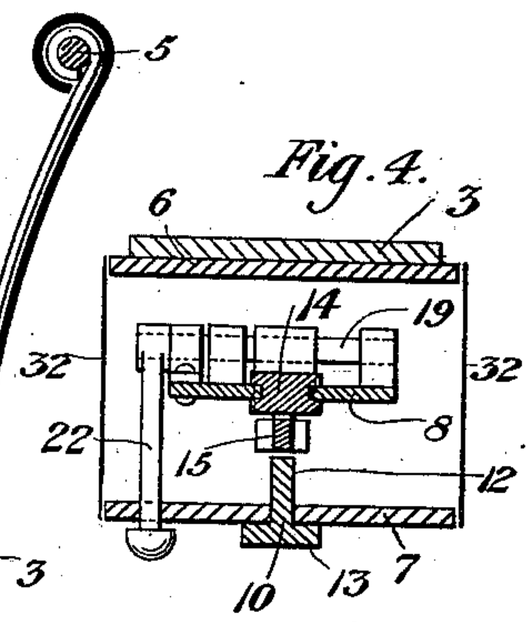


Fig. 2.

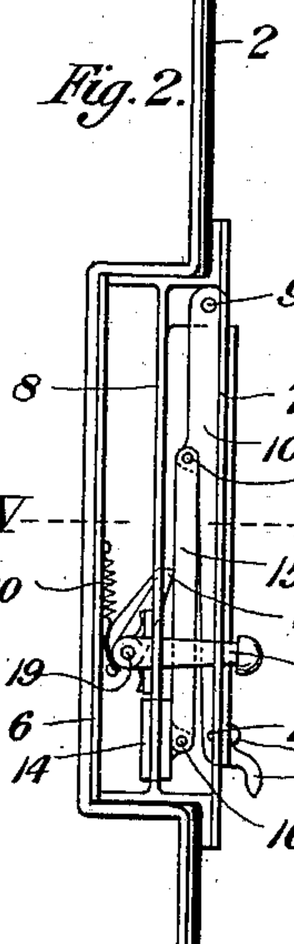


Fig. 3.

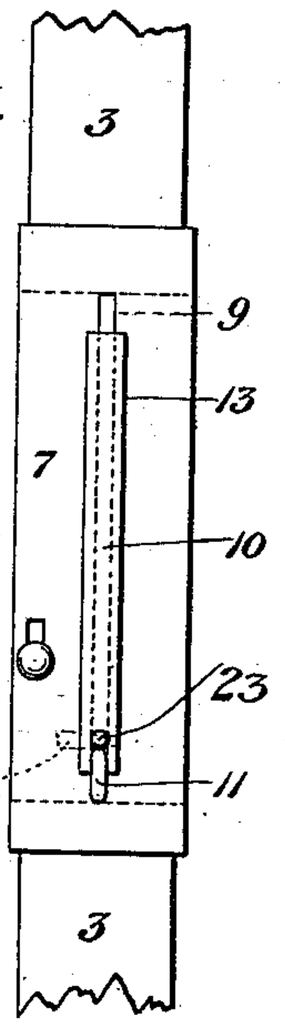


Fig. 5.

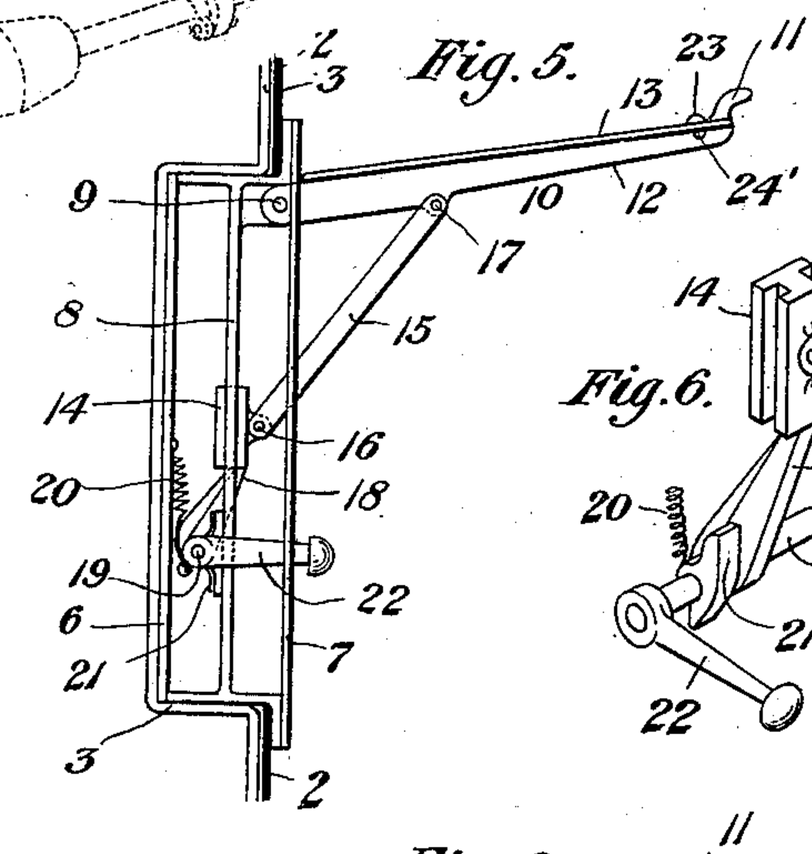


Fig. 6.

Fig. 8.

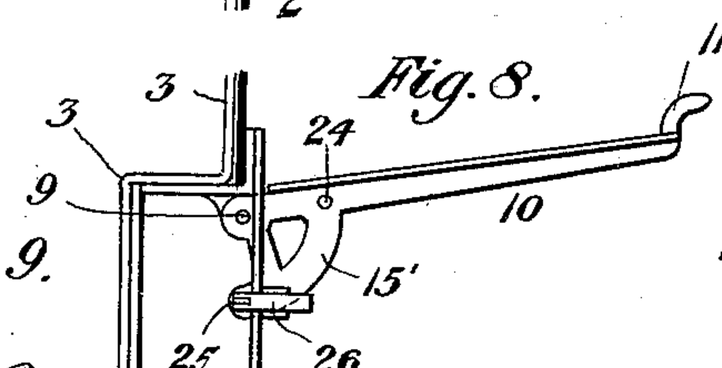


Fig. 9.

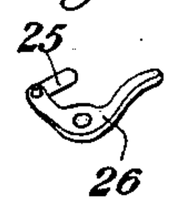


Fig. 7.

Fig. 10.

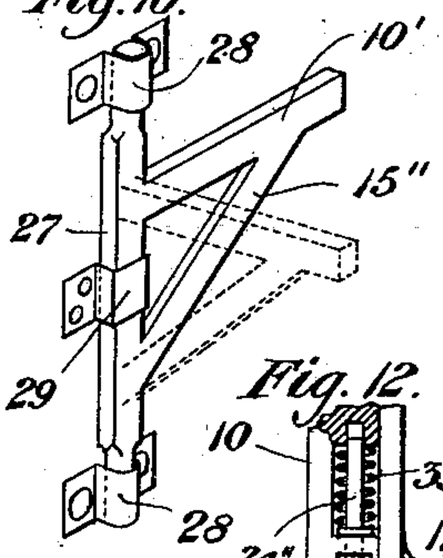


Fig. 11.

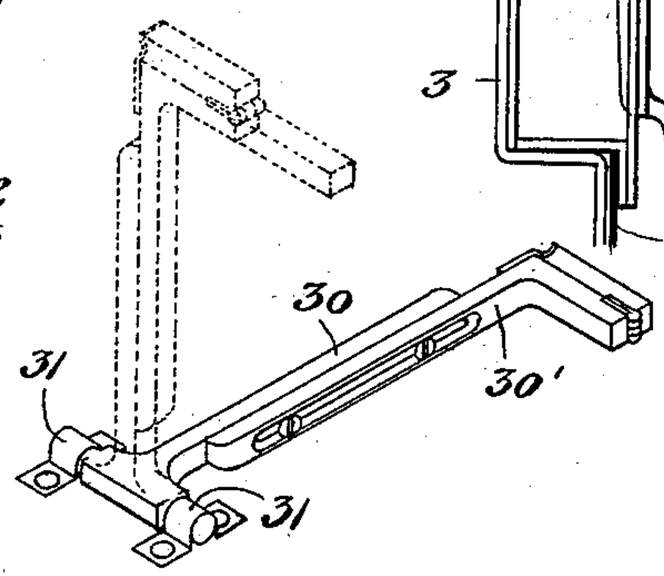
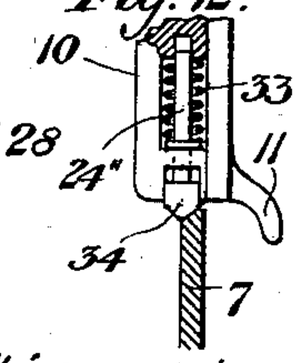


Fig. 12.



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Inventor:
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UNITED STATES PATENT OFFICE.

ROBERT T. GILLESPIE, OF UNIONTOWN, PENNSYLVANIA.

THILL-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 623,004, dated April 11, 1899.

Application filed May 5, 1898. Serial No. 679,825. (No model.)

To all whom it may concern:

Be it known that I, ROBERT T. GILLESPIE, a citizen of the United States, residing at Uniontown, in the county of Fayette and State of Pennsylvania, have invented or discovered a new and useful Improvement in Thill-Supporters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view showing my invention applied to a dashboard of a buggy. Fig. 1ª is a perspective view, detached, showing the inclosing case. Fig. 2 is a side elevation of the device, on an enlarged scale, mounted on the supporting-frame. Fig. 3 is a face view. Fig. 4 is a cross-section on line IV IV of Fig. 2. Fig. 5 is a side elevation similar to Fig. 2, showing the arm extended. Fig. 6 is a perspective detail view of the sliding shoe and supporting-dog. Fig. 7 is a side view showing a modified construction. Fig. 8 is a similar view showing the arm raised. Fig. 9 is a perspective view of the locking-latch. Fig. 10 is a perspective view illustrating a further modification. Fig. 11 illustrates a still further modification. Fig. 12 shows a modified construction of securing-latch.

My invention relates to devices for supporting the thills of vehicles, and is particularly intended for use on buggies, carriages, wagons, &c., in the class of vehicles furnished with dashboards.

Referring to the drawings, 2 is the dashboard, with which and with the floor and frame of the vehicle-bed is incorporated the upright support 3, having extended securing-lugs 4, secured to the vehicle-base and attached to the cross-bar 5 of the dashboard or in any other suitable manner. The frame of the supporting device is composed of outer plates 6 7, with a central vertical slotted plate 8, to which the outer plates are secured in any suitable manner.

Pivoted at 9 is an outwardly and upwardly swinging arm 10, provided at the extremity with a hook 11, by which the arm may be raised and which also serves to retain the cross-bar of the thills in position. This arm has a central web 12 and an upper double flange 13, the web fitting into a slot in the front plate 7 when the arm is lowered and the flange lying against it, thus presenting an almost flat surface.

A vertically-sliding shoe 14 is mounted in a central slot in the plate 8, to which is pivotally attached the brace 15 at 16, the other end being pivoted to the flange 10 of the arm at 17, while the supporting-dog 18, mounted on the rock-shaft 19, is adapted to fall under the shoe 14 when raised by action of spring 20, thus supporting the shoe, brace, and arm in a raised position, as in Fig. 5.

In order to prevent undue movement of the dog 18 either forward or back, a double-ended stop-cam 21 is secured to the shaft 19 and bears against the face of the plate, while the lever 22 is secured to the rock-shaft and projects out through a slot in front plate 7, by which means the dog 18 may be thrown back from engagement with the shoe 14, when the dog, brace, and arm will fall by gravity, assuming the position shown in Fig. 2.

A sliding latch 23 is mounted in the arm 10, provided with bolt 24′, adapted to engage a socket in plate 7 and hold the arm in a lowered position against movement, being thrown back when it is desired to raise the arm to support the thills, the dog 18 riding over the shoe and falling under it automatically when the shoe is raised.

In Fig. 12 I have illustrated a modified construction of latch in which a bolt 24″ is mounted in the end of arm 10, having a pressure-spring 33 and tip 34, beveled on both sides, so as to lock or unlock by pressure on the arm 10.

It will be seen that the form of the upright support 3 is made so as to embrace and surround the frame of the swinging arm, the front of the support being set somewhat back of the front of the plate 7 and designed to set against the back of the dashboard, so that when built in nothing appears but the plate 7 and the exposed parts, while sufficient strength is secured to firmly support the arm and its case.

In the forms illustrated in Figs. 7 and 8 the arm 10 is similarly pivoted at 9 and is supplied with an arm 15′ and two socket-holes 24, into which the bolt 25 is inserted by movement of the pivoted latch 26. By this means the arm is secured in a raised or lowered position, as shown.

In the form illustrated in Fig. 10 I have shown a swinging bracket consisting of a pivoted upright 27, mounted in keepers 28, the upright being preferably rectangular and maintained in the quarter positions by a flat spring 29.

The arm 10′ is attached to the upright, supported by brace 15′, and when not in use is folded against the face of the dashboard and when thrown out into the position shown in dotted lines will support the thills in the same manner that I have already described.

In Fig. 11 a swinging arm 30 is mounted in journal-bearings 31, secured upon any convenient portion of the frame, the swinging arm having an extensible leg 30′, turned at right angles and made with a hinged end, so as to fold up compactly.

The erected position is shown in dotted lines, with the hinged end thrown out to support the cross-bar of the thills.

While I prefer the form first illustrated and described, the modified constructions have advantages of cheapness and adaptability to certain conditions of use that will make them available under certain circumstances.

It will be understood that a surrounding shield 32 is used to protect the device from dirt, as in Fig. 1ª, the shield being removed in the other views to show the interior.

The operation of my invention is obvious, and its simplicity, advantages, and usefulness will be appreciated by those accustomed to the use of buggies and other vehicles, as the thills are raised and held up from the ground and out of the way in a satisfactory manner, dispensing with the use of props or other supporting devices.

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

1. A supporting device for thills consisting of a frame mounted on a support secured to the vehicle-frame, an arm pivotally mounted therein adapted to be raised to operative position and to be folded down within the frame and means for supporting the arm in an erected position, and for lowering and securing it within the frame, substantially as set forth.

2. A supporting device for thills consisting of a pivoted arm a pivoted brace connected to a sliding shoe, and means for supporting the shoe, substantially as set forth.

3. A supporting device for thills consisting of a pivoted arm, a pivoted brace connected to a sliding shoe, a pivotally-mounted dog adapted to engage the shoe, and means for operating the dog, substantially as set forth.

4. A supporting device for thills, consisting of a pivoted arm provided with a hook at the end, a vertically-movable sliding shoe, a brace pivotally connected to the arm and to the shoe, a pivotally-mounted dog adapted to support the shoe, a spring for throwing the dog into engagement and an operating-arm for releasing the dog from engagement, substantially as set forth.

5. A supporting device for thills consisting of a pivoted arm provided with a hook at the end, a vertically-movable sliding shoe, a brace pivotally connected to the arm and to the shoe, a pivotally-mounted dog adapted to support the shoe, a spring for throwing the dog into engagement, a stop-cam for limiting the movement of the dog, and an operating-arm for releasing the dog from engagement, substantially as set forth.

6. In combination with an arm pivoted in a frame and provided with an adjustable sliding brace, a support for the frame secured to the base of the vehicle, substantially as set forth.

In testimony whereof I have hereunto set my hand.

ROBERT T. GILLESPIE.

Witnesses:
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A. B. CLIFFORD.