No. 693,261. Patented Feb. 11, 1902.

R. T. GILLESPIE.

THILL SUPPORT.

(Application filed May 13, 1901.)

(No Model.) 2 Sheets—Sheet 1.

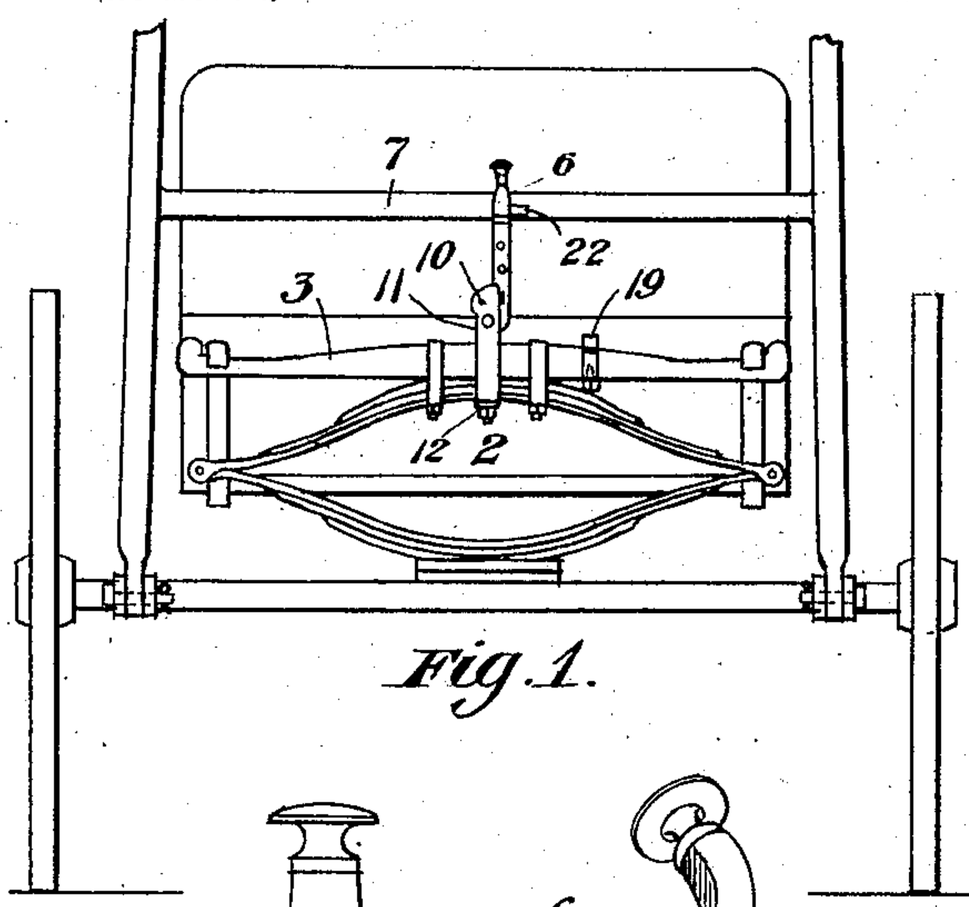

Fig. 1.

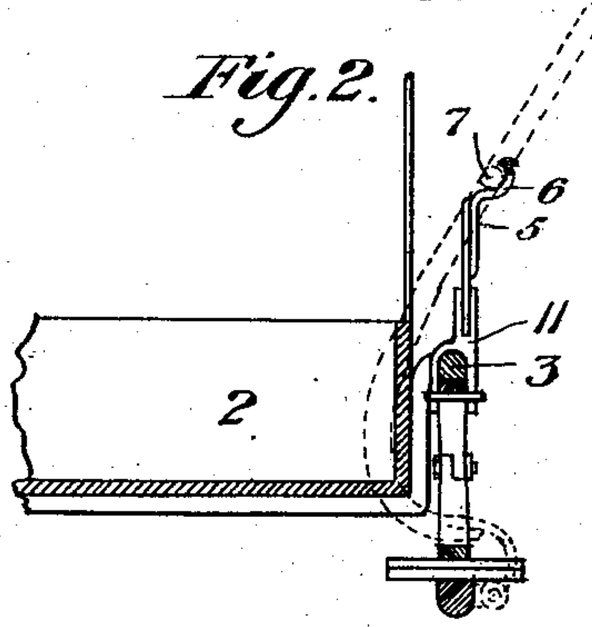

Fig. 2.

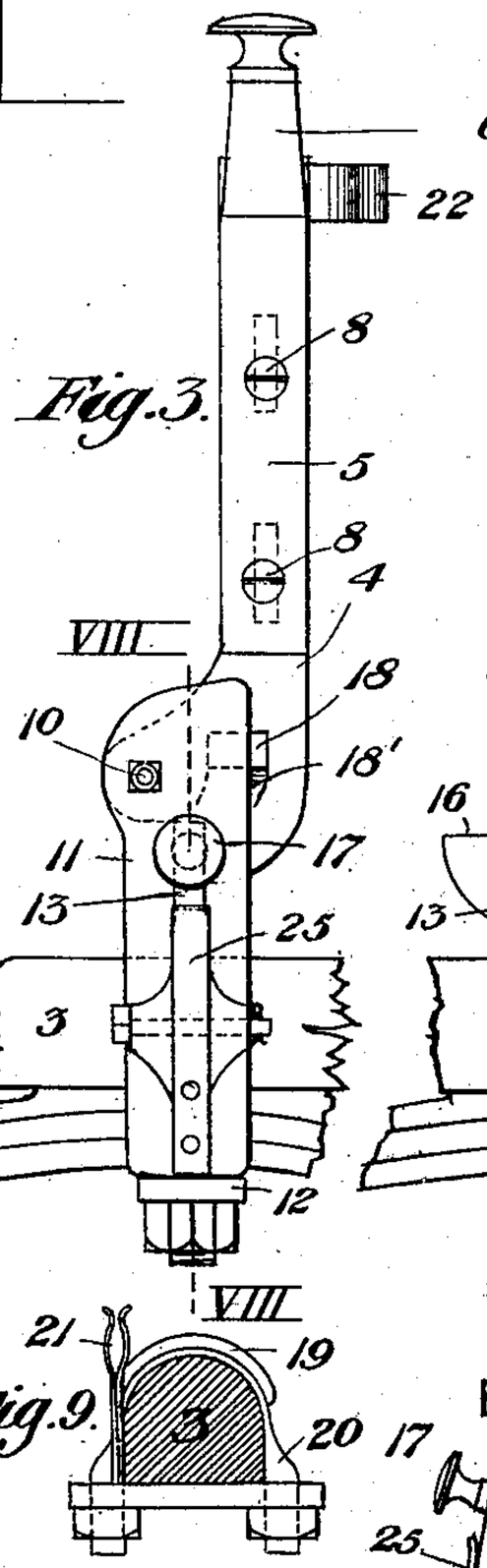

Fig. 3.

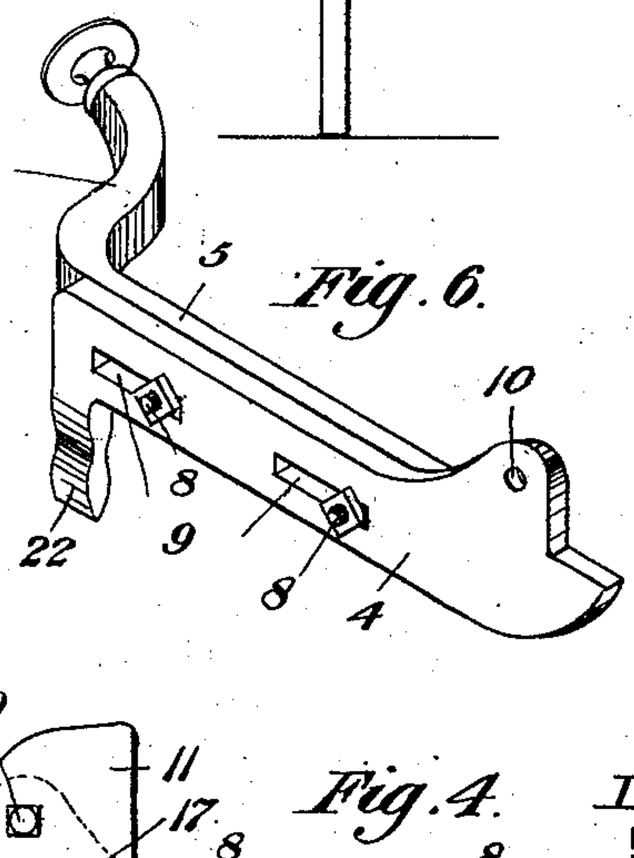

Fig. 6.

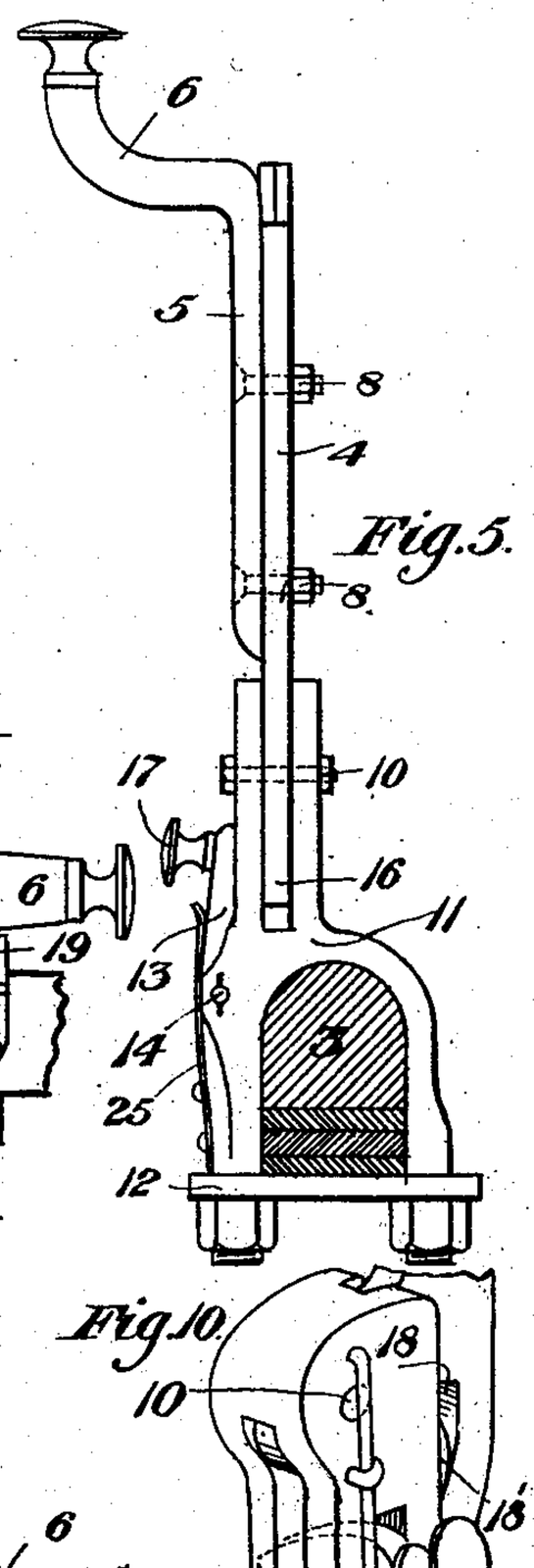

Fig. 5.

Fig. 9.

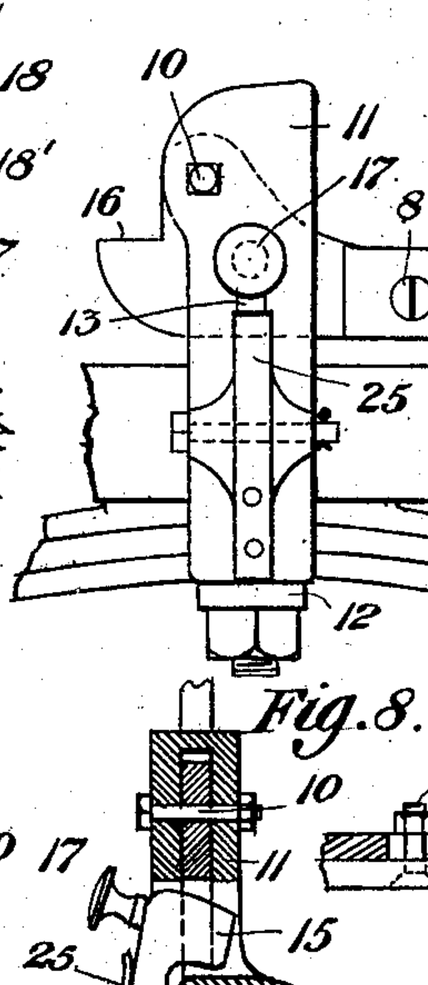

Fig. 8.

Fig. 7.

Fig. 4.

Fig. 10.

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(No Model.) 2 Sheets—Sheet 2.

Fig. 11.

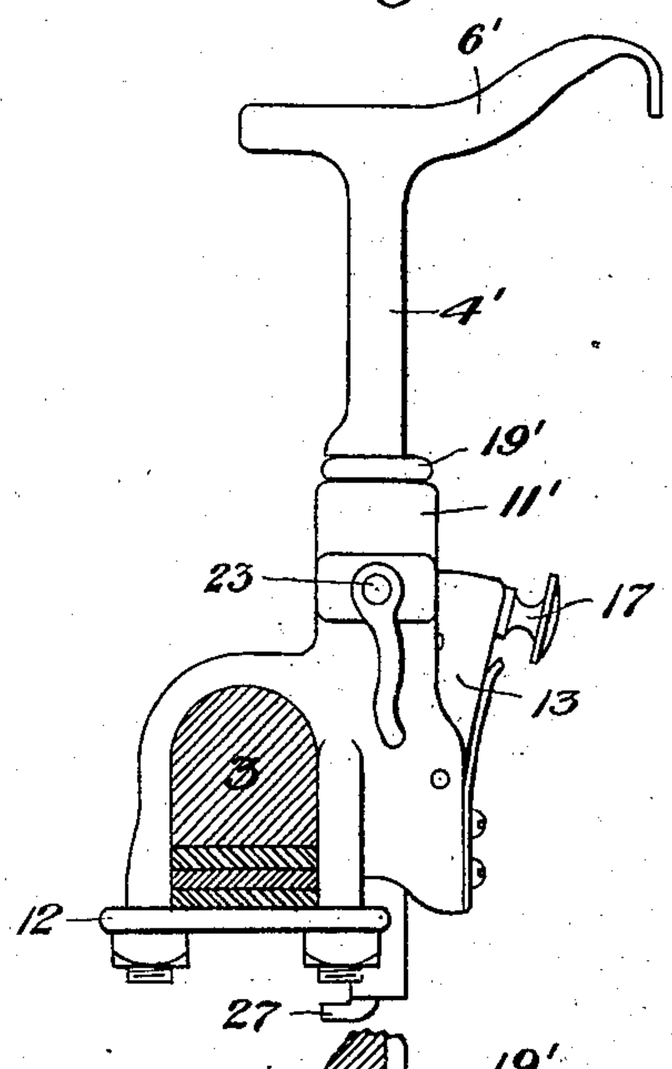

Fig. 12.

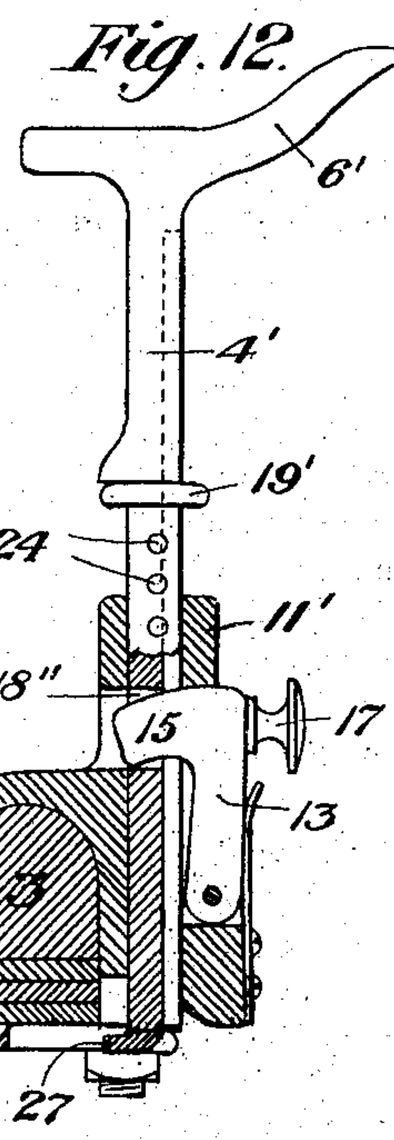

Fig. 13.

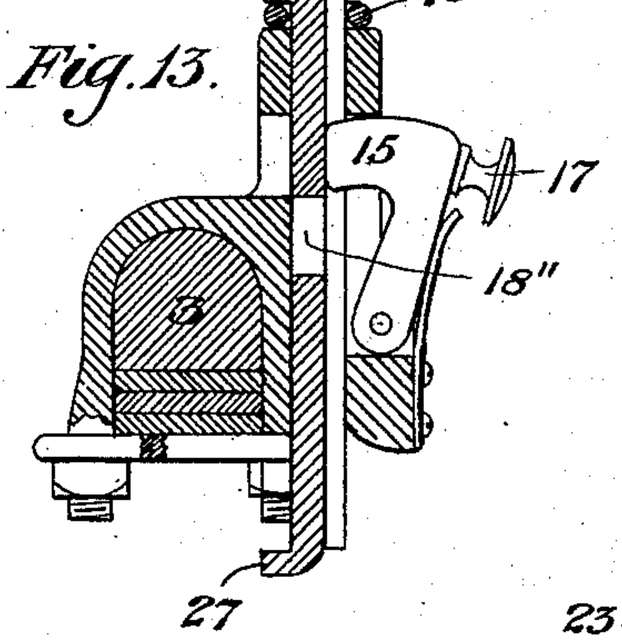

Fig. 14.

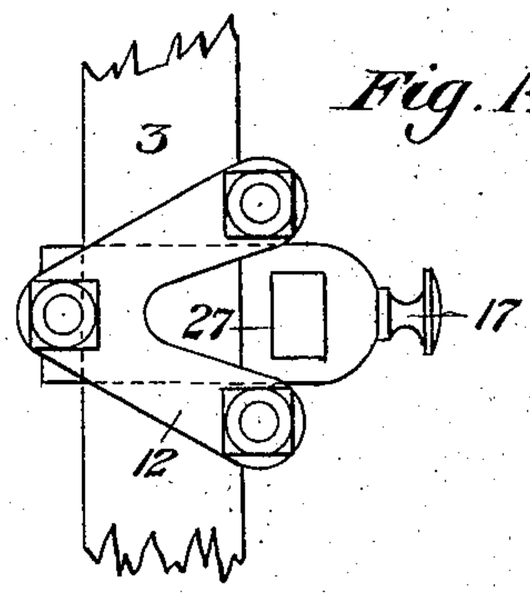

Fig. 15.

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UNITED STATES PATENT OFFICE.

ROBERT T. GILLESPIE, OF ROCHESTER, PENNSYLVANIA.

THILL-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 693,261, dated February 11, 1902.

Application filed May 13, 1901. Serial No. 59,972. (No model.)

To all whom it may concern:

Be it known that I, ROBERT T. GILLESPIE, a citizen of the United States of America, and a resident of Rochester, county of Beaver, State of Pennsylvania, have invented certain new and useful Improvements in Thill-Supports, of which the following is a specification, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front end view of a buggy provided with my improved thill-support erected. Fig. 2 is a partial central sectional view thereof. Fig. 3 is front view of the device erected in operative position. Fig. 4 is a similar view depressed out of use. Fig. 5 is a side view corresponding to Fig. 3. Fig. 6 is a detail perspective view of the swinging supporting-arm detached. Fig. 7 is a plan view of the outer end of the arm, partly in section, showing adjustment. Fig. 8 is a vertical sectional view indicated by the line VIII VIII of Fig. 3. Fig. 9 is a similar section through the retaining spring-clip indicated by the line IX IX of Fig. 4. Fig. 10 is a perspective detail view illustrating a modified construction of the locking-dog and its spring. Fig. 11 is a view similar to Fig. 5, illustrating a modified construction wherein the supporting-arm is adjustible vertically. Fig. 12 is a similar view, partly in section, showing the arm raised to operative position. Fig. 13 is a partial sectional view similar to Fig. 11, showing the arm lowered. Fig. 14 is an under plan view showing the manner of securing the device to the cross-bar of the buggy. Fig. 15 is a front elevation, the supporting-arm being lowered.

My invention relates to devices for supporting the thills of vehicles and is particularly designed for that class of buggies and wagons in which the box is supported upon front and back cross-bars located across the ends and in close proximity at the front end to the dashboard. For this reason it is desirable to support the thill-support upon such cross-bar in front rather than to the dashboard itself.

Referring now to the drawings, 2 is the wagon body or box, supported by suitable construction upon cross-bars 3 at front and back, the front bar only being shown. The supporting device consists of a swinging arm 4, provided with an extension 5, terminating in a bracket 6, adapted to fit under the cross-bar 7 of the thills when they are raised, the brackets when raised supporting the thills in such raised position by means of the curved-out terminal extension in front of the cross-bar, as clearly shown in Figs. 1 and 2.

The extension 6 and its terminal bracket may be made integral with the arm 5; but I prefer to have the same adjustable thereon for the purpose of suiting the dimensions of different vehicles, and to this end the extension is secured to the arm by means of bolts 8, passing through slots 9 in one or both arms, by which means the composite arm may be lengthened or shortened to suit varying conditions, as indicated.

The swinging arm 4 is pivoted at 10 in a bracket 11, which is secured by clip 12 to the front cross-bar 3, as shown, and is capable of being laid down in a position of rest, as in Fig. 4, or of being erected to operative position, as in Fig. 3.

For the purpose of supporting the swinging arm in erect position a spring-controlled locking-dog 13 is pivotally mounted at 14 in the bracket 11, the dog having a projected key 15, which is inserted by spring-pressure behind an extended lug 16 of the arm 4 when the same is raised.

The dog is withdrawn by finger-piece 17 to lower the arm, and when lowered the key 15 springs into socket 18 or the side of the arm, such socket having on its rear side a beveled face 18′, permitting the dog to be automatically forced out of engagement by raising the arm.

The locking-dog is normally held inwardly by pressure of the leaf-spring 25, secured upon the outside of the bracket and bearing upon the face of the dog. In Fig. 10 I have shown a modified construction wherein the spring 25 is composed of wire secured in any suitable manner in the upper side of the bracket, with its spring-terminal bearing inwardly against a lug 26 on the side of the dog, which construction is simple and effective, while being economical to make.

When lowered, the end of arm 5 or of arm 4, if in one piece, rests upon a buffer 19, of rubber or other suitable substance, secured on the upper side of a clip 20, also secured

to cross-bar 3, the clip having secured to it a spring retaining device 21, adapted to receive a holding-point 22, extending downwardly from outer end of arm 4 or arm 5, as desired, and such construction will positively retain the parts in position and effectively prevent rattling; also, a set-screw may be located in proper position in the bracket to bear against the arm to prevent rattling or movement when not erected.

In Figs. 10 to 14, inclusive, I have illustrated a construction wherein the supporting-arm 4′ is slidingly mounted in the supporting-bracket 11′, the arm terminating in an extension 6′, adapted to fit under the cross-bar of the thills. This arm 4′ is likewise provided with a socket 18″, into which the key 15 of spring-controlled dog 13 is automatically inserted when the arm is raised, so as to hold it erect, and when the dog is withdrawn the arm will drop to position shown in Figs. 11 and 13, a rubber buffer 19′ being secured in suitable position around the arm, as shown. If it is desired to adjust the arm at varying heights, a set-screw 23 may be employed, such set-screw being tapped through the side of the bracket against the arm 4, and for more positively insuring a holding engagement bearing-recesses 24 for the tip of the set-screw may be made in the side of the arm, and such set-screw will positively hold the arm in a rigid position and may also be used to bind against it when not erected to prevent rattling. The lower end of arm 4′ is provided with a turned-in lip 27 or other suitable obstruction by which the arm is prevented from being entirely withdrawn or from being lost. As thus constructed my invention is well adapted to the objects in view and will be found available for a large proportion of vehicles to which by reason of their construction other forms of thill-supporting devices are not applicable.

The advantage of this invention will be appreciated by those skilled in the art to which it pertains, and it will be understood that various changes or modifications may be made in the details of construction, design, or arrangement of the parts by the skilled mechanic without departing from the invention and that all such changes or variations are contemplated as within the scope of the following claims.

What I claim is—

1. In combination with a supporting-bracket and a buffing device mounted upon the cross-bar of a vehicle; a supporting-arm adjustably mounted in the bracket provided with a bearing extension adapted to fit under the cross-bar of the thills, and a pivoted spring-controlled dog adapted to engage the supporting-arm and to hold it in an erect position, substantially as set forth.

2. In combination with a supporting-bracket, a buffing device and a spring-clip mounted on the cross-bar of a vehicle; a supporting-arm mounted in the bracket provided with a bearing extension, a holding-point, and a locking-recess; and a spring-controlled locking-dog adapted to enter the recess to hold the supporting-arm fixedly in position, substantially as set forth.

3. In combination with a supporting-bracket, a buffing device, and a spring-clip mounted on the cross-bar of a vehicle; an extensible supporting-arm mounted in the bracket provided with a bearing extension, a holding-point, and a locking-recess; and a spring-controlled locking-dog adapted to enter the recess to hold the supporting-arm fixedly in position, substantially as set forth.

Signed at Rochester this 17th day of January, 1901.

ROBERT T. GILLESPIE.

Witnesses:

EDWARD HUGHES,

N. C. LINDSAY.