

No. 649,601.

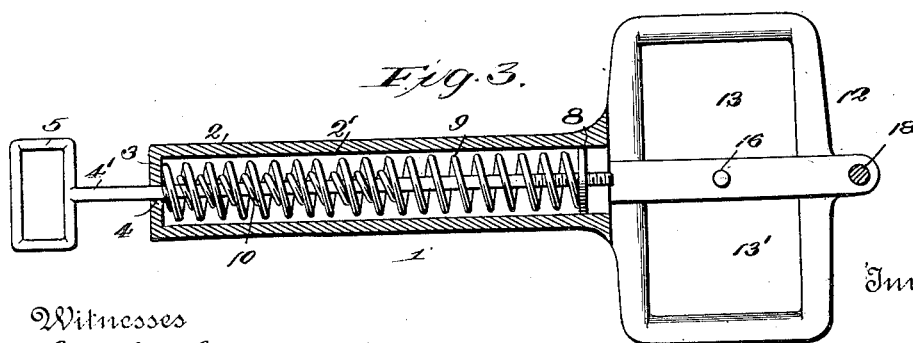
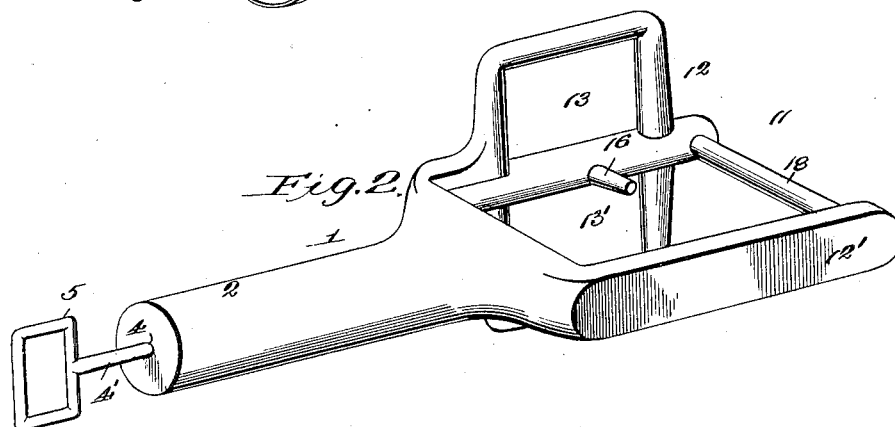
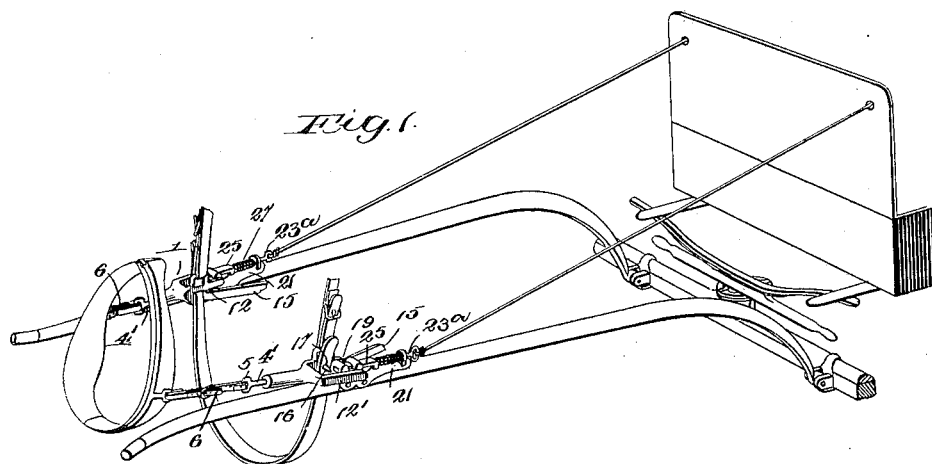
Patented May 15, 1900.

C. S. GREEN.  
HORSE DETACHER.

(Application filed Aug. 14, 1897.)

2 Sheets—Sheet 1.

(No Model.)



Witnesses

Jas. C. Stack.

Victor J. Evans

Inventor

Charles S. Green

John Wedderburn Attorney

No. 649,601.

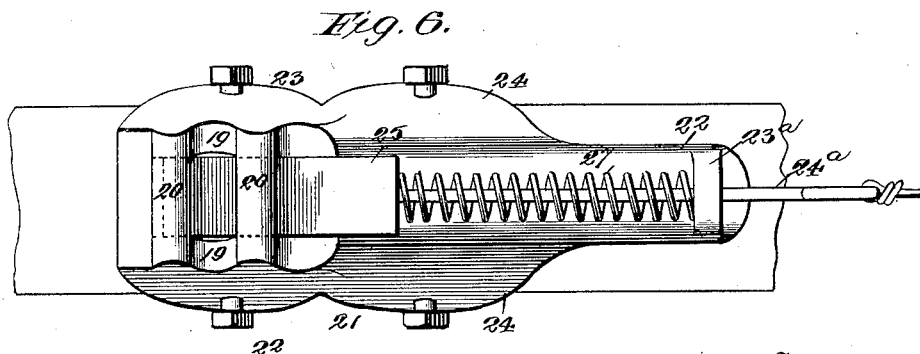
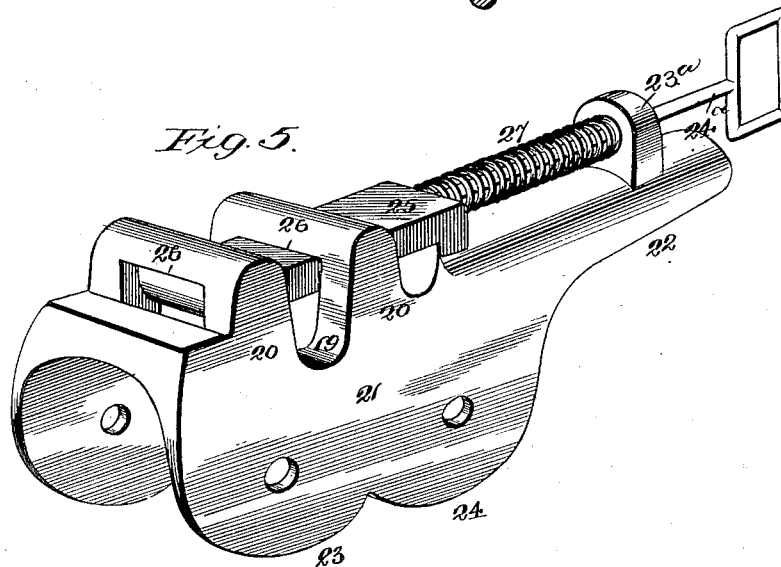
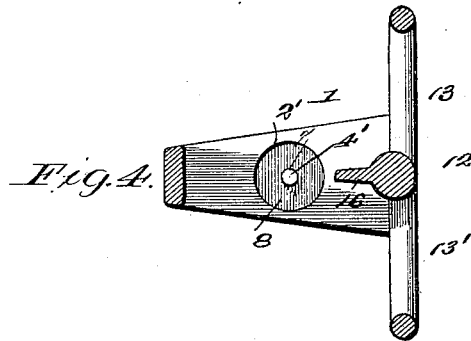
Patented May 15, 1900.

C. S. GREEN.  
HORSE DETACHER.

(Application filed Aug. 14, 1897.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses

*Joe C. Stack.*  
*Victor J. Evans*

Inventor

*Charlie S. Green*

*By John Wedderburn.*

Attorney

# UNITED STATES PATENT OFFICE.

CHARLIE S. GREEN, OF JIMES, NORTH CAROLINA.

## HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 649,601, dated May 15, 1900.

Application filed August 14, 1897. Serial No. 648,296. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLIE S. GREEN, a citizen of the United States, residing at Jimes, in the county of Davidson and State of North Carolina, have invented certain new and useful Improvements in Horse-Detachers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to harness attachments; and it consists of an especially-constructed section adapted to be attached to the upper portion of the shafts or thills near their centers, in combination with another especially-constructed portion adapted to be carried on and forming part of the harness.

The principal objects of the invention are to provide an attachment which will greatly facilitate the rapid hitching and unhitching of the horse and to provide means by which the vehicle will be drawn forward uniformly, overcoming the disagreeable objections of a jerking movement of the vehicle when the horse is improperly hitched to the same, which is often the case when harness of the ordinary construction is used.

Further, the invention contemplates the provision of a device which can be operated from the front of the vehicle to detach the horse in case of a runaway or other accident.

A further object of my invention is to provide a means which will greatly lessen the discomfort of the horse.

A still further object of my invention is to improve an attachment of this character generally and to produce a simple and durable attachment and one that will be perfectly reliable in operation.

With these and other objects in view, which will become apparent in the course of the following description, all looking toward simplifying and improving devices of this character generally, my invention consists in the novel combination and arrangement of simple parts which will be hereinafter fully described, and the points of novelty will be pointed out in the appended claims.

In the drawings, Figure 1 represents a perspective view of a pair of shafts and so much of the harness as is necessary to show the manner of application of my improved attachment. Fig. 2 represents an enlarged perspective view of that portion of the attach-

ment adapted to be carried by the harness and form a part thereof. Fig. 3 is a longitudinal central section of the same. Fig. 4 is a transverse section of the attachment looking toward the front of the same and showing the stud for holding the belly-band in adjusted position. Fig. 5 is a perspective view of that portion of my attachment which is adapted to be carried by the shafts. Fig. 6 is a plan view of the rear portion of one of the shafts, showing the means for detaching the horse from the front of the vehicle.

Referring to the drawings forming part of this specification, the numeral 1 represents that portion of my device which forms part of the harness and which comprises a body constructed, preferably, of metal and provided with a cylindrical arm 2 at its front end, bored longitudinally, as indicated at 2', and provided with a shoulder or abutment 3, having a perforation 4 in the center, through which passes a rod 4', which is provided at its outer end with a loop 5, adapted to receive the end of the strap 6, which is adapted to be fastened to a similar loop provided on the harness.

The rod 4' is provided at its rear end with external screw-threads, which are adapted to enter the internally-screw-threaded perforations 7 in the center of the disk 8, which is adapted to slide longitudinally in the bore 2'. Interposed between the disk 7 and the abutment 3 is a spiral spring 9, which encircles the rod 4' and extends throughout the entire length of said bore.

The numeral 10 indicates a short stiff spiral spring which is adapted to rest in the forward end of the bore and preferably inside the spring 9 for a purpose which will hereinafter become apparent.

The rear portion of the body is cut away to form a fork 11, having two prongs 12 and 12', the prong 12 being greatly widened and provided with two openings 13 and 13', approximately square. These openings 13 and 13' are a little longer than the width of the girth and belly-band to provide room for the attachment of the end of the breeching-strap 15, which is secured in the rear side of the lower opening.

16 designates a short stud which extends laterally from a cross-bar between the openings 13 and 13', and said stud is adapted to enter a perforation 17 in the end of the girth

to secure the same in adjusted position. The upper opening 13' is adapted to receive the end of a saddle-strap to support the attachment in proper position at the side of the horse.

The prongs 12 and 12' are connected at their rear extremities by a transverse bar 18, adapted to rest in a depression 19, formed between two perforated lugs or ears 20, provided upon the upper side of a member 21 at the forward end thereof. This member 21 is provided with a rearward extension 22 and two downwardly-extending ears 23 and 24, provided with perforations for the passage of screws or bolts, by which means the member is firmly secured to the thill at a point just in the rear of the fore legs of the horse.

Upon the rear end of the rearward extension 22 I provide a short vertical lug or projection 23<sup>a</sup>, perforated for the passage of a rod 24<sup>a</sup>, having its forward end connected with the rear end of a flat metallic bolt 25, adapted to extend through the perforations 26 through the lugs or ears 20. Interposed between the vertical lug 23<sup>a</sup> at the rear end of the sliding bolt 25 is a spiral spring 27, adapted to keep the bolt normally projected through the perforations and prevent the accidental displacement of the transverse bar 18.

The spring 8 in the bore 2' is of such strength as to be very resilient when an ordinary load is drawn or when the vehicle is traveling upon level ground; but it will become depressed to its limit when the conditions are reversed. I therefore deem it desirable to use the spring 10, which is much stronger than the spring 9 and is adapted to receive said spring when the strain has become sufficiently great to compress the spring 9 to its limit.

In operation when the attachment is attached to the hames in the manner described and the vehicle is being drawn it will be obvious that the pull upon the rod 4 will cause the spring 8 to be compressed to a certain degree under ordinary circumstances or when the vehicle is being drawn uphill or when the same is heavily loaded. The long spring 9 will be compressed until the disk 8 is brought in contact with the short spring, when the long spring will be relieved. Extending rearwardly from a loop at the end of the rod 24<sup>a</sup> is a cord or strap, as clearly shown in the drawings, which is adapted to be pulled to cause the sliding bolt to be drawn rearwardly sufficiently to permit the cross-bar 18 to leave the depression 19 and permit the horse to leave the shafts in case of a runaway or other accident endangering the lives of the occupants of the vehicle.

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

1. In a harness attachment of the character described, the combination with the thills of the vehicle, of a member mounted thereon, a body having an elongated end and bored longitudinally, and provided with an abut-

ment at its forward end and containing a weak spring and a strong spring, a rod passing through said springs provided at one end with a disk or its equivalent, and at the other end with a loop adapted to receive the hame-strap; said body being detachably secured to the member on the thills, substantially as and for the purpose set forth.

2. In a harness attachment of the character described, the combination with the shafts of a vehicle, a member secured thereto and provided with lugs or projections on its upper side, of a body having a widened rear portion provided with openings for the belly-band and breeching-strap, means for securing said band, said body having an elongated end provided with an abutment, and containing a weak spring and a strong spring, a rod passing through said springs, and provided at one end with a disk or its equivalent, and at the other end with a loop adapted to receive the hame-strap; said body being provided with a cross-bar adapted to rest between the lugs or projections upon the upper side of the thill member, means operated from the front of the vehicle for detaching said body, substantially as and for the purpose set forth.

3. In a harness attachment, the combination with the shafts of a vehicle, of a member mounted thereon provided upon its upper side with perforated lugs or projections, a spring-actuated bolt adapted to enter said perforations, suitable connections whereby the bolt is operated from the front of the vehicle, a body having a cross-bar adapted to rest between the lugs or projections upon said member, and be held therein by the spring-actuated bolt, said body being provided with an elongated end bored longitudinally and containing a weak spring and a strong spring, a rod passing through said springs provided at its inner end with a disk or its equivalent, and at its outer end with means whereby it is attached to the harness, means carried by said body for attaching the belly-band and breeching-strap, substantially as described.

4. In a harness attachment of the character set forth the combination with the thills of the vehicle, of a member mounted thereon, a body having a weak spring and a strong spring therein, adapted to operate as described, a rod passing through said springs and acting against the same, said rod having its forward end attached to a strap or its equivalent adapted to be secured to the hames, said body being detachably connected to the member of the thills and means for detaching said body from the front of the harness, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLIE S. GREEN.

Witnesses:

W. C. HARRIS,  
W. N. KINNEY.