

A. C. STOPP.
SAFETY ATTACHMENT FOR WAGON REACHES.
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1,062,558.

Patented May 20, 1913.

Fig. 1.

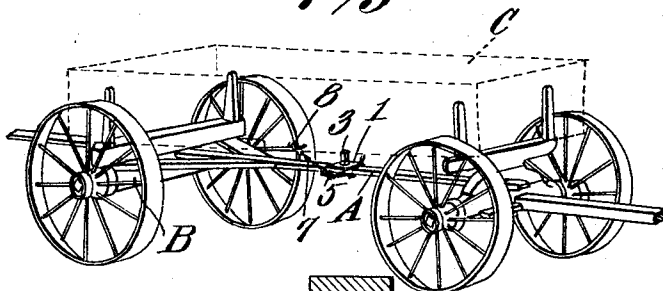


Fig. 2.

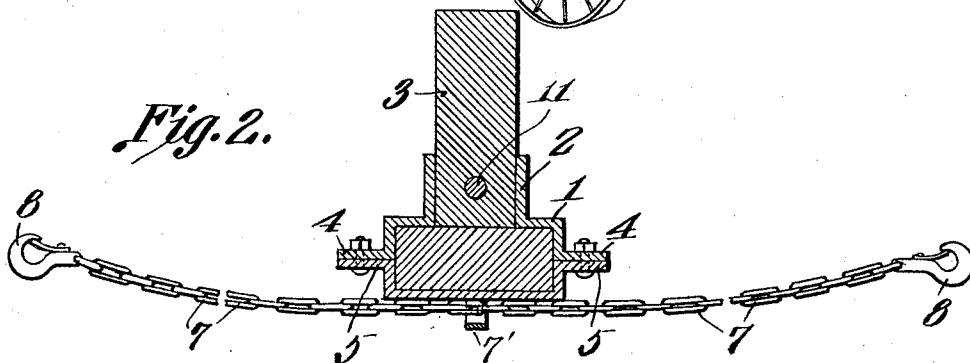


Fig. 3.

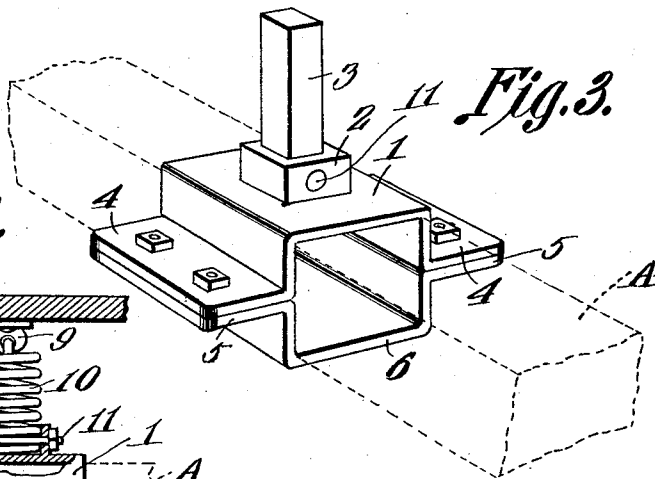
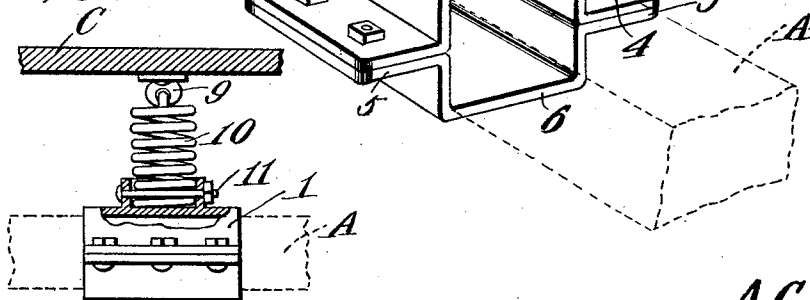


Fig. 4.



Witnesses

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SAFETY ATTACHMENT FOR WAGON-REACHES.

1,062,558.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALVIN C. STOPP, a subject of the King of England, residing at Stoppington, Province of Alberta, Dominion of Canada, have invented a new and useful Safety Attachment for Wagon-Reachs, of which the following is a specification.

This invention relates to a safety attachment for wagon reaches.

Heretofore it has been necessary, in order to provide a reach of sufficient strength to withstand the ordinary strains, to make the same of a heavy timber of hard wood which has been found expensive. Furthermore, these reaches, when in use, are subjected to sudden up and down strains which often breaks them while traveling over rough roads, thereby causing considerable inconvenience as well as expense to the owner.

It has been found that when the front wheels of a wagon are brought to a sudden stop, as when they run into a rut while moving along a downgrade, the rear portion of the fifth wheel or circle of the wagon presses upwardly on the reach and, at the same time, the rear wheels push against the reach thus tending to buckle it upwardly and break it. Furthermore, under similar conditions, should the rear wheels of the wagon be brought to a sudden stop from any cause while the wagon is on a downgrade, they will tend to buckle the reach downwardly and break it. For the foregoing reasons it has been necessary, as hereinbefore stated, to use heavy hard wood timbers in the construction of reaches and even these have not always been found sufficiently strong to withstand the strains to which they are subjected.

One of the objects of the present invention is to provide a safety attachment for use in connection with a reach and whereby the buckling action of the reach either in an upward or downward direction is prevented and it thus becomes possible to use a comparatively light reach of inexpensive wood without danger of the same becoming broken in the manner hereinbefore set forth.

Another object is to provide an attachment of this character which is cheap to manufacture, can be applied to reaches already in use, and can be placed in position without requiring the services of an expert mechanic.

With the foregoing and other objects in

view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of a running gear of a wagon having the present improvements combined therewith, the wagon box being indicated by dotted lines. Fig. 2 is an enlarged vertical transverse section through the attachment. Fig. 3 is a perspective view thereof, the chain being removed. Fig. 4 is a view illustrating another method of retaining the reach against breakage.

Referring to the figures by characters of reference A designates the reach of the running gear B of a wagon and C designates the wagon body.

The attachment constituting the present invention consists of an arched top plate 1 having an upstanding sleeve 2 in which a block 3 is fitted, this block being secured in the sleeve in any suitable manner. Wings 4 extend from the ends of the top plate 1 and are bolted or otherwise secured to wings 5 extending from the ends of an arched bottom plate 6. The plates 1 and 6, when secured together, are adapted to fit snugly around the middle portion of the reach A, as shown. A chain is passed through the eye 7' and is provided with snap hooks 8 or the like at the ends thereof whereby they may be secured to the sides of the wagon box or to the load of lumber or other material mounted on the running gear.

It will be apparent that, when the attachment is in place on the center of the reach, there is no danger of the reach breaking in either of the ways hereinbefore described. Should the reach tend to buckle upwardly, as when the front wheels are brought to a sudden stop, block 3 will come against the bottom of the wagon box C or against the load of lumber or other material which may be carried by the running gear. Should the reach A tend to bow downwardly, as when the rear wheels are brought to a sudden stop, chain 7 will be pulled taut and will prevent such downward move-

ment. Thus the reach will be relieved of excessive strain when buckled in either direction.

The block 3 is preferably removably mounted so that blocks of different lengths can be employed, thus to adapt the device for use in connection with vehicles of different types and sizes.

As shown in Fig. 4 the chain 7 is dispensed with, a spring 10, being secured fast by an eye bolt 9 to the wagon body C and also secured by the pin 11 to the member 1. The spring is of such a strength as to support the reach and to normally withstand any sudden jars either downwardly or upwardly.

What is claimed is:—

1. A safety attachment for reaches, including a reach engaging structure, flexible means for connecting opposite sides of said structure to the load, and a spacing element extending upwardly from the structure.

2. A safety attachment for reaches, including a structure for attachment to the intermediate portion of a reach, flexible devices for connecting opposite sides of the structure to opposite sides of the load, said flexible means coöperating to limit the downward movement of the reach and the structure thereon, and an upwardly extending spacing device upon said structure for limiting the upward movement of the reach relative to the load.

3. A safety attachment for reaches, in-

cluding oppositely disposed arched top and bottom plates for engaging a reach, means for securing the plates together, means extending from the sides of said plates for engaging the load to hold the plates against downward movement, and a spacing element upstanding from the top plate.

4. A safety attachment for reaches, including oppositely disposed arched top and bottom plates for engaging a reach, means for securing the plates together, means extending from the sides of said plates for engaging the load to hold the plates against downward movement, and a spacing plate detachably mounted within and extending upwardly from the top plate.

5. The combination with a vehicle including a reach, of top and bottom plates detachably secured together and extending around the reach adjacent the center thereof, an upwardly extending spacing device carried by the top plate, and means extending in opposite directions from the plates for engaging the wagon load to limit the downward movement of the plates and reach relative to the load.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ALVIN C. STOPP.

Witnesses:

EDYTHE STONE,
LLOYD A. COREY.