(No Model.)

C. H. KEENAN & J. P. GARDNER.

HORSE DETACHER.

No. 342,106. Patented May 18, 1886.

Fig. 1

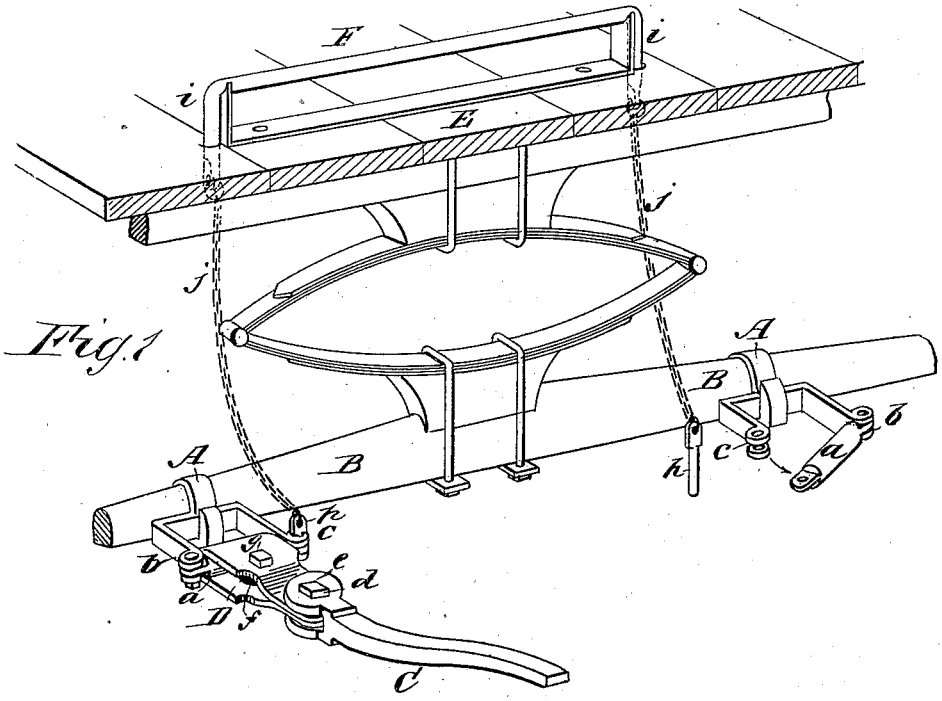


Fig. 2.

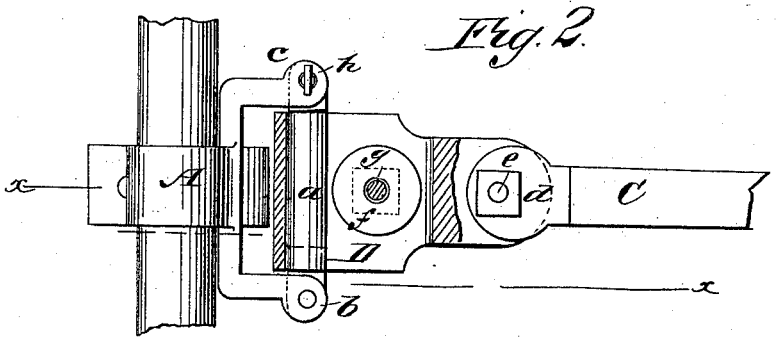
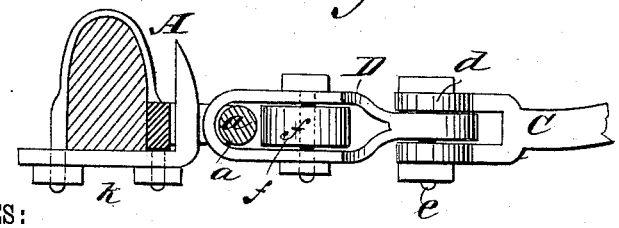


Fig. 3



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CHARLES H. KEENAN AND JOHN P. GARDNER, OF FORT HALLECK, NEVADA.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 342,106, dated May 18, 1886.

Application filed February 5, 1886. Serial No. 190,939. (No model.)

To all whom it may concern:

Be it known that we, CHARLES H. KEENAN and JOHN P. GARDNER, of Fort Halleck, in the county of Elko and State of Nevada, have invented a new and useful Improvement in Horse-Detachers, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a perspective view of a part of a wagon, showing the application of our improved horse-detacher. Fig. 2 is a plan view, partly in section. Fig. 3 is a vertical transverse section taken on line *x x* in Fig. 2.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of our invention is to provide a simple and easily-operated device for detaching horses from carriages, to avoid injury to the occupants of the carriage in case of a runaway; also, to provide a means for readily unhitching fallen or disabled animals from the wagon.

Our invention consists of a thill-coupling provided with a swiveled looped end connected with the thill-iron, and a clip secured to the axle, and having a swinging bolt which may be released in times of danger, allowing the thill-iron to escape.

The clips A, which are secured to the axle B, are each provided with a swinging bolt, *a*, turning on a vertical pivot, *b*, in one arm of the clip. The free end of the swinging bolt *a* is flattened and received between eyes *c*, formed on the ends of the other arm of the clip.

The thill-iron C is provided with a forked eye, *d*, whose slot is arranged horizontally, and in the slot of the eye is received a loop, D, which is held therein by a bolt, *e*, passing through the forked eye *d*, and through the end of the loop D. The loop D is received on the swinging bolt *a*, and between the sides of the loop, and in front of the swinging bolt, is journaled a rubber roller, *f*, on the pin or bolt *g*, passing transversely through the sides of the loop. The rubber roller *f* bears against the front of the swinging bolt *a* and holds the loop into close engagement with the swinging bolt. The free end of the swinging bolt *a* is apertured vertically to receive a pin, *h*, which also passes through the eyes *c*.

To the floor of the wagon is secured a rest, E, for the rod F, the rest being formed of a bar of iron bent upward at right angles at its ends and notched to receive the rod F. The rod F is bent at right angles at opposite ends, forming arms *i*, which pass through the floor of the wagon, and are provided with chains *j*, which are connected with eyes formed on the upper ends of the pins *h*. The cross-bars *k*, through which the threaded ends of the clip A pass, are bent upward in front of the clip, to retain the fork of the clip in case of the breakage of the strap which extends over the axle.

Normally the loop D retains its place on the swinging bolt *a*, and the swinging bolt is held by the pin *h*; but when it is desired to detach the horse or horses from the vehicle the rod F is raised, pulling the chains *j* upward and withdrawing the pins *h* from the bolts *a*, allowing them to turn on their pivots and release the loops D, thus disengaging the thills. The rubber roller *f* presses firmly against the side of the swinging bolt *a*, and prevents the rattling of the thill-coupling, and when the bolt *a* is released in the manner described the roller *f* rolls along the bolt and facilitates the escape of the loop D from the bolt.

The rod F serves not only as a means of withdrawing the pins *h* from the bolts *a*, but it may also be used as a foot-rest, or it may be applied to the wagon in place of the ordinary foot-rest.

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

1. The combination of the clip A, the bolt *a*, pivoted therein, the pin *h*, received in eyes *c*, formed on the clip and adapted to retain the free end of the swinging bolt, and a thill-iron received on the swinging bolt and adapted to be released by the swinging of the bolt, substantially as herein shown and described.

2. The combination, with the clip A, provided with the horizontally-swinging bolt *a* and retaining-pin *h*, of the thill-iron received on the swinging bolt, the rod F, and chain *j*, connecting the rod F and pin *h*, substantially as herein shown and described.

3. The combination, with the clip A, provided with the horizontally-swinging bolt *a* and retaining-pin *h*, of the forked eye *d*, and

the loop D, received on the bolt *a*, and provided with the rubber roller *f*, substantially as herein shown and described.

4. The combination, with the clip A, provided with the swinging bolt *a*, of the crossbar *k*, bent upward at right angles and arranged to retain the fork of the clip, as herein shown and described.

5. The combination of the clips A, provided with the swinging bolts *a* and retaining-pins *h*, the loops D, thill-irons C, connected with the loops D, the rod F, chains *j*, and the support E for the rod F, substantially as herein shown and described.

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Witnesses:
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