

(No Model.)

J. G. COPELAND.  
HORSE DETACHER.

No. 599,223.

Patented Feb. 15, 1898.

Fig. 1.

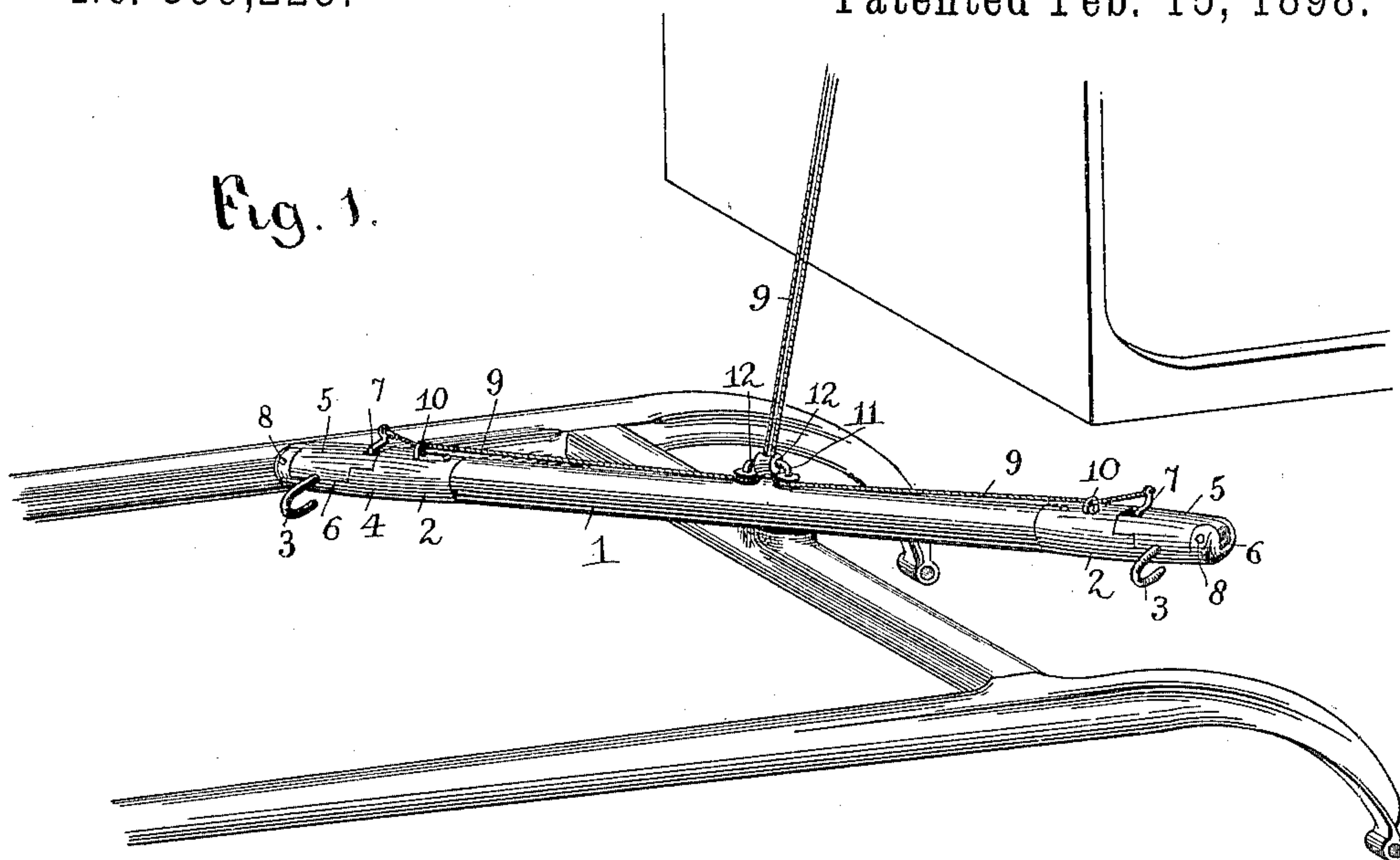


Fig. 2.

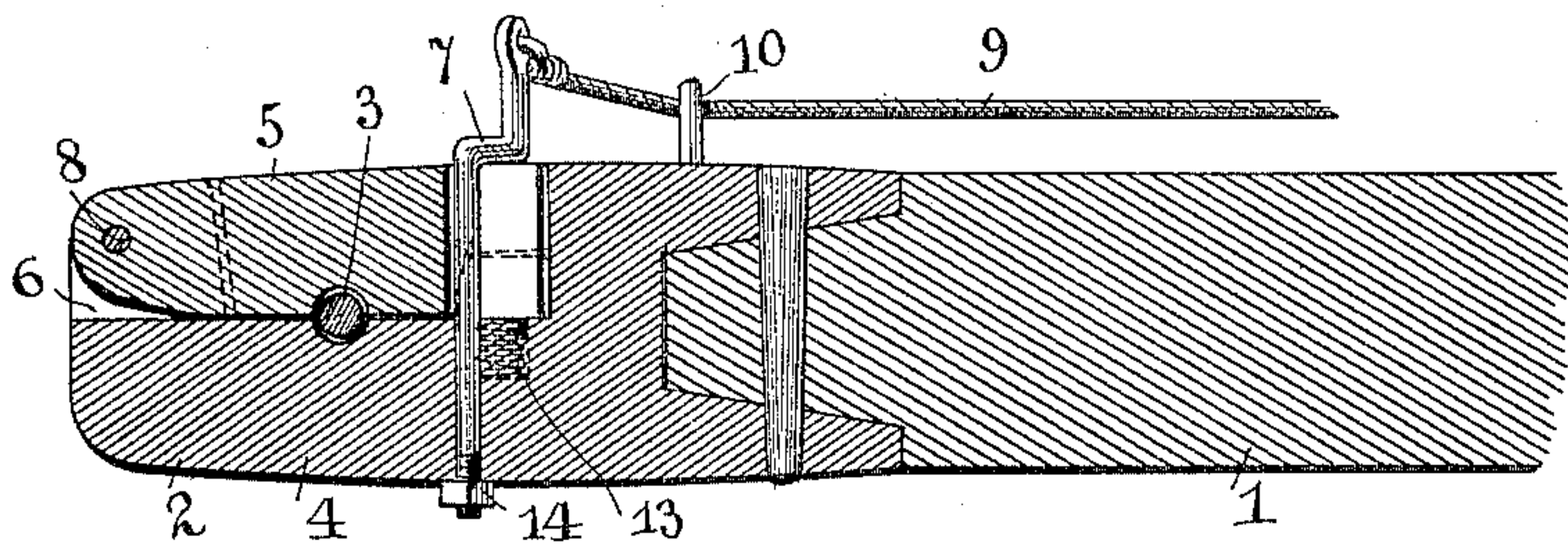
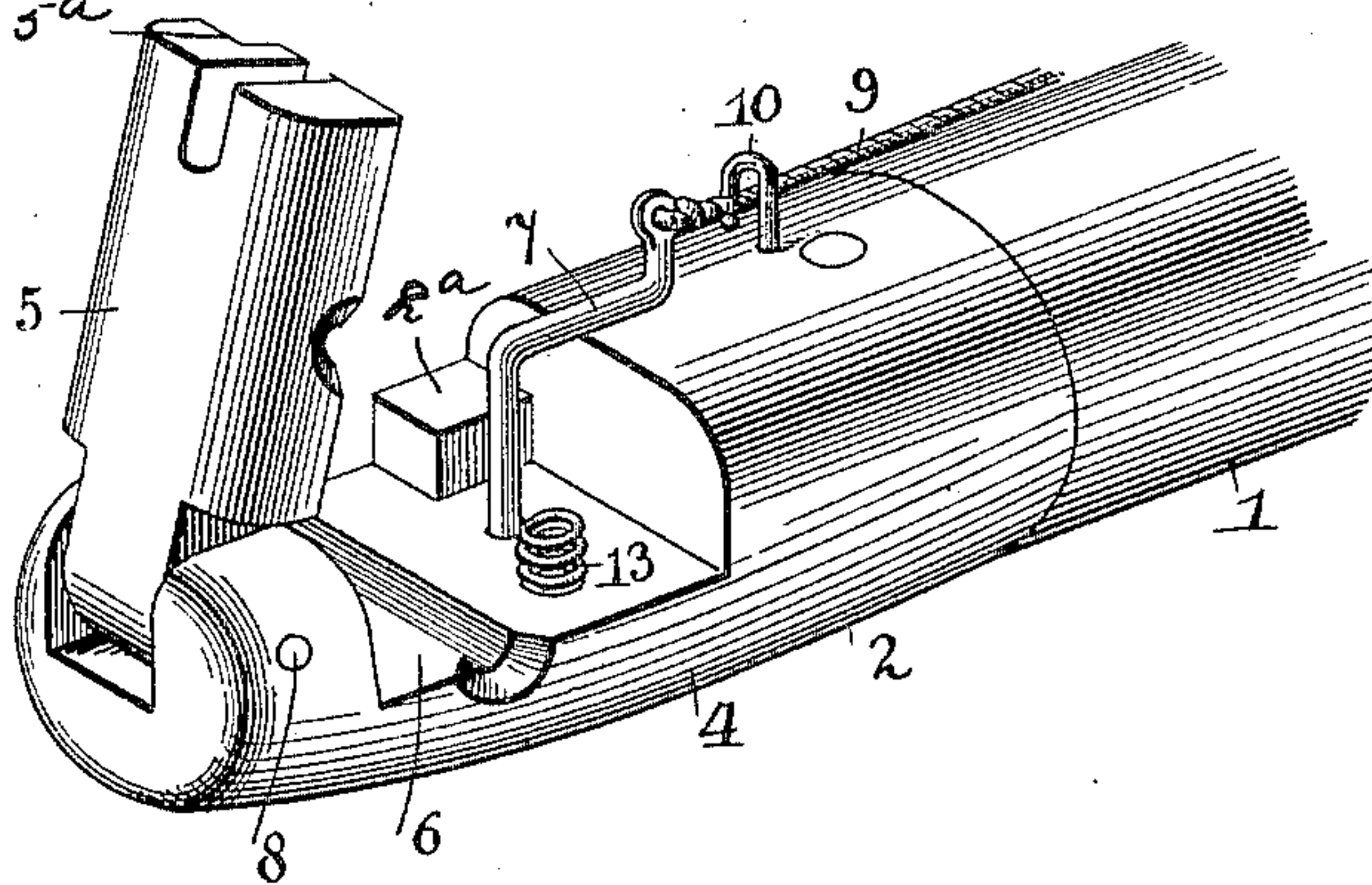


Fig. 3.



Inventor

Witnesses

Charles Ourand

By his Attorneys,

John G. Copeland

T. F. Riley

C. A. Snow & Co.



# UNITED STATES PATENT OFFICE.

JOHN G. COPELAND, OF CERRO GORDO, TENNESSEE.

## HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 599,223, dated February 15, 1898.

Application filed July 12, 1897. Serial No. 644,292. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN G. COPELAND, a citizen of the United States, residing at Cerro Gordo, in the county of Hardin and State of Tennessee, have invented a new and useful Horse-Detacher, of which the following is a specification.

The invention relates to improvements in horse-detachers.

The object of the present invention is to provide a simple, inexpensive, and efficient device capable in event of a runaway to enable a horse to be detached from a vehicle to prevent it from injuring the latter or its occupants.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a horse-detacher constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of one end of the singletree. Fig. 3 is a detail perspective view of one of the catches, the hinged section or member being open.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

1 designates a singletree mounted on the cross-bar of a pair of thills in the usual manner and provided at each end with a catch 2, which detachably connects a whiffletree-hook 3 to the singletree and which is adapted in event of a runaway to enable the driver to release or detach the singletree-hook from the singletree and thereby free the animal and prevent it from injuring a wagon or other vehicle and its occupants. Each catch is composed of a stationary member 4, which is secured to the singletree, and a hinged section or member 5, which is arranged in a recess 6 of the stationary member and which is locked in its closed position by a crank 7. The stationary section or member 4 is provided at its inner end with a socket to receive the singletree, and it is secured to the same by a suitable fastening device. The section or member 5 is hinged at its outer end to the stationary section or member by a horizontal pintle 8, and the crank 7, which is arranged at the

inner end of the hinged section in a slot or bifurcation, is provided with a vertical shank, and it is adapted to swing over and engage the upper face of the said hinged section or member 5. The sections or members of the clamps are provided at their inner faces with transverse grooves, forming an opening for the shank of the whiffletree-hook, which is provided with a head for engaging the rear face of the catch.

The transverse grooves which receive the shank of the whiffletree-hook are enlarged at their rear ends to form a cavity for the head of the shank. The outer portion of the stationary section of the catch is reduced and the inner portion is provided with a socket to receive the ends of the whiffletree, and the said stationary section is provided at the front of its reduced portion with a lug 2<sup>a</sup>, which is received within a recess 5<sup>a</sup> of the movable section and which forms the support for the inner end of the same to relieve the pivot of the shank of strain.

The cranks are provided at their upper ends with eyes, to which are connected the terminals of an operating-cord 9 or other flexible connection, which extends through guides 10 to a central guide 11, where it passes around pulleys 12 and extends to the body of the vehicle, so as to be within easy reach of the occupants. After passing through the central guide 11 the operating-cord divides into two branches, so that when it is drawn rearward both of the cranks are swung out of engagement with the hinged members or sections 5 of the catches.

When the hinged sections or members of the catches are released, they are thrown open by spiral springs 13, mounted in the recessed portions of the stationary sections or members and adapted to throw the hinged sections or members upward. The shanks of the cranks have their lower ends threaded and are provided with nuts 14, adapted to be adjusted to cause the engaging arms of the cranks to bind against the upper faces of the hinged sections or members with the desired degree of friction.

It will be seen that the horse-detacher is simple and comparatively inexpensive in construction, that it is positive and reliable in operation, and that it is capable of instantly



releasing a horse from a vehicle to prevent any injury to the occupants thereof.

What is claimed is—

1. In a horse-detacher, the combination  
5 with a singletree, of a catch secured to the  
singletree at one end thereof and comprising  
a stationary section and a movable section  
mounted upon the stationary section and  
hinged to the same at the outer end thereof,  
10 a crank mounted on the stationary section,  
provided with a vertical pivot and adapted  
to engage the upper face of the movable sec-  
tion, and a spring interposed between the  
sections and adapted to throw the movable  
15 section open when the same is released by  
the crank, substantially as described.

2. In a horse-detacher, the combination  
with a singletree, of a catch secured to the  
singletree at one end thereof, and comprising  
20 upper and lower sections hinged at their outer  
ends and provided at their inner faces with  
corresponding grooves, the lower section be-  
ing stationary and the upper one movable, a  
whiffletree-hook having its shank detachably  
25 arranged in said grooves and adapted to be  
released by the opening of the upper section,  
a spring interposed between the sections and  
adapted to throw the movable one open when  
the same is released, and a crank mounted on

the stationary section and provided with a 30  
vertical pivot, said crank being arranged to  
engage the upper face of the movable section,  
substantially as described.

3. In a horse-detacher, the combination  
with a singletree, of the stationary section of 35  
the catch provided at its inner end with a  
socket to receive the singletree and having  
its outer portion reduced and provided at the  
front with the lug 2<sup>a</sup>, the movable section of  
the catch hinged at its outer end to the sta- 40  
tionary section, bifurcated at its inner end  
and provided with a recess to receive the lug  
2<sup>a</sup>, a whiffletree-hook detachably arranged in  
grooves of the sections of the catch, and a  
crank having a vertical pivot passing through 45  
the bifurcation of the movable section and  
mounted on the stationary section, said catch  
being arranged to engage the upper face of  
the movable section, substantially as de-  
scribed. 50

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

JOHN G. COPELAND.

Witnesses:

A. M. CROOK,  
L. K. FREEMAN.