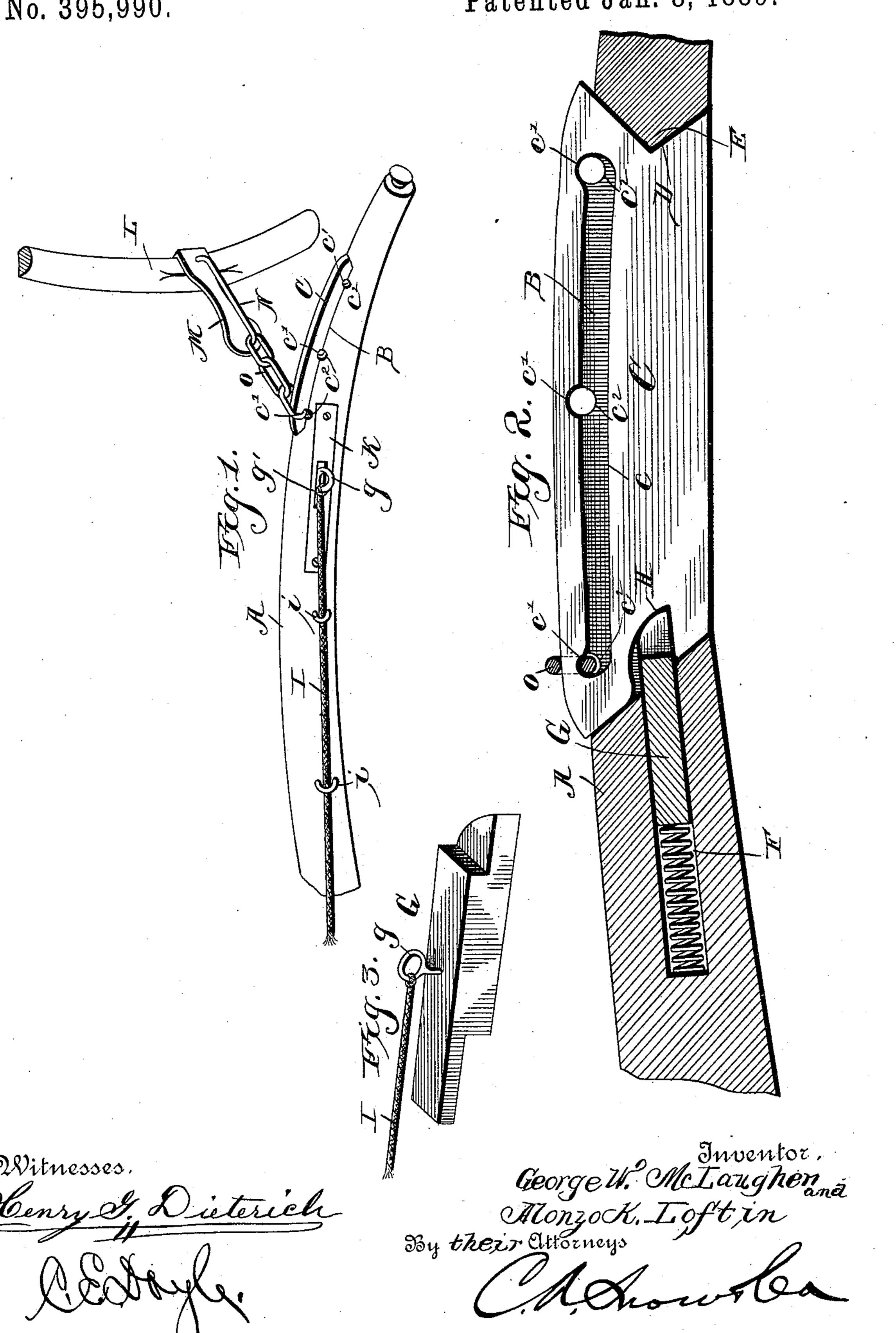
(No Model.) G. W. McLAUGHEN & A. K. LOFTIN. HORSE DETACHER.

No. 395,990.

Patented Jan. 8, 1889.



United States Patent Office.

GEORGE WASHINGTON McLAUGHEN AND ALONZO KELLEY LOFTIN, OF GASTONIA, NORTH CAROLINA.

HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 395,990, dated January 8, 1889.

Application filed October 30, 1888. Serial No. 289,547. (No model.)

To all whom it may concern:

Be it known that we, George Washington McLaughen and Alonzo Kelley Loftin, citizens of the United States, residing at Gastonia, in the county of Gaston and State of North Carolina, have invented a new and useful Improvement in Horse-Detachers, of which the following is a specification.

This invention relates to improvements in horse-detachers; and it consists in a certain novel construction and combination of devices, fully set forth hereinafter in connection with the accompanying drawings, and specifically pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a portion of a thill and the hame connected thereto, showing the improved detacher applied in operative position. Fig. 2 is a longitudinal sectional view of a portion of the thill. Fig. 3 is a detail perspective view.

Referring by letter to the drawings, A designates a thill, which is provided near its front end with a vertical longitudinal slot, B, in which fits the link or plate C, that is provided 25 near its upper edge with a longitudinal slot, c, having the offsets or notches c' c' at intervals therein. The front end of this link or plate is provided with a V-shaped notch, D, which engages a wedge-shaped tenon or pro-30 jection, E, at the front end of the slot in the thill, and the rear end of the link or plate is beveled downwardly and forwardly, so that, to arrange the link or plate in the slot in the thill, the front end thereof is first engaged 35 with the tenon or projection at the front end of the slot, and then the rear end thereof is pressed down into the slot.

In a longitudinal bore, F, in rear of the slot B, is mounted the spring-actuated locking-bolt G, which is provided with a beveled front end engaging a notch, II, in the rear end of the link or plate. The bolt is provided on its outer side with a lateral eye, g, which projects through a slot, g', in the outer side of the thill, and the front end of an operating-cord, I, is attached to the said eye and passes rearwardly along the thill through the guide-eyes i i to the driver. All this mechanism at the front end of the thill is preferably inschanged in a metallic tip, K, which fits on the

end of the thill and forms part of the same, but it may be set in the thill proper, if desired.

L represents the hame of the ordinary construction, which is provided at a suitable point 55 with a rearwardly-extending plate, M, having the elongated loop N thereon; and O represents a short trace-chain, the front link of which is engaged in the loop N and the rear link is engaged in the slot of the link or 60 plate C.

The front end of the trace-chain engages in either the rear or the front end of the loop N, according to whether the horse is pulling or backing, and in order to lengthen or shorten 65 the draft the rear link of the chain is engaged in different notches c', which register, respectively, with corresponding notches $c^2 c^2$ in the upper side of the thill on opposite sides of the slot B therein.

The operation of the improved detacher will now be readily understood. The link or plate C is carried by the trace-chain, which is attached to the hame, and when it is desired to attach the horse to the vehicle the said 75 link or plate is engaged in the slot in the thill in the manner before described. If it should become necessary to detach the horse instantly from the vehicle on account of an accident, or because the horse is unruly, the cord I is 80 drawn rearwardly, and the spring-actuated bolt is disengaged from the rear end of the link or plate, thereby allowing the said rear end to be drawn instantly out of the slot by the draft on the trace-chain.

It will be understood that we do not desire to be limited strictly to the precise details of construction and arrangement herein specified, as we may alter the same in various minor particulars without departing from the 90 spirit and intent of the invention.

Having thus described our invention, we claim—

1. The combination, with the hame, of the link or plate fitting in a slot in the thill, the 95 chain connecting the said link or plate to the hame, and a spring-bolt mounted on the thill and engaging a notch in the link or plate, substantially as set forth.

2. The combination, with the thill provided 100

with a longitudinal slot, of the link or plate fitting in the said slot, the rearward-extending arm on the hame provided with an elongated loop, and the trace-chain connected to the link or plate and sliding in the said loop, as set forth.

3. The combination, with the thill provided with a longitudinal slot having a wedge-shaped tenon or projection at its front end, the link or plate flexibly connected to the hame, fitting in the slot in the thill and provided at its front end with a V-shaped notch engaging the said tenon or projection, and the spring-bolt engaging a notch in the rear end of the link

15 or plate, substantially as specified.

4. The combination, with a thill provided with a longitudial slot having a wedge-shaped projection, E, at its front end, of the link or plate connected by a chain to the hame, fitting in the slot in the thill and provided at its front end with a V-shaped notch engaging the wedge-shaped projection in the slot the spring-actuated bolt fitting in a longitudinal bore at the rear end of the slot and engaging a notch in the rear end of the link or plate,

and the operating-cord I, attached to a lateral eye on the bolt and passing rearwardly through guiding-eyes on the thill, substantial

tially as specified.

5. The combination, with the thill provided 30 with a longitudinal slot, B, and the spring-actuated bolt mounted in a bore in rear of the slot, of the link or plate C, fitting in the slot and engaged by the bolt and provided with a longitudinal slot, c, having offsets or notches 35 c' in its upper side registering with notches c² in the upper side of the thill, the elongated loop on the thill, and the trace-chain engaged at its front end in the said loop and at its rear end in the registering offsets and notches 40 c' c², when the link or plate is in position in the slot, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures

in presence of two witnesses.

GEORGE WASHINGTON MCLAUGHEN. ALONZO KELLEY LOFTIN.

Witnesses:

J. C. Lewis,

S. E. CRAIG.