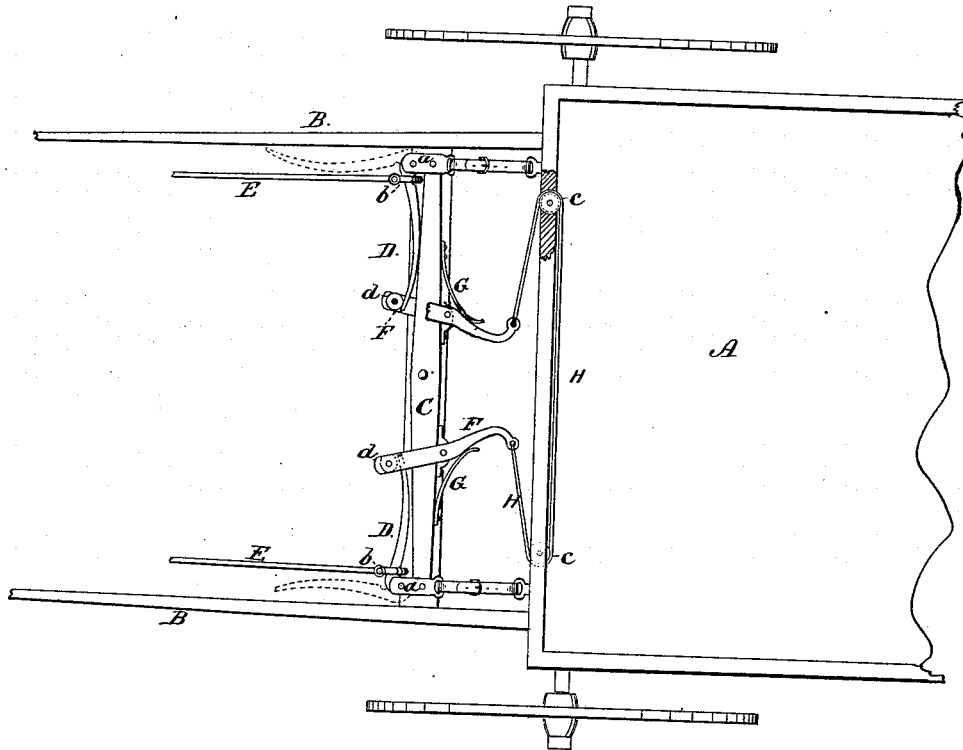


G. W. ATKINS.
HORSE DETACHER

No. 195,787.

Patented Oct. 2, 1877.



WITNESSES:

W. W. Hollingsworth
John Kerron

INVENTOR:

G. W. Atkins

BY

Reed & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. ATKINS, OF NOBLE'S LAKE, ARKANSAS.

IMPROVEMENT IN HORSE-DETAACHERS.

Specification forming part of Letters Patent No. **195,787**, dated October 2, 1877; application filed October 17, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. ATKINS, of Noble's Lake, in the county of Jefferson and State of Arkansas, have invented a new and Improved Horse-Detacher; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention is an improvement in the class of detaching apparatus in which the traces are attached to curved pivoted bars or levers having a spring-catch or locking device, which may be retracted to release said bars or levers, and thus allow the traces to become detached and free the team from the vehicle.

The improvement consists in the construction and arrangement of parts, as hereinafter described and claimed, whereby the trace-catches are adapted to lie close alongside of and parallel to the single-tree, and the locking-levers to lie in the same plane with said trace-catches and single-tree, so that said parts occupy as little as practicable of the space available for other purposes, and are not liable to be broken or injured by contact with other objects, as they would otherwise be. The rope or cord for operating the detaching-levers is likewise connected to the latter, and so arranged otherwise as to be out of the way and not liable to come in contact with other objects, and not be easily observable in viewing the vehicle from the side.

The accompanying drawing, forming part of this specification, exhibits a top plan view of the front portion of a farm-wagon provided with my improved detaching apparatus.

A represents the body of the wagon; B B, the thills or shafts; and C, the single-tree, which is pivoted to the cross-bar of the thills in the usual manner.

In place of the ordinary trace-hooks, the single-tree is provided with clips *a*, to which arms or catches D are pivoted in such a manner as to allow them to swing horizontally. The traces E are attached to the catches D by passing their free ends through the cockeyes or rings *b*.

The free ends of the catches D are confined in slots formed in the short arms of levers F, which are pivoted to the single-tree, and extend back toward the front axle, as

shown. The springs press against the levers F and tend to maintain them in such position that the free ends of the trace-catches D will remain locked in the slot of said levers until released by the positive movement of the latter, which is effected by pulling the strap or cord H that is attached to the rear ends of levers F and passes through holes in the end of the wagon-body A. Said holes are formed at points more widely separated than the fulcra of the levers, so that when tension is applied to the strap or cord H it will draw the rear ends of the levers apart, and thus bring their front ends nearer each other. This movement of the levers releases the free ends of the catches D, and allows the trace-rings *b* to slip off and the horse to go free, as will be readily understood without further description.

When it is desired to attach the horse to the vehicle the trace-rings *b* are slipped over the arms or catches D, and the rear ends of the levers F drawn apart to allow the free ends of the catches to be inserted in the slots formed in the outer ends of the levers. The operation is therefore effected with ease and dispatch.

For the purpose of facilitating the easy action of the apparatus the strap or cord H is made to work on pulleys *c*, and the catches D likewise bear against friction-rollers *d*.

When a carriage is provided with a tongue or pole, in place of thills, the detaching apparatus will be applied to the double-tree, and a single-tree will then be attached to each of the catches D in the same manner as the traces represented in the drawing.

What I claim is—

The trace-catches D, pivoted to the ends of the single-tree, and adapted to fold inward and lie alongside the same, the detaching-levers F, provided with slots in their front ends, and extending horizontally in rear of the single-tree, and the trip cord or strap H passing around pulleys placed farther apart than the said levers, as shown and described, for the purpose specified.

GEO. W. ATKINS.

Witnesses:

A. W. HART,
CHAS. A. PETTIT.