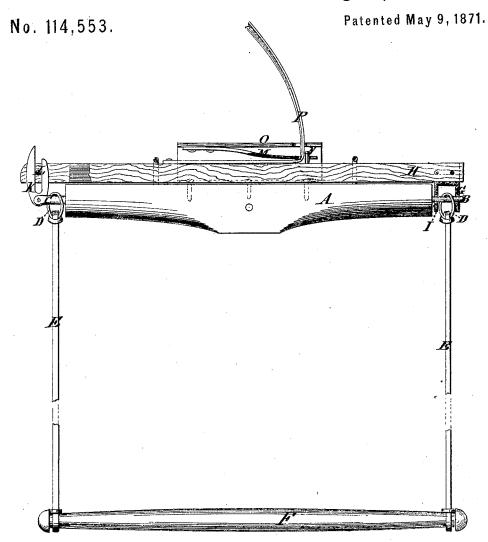
## JOHN L. HAMILTON.

Improvement in Horse-Detaching Apparatus.



Witnesses:

Tym ge. C. Smith.

**Juventor:** J. L. Mamielon.

Per Mum Lo. Attorneys.

# United States Patent Office

## JOHN LINTON HAMILTON, OF ST. JOSEPH, MISSOURI.

Letters Patent No. 114,553, dated May 9, 1871.

#### IMPROVEMENT IN HORSE-DETACHING APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN LINTON HAMILTON, of St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and improved Horse-Detaching Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in horse-de-

taching apparatus; and

It consists in a sliding bar attached to the whiffletree or to a secondary whiffletree, to which the one having the horse hitched to it is connected by cockeyes or rings in the ends of short traces hooked onto studs projecting from the end of the whiffletree, said bar being provided with a holding and tripping spring and ears, through which one of the studs holding a trace passes, and so arranged that by a sudden jerk of the cord one will be pushed off its holding-stud, and a guard which holds the trace on the other stud will be released, to free the trace and let it escape, all as hereinafter more fully specified.

The drawing is a plan view of my improved horse-

detaching apparatus.

A is the whiffletree, having the stud B in one end and C in the other, to which the cock-eyes or rings D of the harness-traces E—or it may be short traces, connecting another whiffletree F—are connected, as shown.

The trace connected to B is confined therein by an ear, G, projecting in front of the end of A from a bar, H, fitted upon A so as to slide back and forth a suitable distance, and extending beyond each end.

The said ear has a hole coinciding with the stud B. I is another ear, parallel to G, also having a hole for stud B, and bearing against the end of A when the trace is secured to the stud, the ring thereof being

between the two ears.

The stud C has a slotted guard, K, pivoted in a slot in the end, and held by a pin, L, in bar H, to secure the trace on said stud, the said pin being engaged in the slot of the guard so as to prevent it from swinging around to release the trace as long as the bar H remains in the position indicated in the drawing. This guard swings into a slot in the end of bar H, to engage the pin between the two walls of the slot.

The bar is held in the position represented in the

drawing to retain the traces on the studs B C by the spring M and stud-pin N, covered by a case, O, or protected in any other suitable way at the rear side of bar H.

P is the tripping-cord or strap attached to bar H behind the spring near its fixed end, and passing along parallel with it and bar H to the hole for engaging the stud N, thence through the hole and through case O to any suitable place where the driver can reach it

at any time.

By suddenly jerking this cord the spring M will be forced back off the studs N, the bar will be forced to the right, and the trace thrown off from stud B by the ear I; at the same time the pin L will escape from the slot of guard K, consequently as the end of A having the guard K swings forward, in consequence of the trace at this end being not yet detached, while the other one is, the ring D will slide along the stud and, coming against the guard, which cannot resist the escape of the ring, the said guard will be swung around and the ring will escape, as will be clearly seen by inspection of the drawing.

When the traces are connected to the studs care is taken to arrange the ring of one between the ears G I, and the ring of the other being placed on the stud over guard K, the latter is so held as to receive the pin L in its slot when the bar H is shot back to en-

gage springs M with stud N.

The guard K may be curved from the pivot on the side next to the ring, to afford more room for the latter than it does when made straight.

Having thus described my invention,

I claim as new and desire to secure by Letters

1. The sliding bar H, having the perforated ears G I at one end and the pin L at the other, combined with the whiffletree A, having the stud B in one end and the stud C and slotted guard K in the other, all substantially as specified.

2. The combination, with the sliding bar H, of the spring M, stud N, and tripping-cord or strap P, all

substantially as specified.

JOHN LINTON HAMILTON.

### Witnesses:

C. B. GRANCE, D. McDonald.