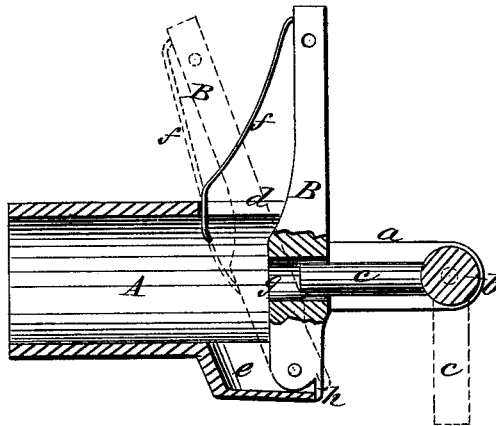


W. R. KITCHEN.  
Horse-Detacher.

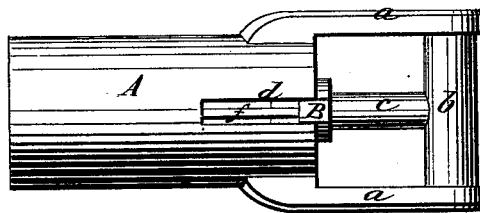
**No. 220,389.**

Patented Oct. 7, 1879.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

Achilles Tschekl.  
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# UNITED STATES PATENT OFFICE.

WILLIAM R. KITCHEN, OF WILLARD, KENTUCKY.

## IMPROVEMENT IN HORSE-DETACHERS.

Specification forming part of Letters Patent No. **220,389**, dated October 7, 1879; application filed April 7, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM R. KITCHEN, of Willard, in the county of Carter and State of Kentucky, have invented a new and Improved Horse Detacher, of which the following is a specification.

The object of this invention is to provide a simple, strong, and easily-operated device for detaching the harness-tugs from the ends of whiffletrees; and it consists of a ferrule with projecting arms, in which is pivoted a cross-bar with a pin which enters a hole in a lever pivoted below, the whole operating in a way that will be fully set forth farther on.

In the accompanying drawings, Figure 1 is a longitudinal section of the improvement, and Fig. 2 is a side elevation of the same.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the ferrule, from the outer end whereof project two arms, *a a*, in the ends whereof is pivoted a cross-bar, *b*, with a pin, *c*, projecting from the center thereof at right angles to its length. Between the two arms, and in a line at right angles thereto on one side of the ferrule, is a slot, *d*, while on the opposite side is a box or offset, *e*. B represents a lever fulcrumed in the offset *e*, and its power end projecting across the upper end of the ferrule through the slot *d*, where it is connected on its inside with a spring, *f*, the end whereof bears upon the bottom or end of the slot *d*. In the lever concentric to the ferrule is a hole, *g*, immediately in line with the pin *c*, so that the latter enters the same and is retained, as clearly shown in

Fig. 1. Just beyond the fulcrum on the lever is a finger, *h*, which bears upon the edge of the offset and prevents the lever from throwing out of the slot *d*.

The device is applied and operated as follows: One goes on each end of the whiffletree, and the power ends of the levers are joined to a cord running to the center through a ring and thence up to the box within easy reach of the driver. The eyes of the tugs are passed between the arms *a a*, the pin *c* passed through and in position to enter the hole *g* in the lever, (which is turned down into the position indicated by the dotted lines to release the pin,) and the lever is then allowed to spring up and catch the pin, as in Fig. 1. The strain is borne by the pin *c* and its connections in the lever and arms.

The tugs are released by jerking the levers down into the position indicated by the dotted lines in Fig. 1. This, by disconnecting the pin, allows it to be drawn into the position indicated by the dotted lines, and the tugs draw off without difficulty.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the ferrule A, having slot *d* and offset *e*, the lever B, having rear spring, *f*, and hole *g*, and the tug-pin *c*, attached by a loose sleeve on a cross-pin of the arms *a*, as shown and described.

WILLIAM RILEY KITCHEN.

Witnesses:

JAMES K. GRAHAM,  
J. M. KITCHEN.