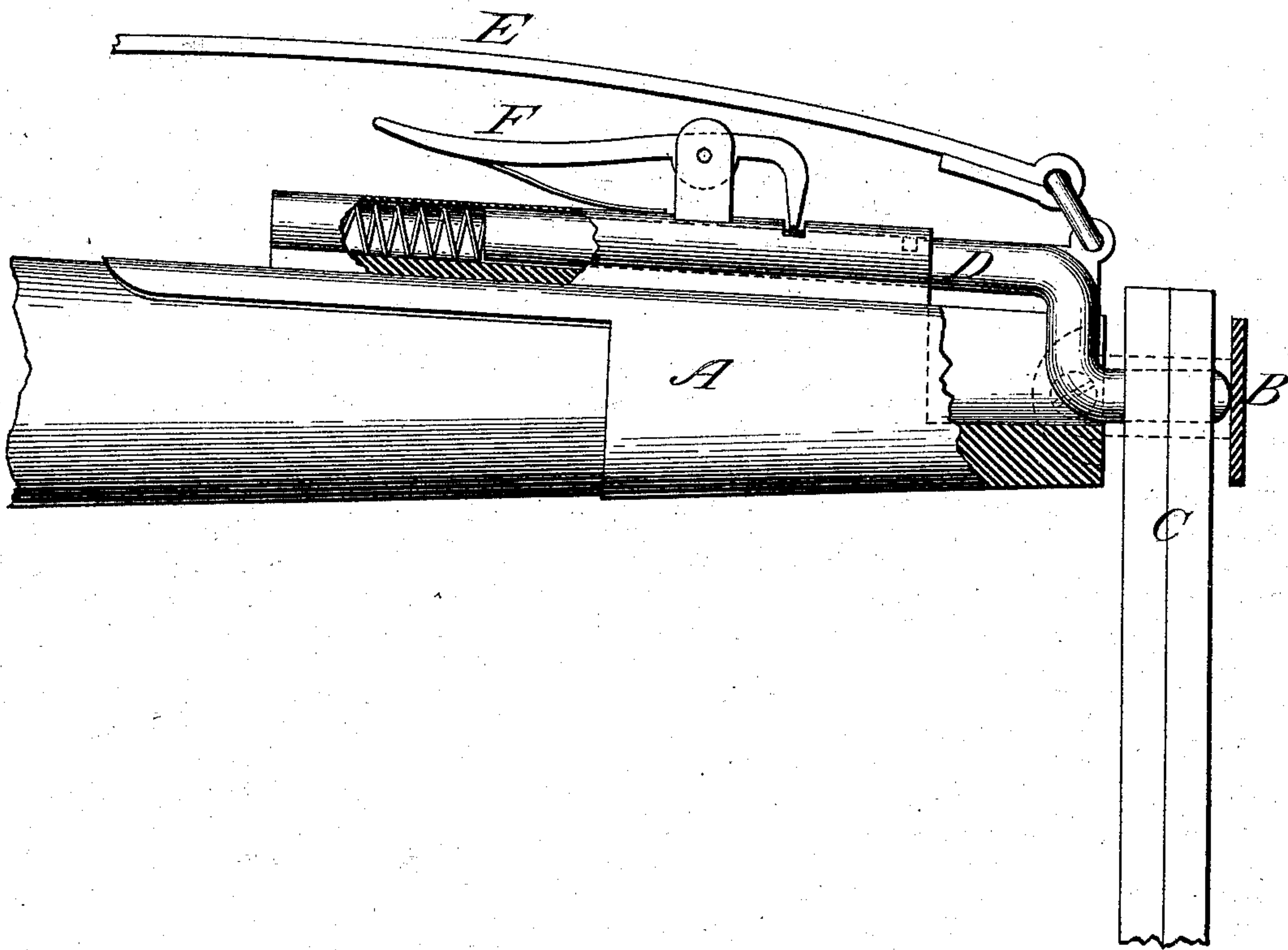


J. P. CRUTCHER.
Horse-Detacher.

No. 219,448.

Patented Sept. 9, 1879.



Attest;

W. J. Jackson
J. A. Gunn

Inventor.

J. P. Crutcher

UNITED STATES PATENT OFFICE.

JAMES P. CRUTCHER, OF BETHESDA, TENNESSEE.

IMPROVEMENT IN HORSE-DETACHERS.

Specification forming part of Letters Patent No. **219,448**, dated September 9, 1879; application filed February 27, 1879.

To all whom it may concern:

Be it known that I, JAMES P. CRUTCHER, of Bethesda, in the county of Williamson and State of Tennessee, have invented a new and Improved Horse-Detaching Apparatus for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to an improved mechanism for the purpose of disconnecting the traces from the single-tree, and thus allowing the horse to free himself from the vehicle in case of accident or danger requiring it.

The means I employ for securing the traces to the single-tree are sliding spring-bolts, and I secure them in the retracted position out of engagement with the traces by means of spring-catches or locking devices, as herein-after described.

In accompanying drawing, forming part of this specification, I show a plan view of one end of a single-tree provided with my improved trace-detaching mechanism.

A indicates a ferrule applied to the end of the single-tree, and B a metal plate, which is secured to said ferrule, but is separated from the end thereof, so that, taken together, the two form an open socket to receive the end of trace C. The rod D is bent twice at right angles, and one part slides through the body of ferrule A, while the long arm enters a socket formed on or attached to the back of the ferrule. A spring is placed in the socket behind the rod D to press it outward or toward the plate B, and thus hold it engaged with the trace C, through the eye of which it passes, as

shown. To retract the spring-rod D, and thus release the trace C, I employ a strap, E, which is attached to an eye or loop formed on the same. When the rod is retracted it is locked and prevented from sliding back by means of a spring-catch, F, which is pivoted to the rear side of ferrule A. The nose of the catch enters a slot in the ferrule and presses on the rod D, which is provided with a notch or recess to receive the same.

The parts shown in the drawing are, of course, duplicated in practice on the other end of the single-tree, and the two straps E passed through loops at or near the pivot of the single-tree, and are connected with a strap (not shown) which extends to the driver's seat. Thus, when imminent danger or other occasion requires, the driver may retract the sliding rods D and release the traces C by pulling on the straps E, and the rods D will be held thus retracted by the spring-catches F engaging the notches in said rods. To release the rods D the free ends of catches F are depressed.

I do not claim, broadly, a sliding rod for securing a trace to a single-tree, nor retracting such rod by means of a pull-strap; but

What I do claim is—

The combination of locking-catch F with sliding rod D, having a notch or recess, as specified, the ferrule A, plate B, and strap E, substantially as shown and described.

J. P. CRUTCHER.

Witnesses:

W. J. JACKSON,
J. A. GUN.