J. HARTMAN, Jr.
Trace-Holder.

No. 197,361. Patented Nov. 20, 1877.

FIG. 1

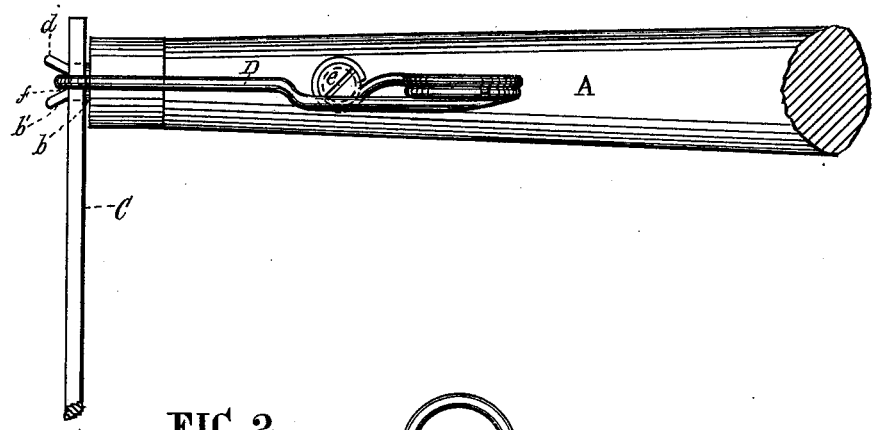


FIG. 2

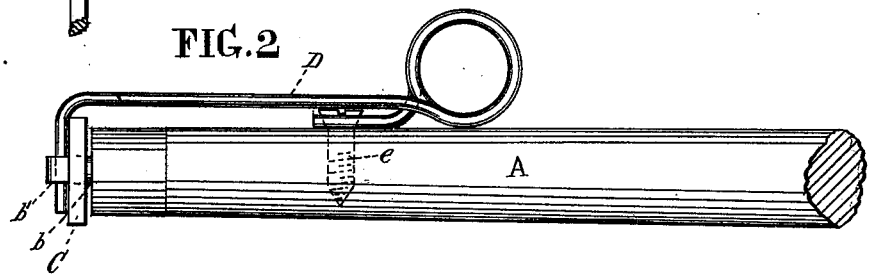
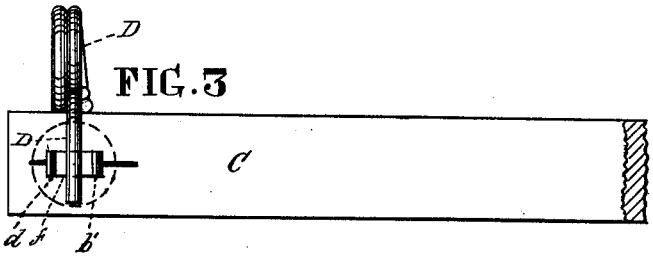


FIG. 3



Witnesses.

Thomas J. Bewley.

William H. Gathrop.

Inventor

John Hartman Jr.

per Stephen Motick attorney

UNITED STATES PATENT OFFICE.

JOHN HARTMAN, JR., OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN TRACE-HOLDERS.

Specification forming part of Letters Patent No. **197,361**, dated November 20, 1877; application filed March 30, 1877.

To all whom it may concern:

Be it known that I, JOHN HARTMAN, Jr., of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Trace-Holders, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a top view of one end of a single-tree having my improved holder in connection; Fig. 2, a side view of the same, and Fig. 3 an end view.

Like letters of reference in all the figures indicate the same parts.

The object of my invention is a cheap, reliable, and expeditious mode of securing the traces with a single-tree; and the nature of the invention consists in the combination of a spring with each end of a single-tree, and a projecting pin having a notch or crotch, as hereinafter fully described.

Referring to the drawings, A represents one end of a single-tree, having a cockeye or pin, *b*, projecting from its end. C is the trace, which has the ordinary slit, as seen in Fig. 3. The pin has a head, *b'*, which is flattened in the direction of the slit to facilitate the connection of the trace.

When the trace is drawn tightly, the rear projection *d* of the pin would hold it securely in place; but when the trace is slack it would be liable to be disengaged from the pin. To prevent this I employ a spring, D, to bear against the head *b'*.

A wire spring, D, is connected at its coiled end with the upper side of the single-tree by means of the screw *e*. The outer end of the spring is turned at right angles to the longitudinal plane of the single-tree, and presses into the depression *f* of the pin *b*, whereby lateral movement of the spring is prevented, and the trace is held securely in position.

If the spring should slip to one side of the cockeye or pin *b*, it would press the trace against the end of the single-tree, and thereby still securely hold the trace in connection therewith.

When the trace is to be disengaged from the pin *b*, the spring is pressed outward from the single-tree until the trace is removed.

If desired, the spring may be fastened to the lower side of the single-tree, or to either of the other sides.

I claim as my invention—

The combination of a spring, D, with each end of the single-tree A, and the notched or forked pin *b*, substantially as and for the purpose set forth.

JNO. HARTMAN, JR.

Witnesses:

THOMAS J. BEWLEY,

STEPHEN USTICK.

197361