

Mallery & Sage,

Trace Fastener.

No. 98,283.

Patented Dec. 28, 1869.

Fig. 1.

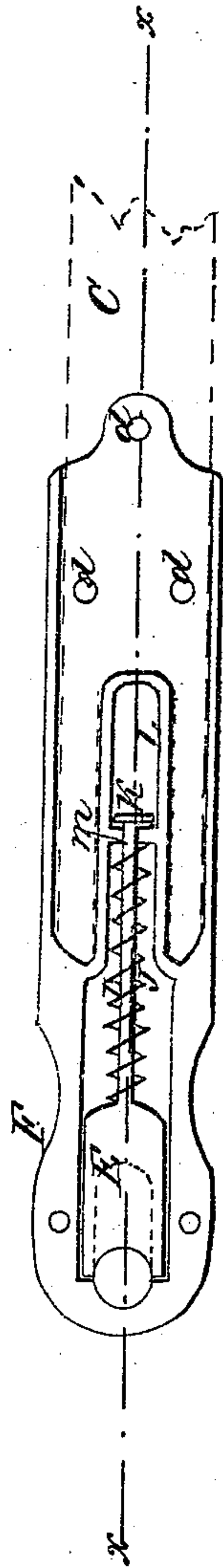
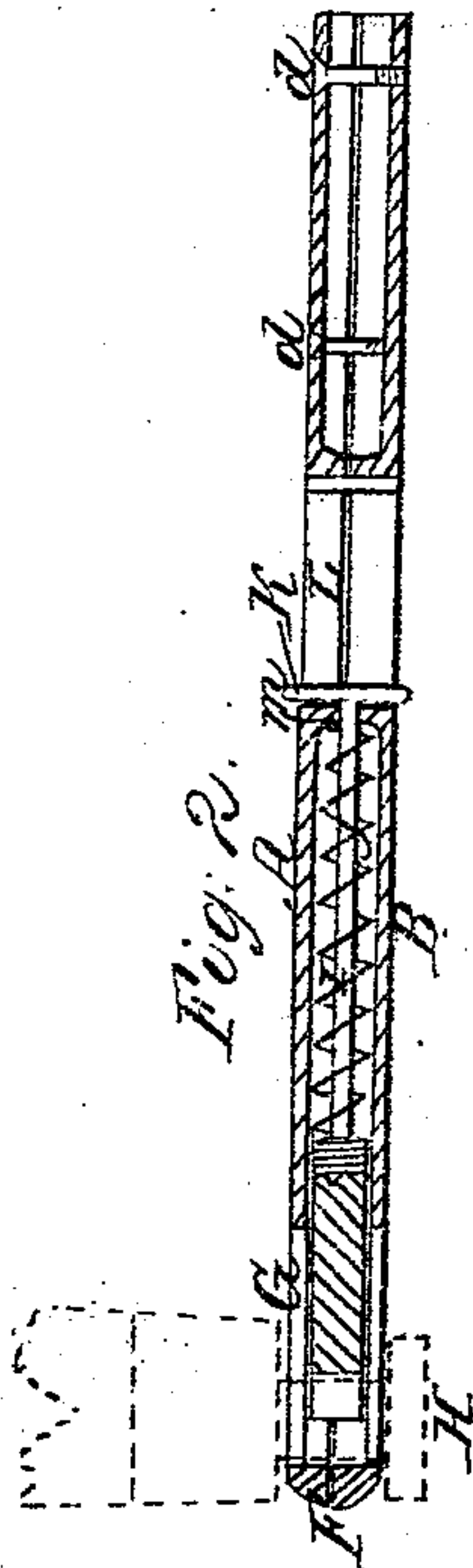


Fig. 2.



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# United States Patent Office.

WILLIAM W. MALLERY AND CHARLES H. SAGE, OF COPENHAGEN, NEW YORK.

Letters Patent No. 98,283, dated December 28, 1869.

## IMPROVED TRACE-FASTENING.

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

*To all whom it may concern:*

Be it known that we, WILLIAM W. MALLERY and CHARLES H. SAGE, of Copenhagen, in the county of Lewis, and State of New York, have invented a new and useful Improvement in Trace-Fastening; and we 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 drawings, forming part of this specification.

This invention relates to a new and useful improvement in a fastening for the traces of harness; and consists in applying a spring-slide to the end of the trace, by which slide the trace is held to the whiffletree, as will be hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a sectional side view of the fastening, or the fastening-device complete, with one portion (or half) the casing off.

Figure 2 is a section of fig. 1, through the line *x x*, showing the fastening as when applied to a whiffletree.

Similar letters of reference indicate corresponding parts.

This fastening-device is applied by means of two plates, A and B, which are recessed out for receiving the spring and slide, and the end of the trace. These parts are duplicates of each other, placed upon the trace so that each part contains half of the trace and half the slide.

In fig. 1, C represents the trace, which is secured to the plates by screws or rivets, as seen at *d*.

E represents the fastening-slide, which is inclosed in the case formed by the two parts A and B, which case is marked F.

The case has two slot-holes passing through it. One of these holes, G, near the end of the case, has its outer end rounded, so that it will fit the whiffletree, and this end of the case receives the draught,

the case being passed over the end of the whiffletree, as seen in fig. 2.

H is the flange or head on the end of the whiffletree, which holds the case from slipping off.

The slide E has a stem, I, around which there is a spiral spring, J.

On the end of the stem I there is a T-cap, K, which passes through each part of the case, as seen in fig. 2, in the slot-hole L. The slide is operated or drawn back by means of this cap, in attaching the trace to the whiffletree, and in removing it therefrom.

The spiral spring leans against the back end of the slide and against the bridge *m*, at the end of the hole L, with a constant pressure, so that when the slide is drawn back, the reaction of the spring forces it forward, and in contact with the draught-journal of the whiffletree. The tension of the spring keeps the whiffletree at all times in close contact with the case, and as there is no forward pressure on the ends of the whiffletree, the spring-slide renders the fastening complete, and perfectly safe and reliable. The advantages of this arrangement are many, and must be obvious to all.

We are aware that spring-catches on trace-fasteners are not new, the object being to prevent the traces from being slipped off by a jolt or slackening thereof; and we wish, therefore, to disclaim the same; but

What we esteem as of our invention, and desire to protect by Letters Patent, is—

A trace-fastener, covered on the outside with a smooth-surfaced frame, made in detachable sections, and having a recess to receive the trace, and provided with a forked spring-catch on the inside, all as shown and described.

WILLIAM W. MALLERY.

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