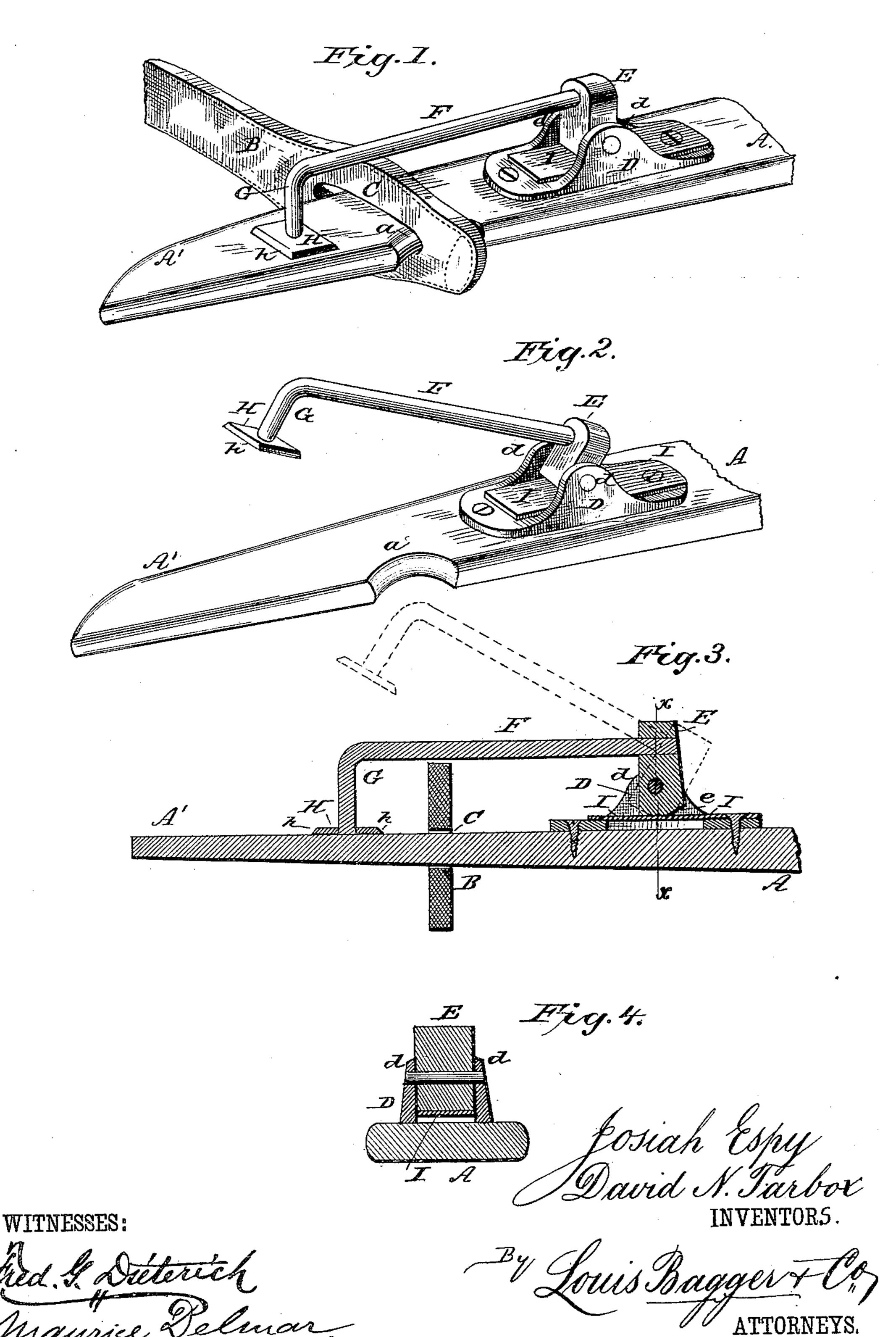
(No Model.)

## J. ESPY & D. N. TARBOX.

TRACE FASTENING.

No. 318,422.

Patented May 19, 1885.



## UNITED STATES PATENT OFFICE.

JOSIAH ESPY AND DAVID N. TARBOX, OF CEDARVILLE, OHIO.

## TRACE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 318,422, dated May 19, 1885.

Application filed March 6, 1885. (No model.)

To all whom it may concern:

Be it known that we, Josiah Espy and | pivoted heel E. DAVID N. TARBOX, citizens of the United States, and residents of Cedarville, in the 5 county of Greene and State of Ohio, have invented certain new and useful Improvements in Trace-Clips; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable 10 others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of our improved trace-clip, showing the trace in position. Fig. 2 is a similar view of the clip with the trace removed and the spring-lever opened ready for its insertion. Fig. 3 is a 20 longitudinal sectional view of the device, and Fig. 4 is a cross-section on line x x in Fig. 3.

Similar letters of reference indicate corre-

sponding parts in all the figures.

Our invention has relation to devices for fast-25 ening traces upon the ends of the whiffletrees or single-trees or so-called "trace-clips;" and it consists in the combination, with the end of the whiffletree, of a peculiarly-constructed spring-actuated clip or lever, substantially as 30 will be hereinafter more fully described and claimed.

In the accompanying drawings, A denotes one end of a whiffletree having our improved clip, and B is the trace having the usual cock-35 eye, C. The outer end of the tree is made pointed and tapering, as shown at A', to facilitate its insertion through the cockeye, and is provided with a notch, a, to prevent the trace

from slipping.

Fastened upon the tree is a bearing, D, having two ears, dd, between which is pivoted the heel E of a lever, F, the free end of which is bent at right angles, as shown at G, and provided with a flat shoe, H, having beveled | 45 edges h. The under side of the heel E is beveled, as shown at e, Fig. 3, and bears against a flat steel spring, I, fastened upon the plate of the bearing D, and projecting with its free end between the ears d d, so as to exercise l

spring-pressure against the under side of the 50

From the foregoing description, taken in connection with the drawings, the operation of this device will readily be understood. If it is desired to attach the traces to the whiffle- 55 tree, the spring-actuated lever is raised into the position shown in Fig. 2 and indicated in dotted lines in Fig. 3, in which position it will be held by the free end of the spring bearing against the beveled part e of the heel. After 60 the trace has been placed in position the lever is sprung back to its former or closed position, with its flat shoe H bearing against the flat top of the tree. When the lever is in this locked position, it is impossible for the trace 65 to slip off, because, even if it should be drawn out of the notch or recess a, the cockeye C would slip over the beveled edge of the plate or shoe H upon the same, and thus, instead of having a tendency to open the latch or spring- 70 lever, would, on the contrary, operate to keep the same in its closed position by holding the shoe down upon the top of the tree. At the same time, while it will thus be seen that our device absolutely prevents the accidental dis- 75. engagement of the trace and the whiffletree, it will be seen that the trace may readily be attached to or detached from the whiffletree simply by manipulating the spring-actuated lever.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

The spring-actuated lever bent at right angles at its free end, and provided at the said 85 bent end with a flat plate or shoe having beveled edges, in combination with the pointed outer end of the whiffletree adapted for insertion through the cockeye of the trace, substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

> JOSIAH ESPY. DAVID N. TARBOX.

Witnesses:

GEO. B. CONFER, JNO. A. NESBIT.