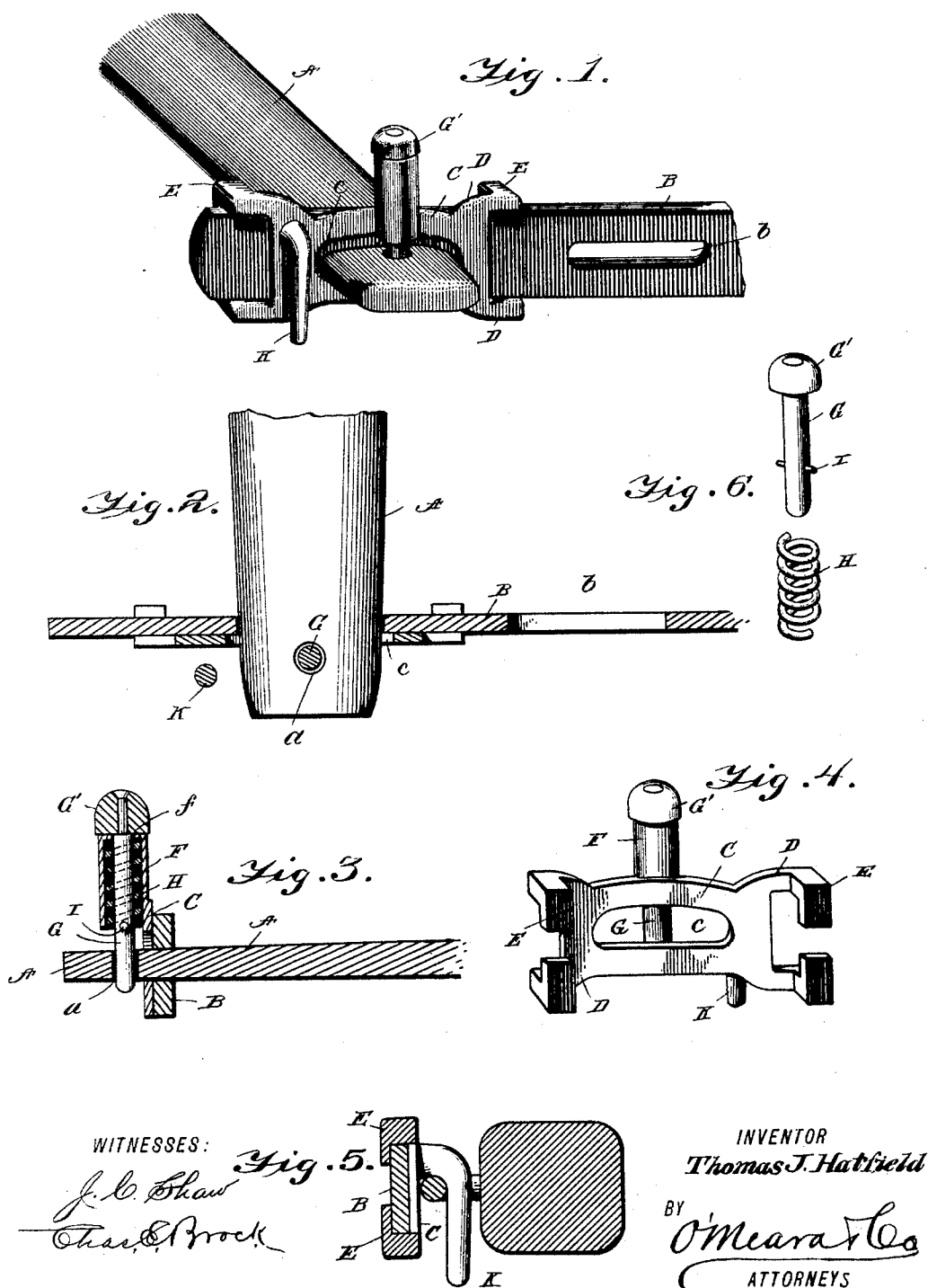


(No Model.)

T. J. HATFIELD.  
TRACE HOLDER.

No. 586,767.

Patented July 20, 1897.



# UNITED STATES PATENT OFFICE.

THOMAS J. HATFIELD, OF DUBLIN, INDIANA.

## TRACE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 586,767, dated July 20, 1897.

Application filed July 15, 1896. Serial No. 599,289. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS J. HATFIELD, residing at Dublin, in the county of Wayne and State of Indiana, have invented an Improved Trace-Holder, of which the following is a specification.

This invention is an improved device for holding or fastening a trace or tug upon the end of a whiffletree or singletree. The most common method of accomplishing this purpose is the employment of a leather strap fastened to the end of the whiffletree and adapted to be passed through a hole in the end of said tree upon the outer side trace or tug, said trace or tug having been placed upon the end of tree and pushed beyond the hole. This is the oldest and simplest method, but it is open to many objections, such as the leather rotting and becoming stiff, and, furthermore, it is liable to be pulled out and drop the trace. To avoid this, numerous devices have been contrived, most of which have been applied to the end of the whiffletree, but all of these appliances, so far as I am aware, require a peculiar construction of whiffletree end, or they require some alteration in the trace or tug. Now my invention is designed to avoid all these objections and provide a cheap, simple, and efficient form of holder or fastener and one which can be applied to any of the whiffletrees and traces now in common use.

Another object is to provide a holder or fastener which will provide a positive connection between the trace and whiffletree which can be quickly and easily effected, but cannot be disconnected by jarring or jerking.

Another object of the invention is to provide a fastener which will not be injured by water, snow, or ice.

With these various objects in view my invention consists, essentially, of a plate adapted to be attached to a trace, said plate carrying a sleeve or tube in which is arranged a locking-pin, said pin being spring-actuated and provided with a head at the upper end to limit its downward movement.

The invention consists also of a plate having means for ready attachment to the trace or tug; and the invention consists also in a plate carrying the sleeve and pin before referred to, and also a hook for holding said trace up when not connected to a whiffletree.

The invention consists also in certain details of construction and novelties in combination, which will be fully set forth in the description, and then specifically pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a view showing the invention in use. Fig. 2 is a horizontal section, the whiffletree being shown in top plan. Fig. 3 is a vertical section. Fig. 4 is a detail view of the holder or fastener. Fig. 5 is a detail view showing the application of the hook, and Fig. 6 shows the locking-pin and spring for actuating the same.

In the drawings I have shown a whiffletree A, and trace B, in order to clearly explain the application of my invention, and it will be noticed that these parts are the same as those now in general use, the whiffletree having an opening *a*, and the trace a series of slots *b b*.

In constructing a holder in accordance with my invention I employ a plate C, which has a central opening *c*, adapted to be arranged opposite one of the slots *b* and permit the passage of the end of the whiffletree. The plate C has an arm D extending from each corner, and projecting from said arms are right-angled fingers E, said fingers extending inwardly a distance equal to the thickness of the trace and then toward each other, as shown, but they do not meet, sufficient space being left between the ends of said fingers to permit the insertion and withdrawal of the trace. The manner of connecting the plate and trace will therefore be apparent. The plate also carries a sleeve or tube F upon the forward upper edge, said sleeve being arranged about midway the plate and opening and projects some distance above said plate. The sleeve is open at the lower end and perforated at the top, and working in said sleeve through such perforation *f* is a locking-pin G, having a head *G'*, and surrounding said pin within the sleeve or tube is a spiral spring H, said spring being held in place between the top of sleeve or tube and a cross-pin I, passing through the locking-pin, so that when the pin is lifted up by the head said spring will be compressed and will project it down the moment the pin is released.

Now in operation the holder is placed upon a trace, and to connect the trace with the

whiffletree the pin is raised, the end of tree passed through trace and plate, and the pin released, so that it passes through the hole *a* in the end of whiffletree.

5 It will thus be seen that it is impossible for the parts to be accidentally disconnected, and it will also be noted that the operative parts are thoroughly protected against dirt, rain, ice, and snow.

10 It will of course be understood that the holder can be moved along the trace opposite any particular slot *b*.

The plate *C* also carries a downwardly-hanging hook *K* upon its forward face, the purpose of which is to hang the trace and holder upon the hame when said trace is not  
15 attached to whiffletree, the hook being inserted in the hame-coupling, as most clearly shown in Fig. 5.

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

1. The herein-described trace-holder consisting of a plate having an opening for the passage of the whiffletree and provided at each  
25 end with attached arms for embracing the trace, and at the central portion thereof with a tube or sleeve projecting above its upper edge, and a bolt or pin carrying a coiled spring in said tube or sleeve, for the purpose  
30 set forth.

2. As a new article of manufacture, the herein-described trace-holder consisting of a plate having a central opening, the arms at the corners thereof being formed with the  
35 right-angled fingers, the sleeve or tube, the pin having a head and cross-bar, the coiled spring secured thereon, and the support-hook, all arranged and operating substantially as set forth.

THOMAS J. HATFIELD.

Witnesses:

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