(No Model.)

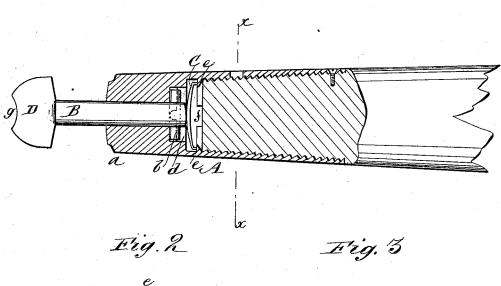
## G. R. B. SWANTON.

WHIFFLETREE HOOK.

No. 345,456.

Patented July 13, 1886.

Fig. 1



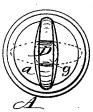


Fig. 4

INVENTOR:

Murm +C ВУ

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

GEORGE R. B. SWANTON, OF OKAWA, HAWK'S BAY, NEW ZEALAND.

## WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 345,456, dated July 13, 1886.

Application filed April 9, 1886. Serial No. 198,362, (No model.)

To all whom it may concern:

Be it known that I, GEORGE R. B. SWANTON, of Okawa, Hawk's Bay, New Zealand, have invented a new and useful Improvement in Whiffletree-Hooks, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation, partly in section. 10 Fig. 2 is a transverse section taken on line x x in Fig. 1, the whiffletree being removed from the socket. Fig. 3 is an end elevation. Fig. 4 is a detail view of the spring.

Similar letters of reference indicate corre-15 sponding parts in the different figures of the

drawings.

The object of my invention is to provide a simple, reliable, and easily manipulated hook for whiffletree ends, for receiving the traces of 20 harnesses.

My invention consists in the construction and arrangement of parts, as will be herein-

after fully described and claimed.

The socket A is threaded internally to receive the end of the whiffletree, and is tapered to correspond with the taper of the whiffletree, to which it is applied. The end a of the socket is bored axially, and has sufficient thickness to form a suitable bearing for the traceholder B. The trace-holder B projects through the end of the socket, and is provided at its inner end with a transverse pin, b, which may be received in either of the two pairs of grooves c c and c' c', formed in the head of the ferrule at the bottom of the circular recess d, and arranged at right angles with each other.

The spring C, having its ends bent at right angles, is placed in the socket A between the inwardly-projecting flange e and the end of the

socket, the flange being cut away at f on dia-40 metrically-opposite sides, to admit of inserting the spring. The spring C presses against the inner end of the trace-holder B and abuts upon the flange e. The outer end of the traceholder B is provided with the T-head D, in 45 the end of which is formed a notch, g, for receiving the end of the thumb or finger. By pushing the trace-holder B inward, so as to disengage the transverse pin b from the grooves c or c', the trace-holder may be turned so as 50 to bring its head D parallel with the slit in the trace, so that the trace may be readily removed therefrom, and when the trace-holder is released the spring C pushes it forward, so as to bring the transverse pin b into engagement 55 with one of the pairs of grooves c c'. When the head D is turned at right angles to the trace, the trace will be retained upon the traceholder B, and the trace-holder will be held in either of its two positions by the reception of 60 the pin b in the grooves in the inner face of the end of the socket.

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

In a trace-holder, the combination of an internally-threaded socket, A, having an axially-bored head, a, and provided in its inner surface with transverse grooves, the trace-holder B, provided with a transverse pin, b, and the 70 spring C, resting on the flange e and pressing the trace-holder B outward, substantially as herein shown and described.

GEORGE R. B. SWANTON.

Witnesses:

EDGAR TATE, JAS. M. HENLEY.