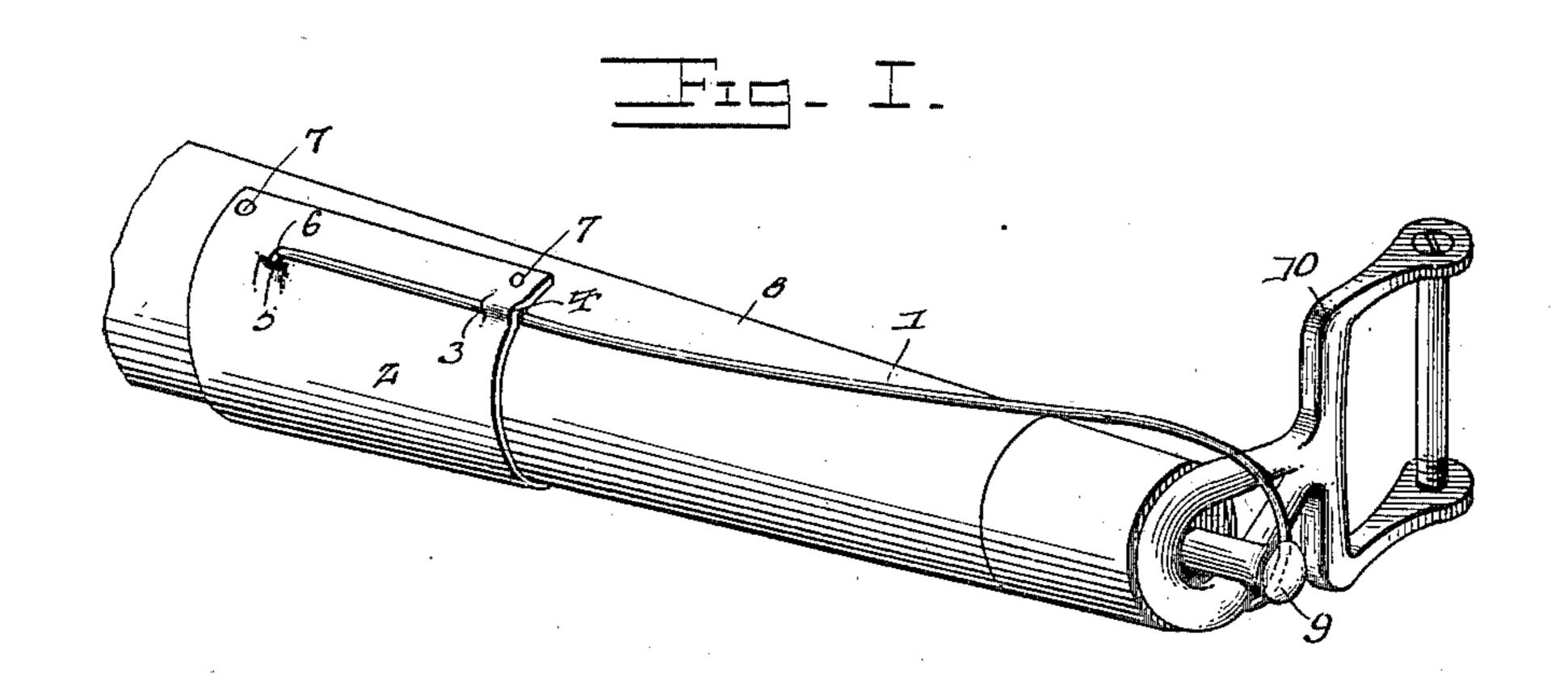
No. 661,420.

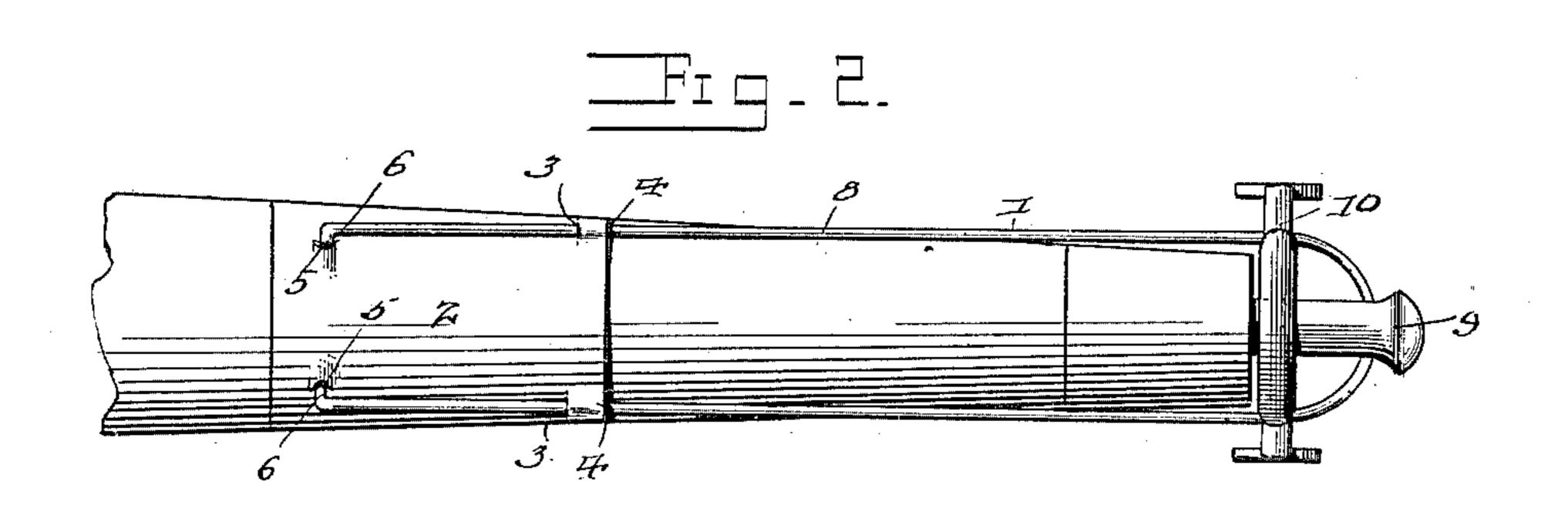
Patented Nov. 6, 1900.

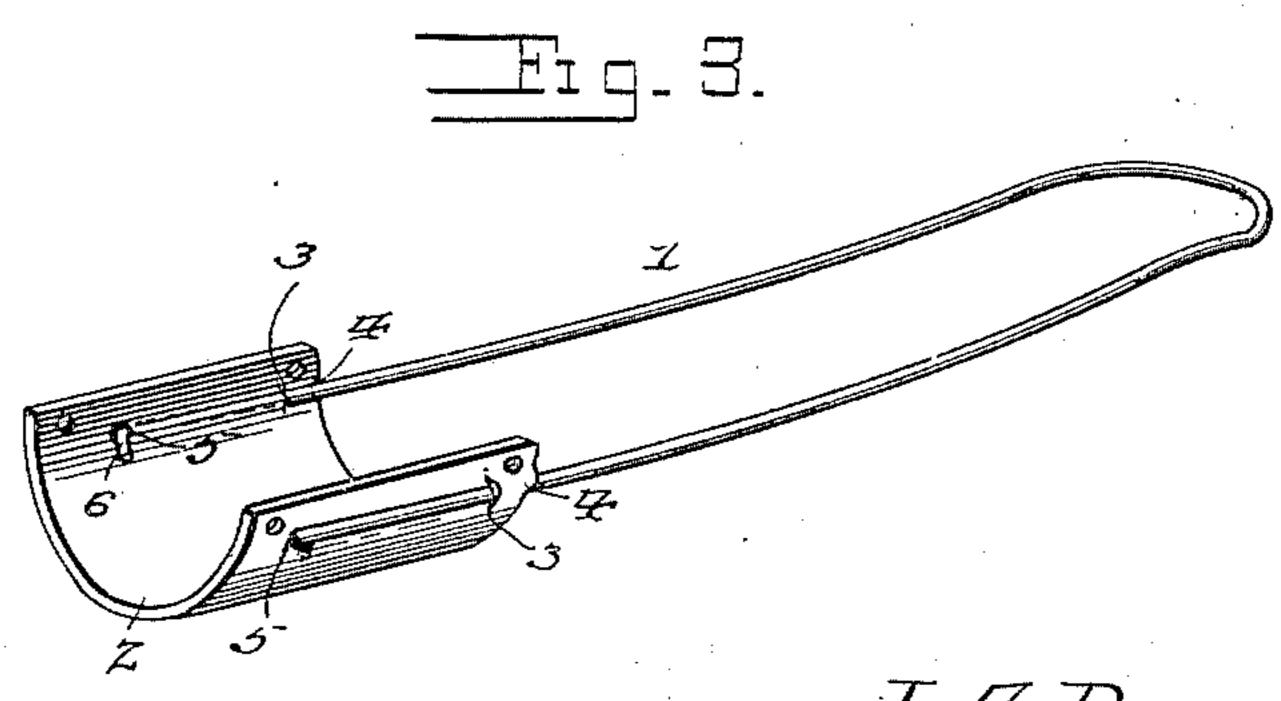
## J. A. PARSONS. TRACE FASTENER.

(Application filed Sept. 29, 1900.)

(No Model.)







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By

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## United States Patent Office.

## JAMES A. PARSONS, OF THAYER, IOWA.

## TRACE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 661,420, dated November 6, 1900.

Application filed September 29, 1900. Serial No. 31,530. (No model.)

To all whom it may concern:

Be it known that I, James A. Parsons, a citizen of the United States, residing at Thayer, in the county of Union and State of Iowa, have invented a new and useful Trace-Fastener, of which the following is a specification.

This invention relates to trace-fasteners, and has for its object to provide an improved 10 device of this character which can be readily and conveniently applied to a whiffletree without altering the same and arranged to embrace the adjacent end of a trace, so as to prevent accidental disengagement thereof 15 from the whiffletree and at the same time permitting of the forcible removal of the trace when desired. It is furthermore designed to provide improved means for connecting the device to a whiffletree and to arrange the 20 former so as to snugly hug the end of the latter, thereby presenting no projections, so that the whiffletree is comparatively even and not liable to catch in any part of the harness.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of one end of a whiffletree having the improved trace-fastener fitted thereto. Fig. 2 is a rear elevation thereof. Fig. 3 is a detail perspective view of a trace-fastener constructed in accordance with the present invention.

Corresponding parts are designated by like characters of reference in all of the figures of the drawings.

Referring to the drawings, and particularly to Fig. 3 thereof, 1 designates the trace-fastener proper, which is formed from a single spring wire or rod bent intermediate of its ends into substantially U shape, having its bowed end deflected laterally. The opposite end of the device is provided with a bowed attaching-plate 2, having the opposite slits

or perforations 3 adjacent to the opposite corners at the same end of the plate. From each perforation or slit to the adjacent outer 55 edge of the plate the latter is crimped or fluted, as at 4, so as to form a gutter or groove upon the inner or concaved side of the plate. Opposite each perforation and adjacent to the opposite end of the plate there are pro-60 vided other perforations 5.

To connect the spring trace-fastener to the plate, the opposite ends of the wire or rod are passed inwardly through the respective grooves and adjacent perforations, thence 65 rearwardly across the exterior of the plate, and then hooked into the rear perforations, the extremities of the spring being bent laterally inward in opposite directions, so as to provide the opposite hooks or fingers 6 to engage with the perforations.

In applying the device to a whiffletree the plate is fitted to the rear side thereof and secured in place by means of suitable fastenings 7, driven through the respective cor- 75 ners and into the whiffletree 8, as indicated in Fig. 1 of the drawings. The plate is so situated that the deflected bowed end of the spring may lie against the opposite side of the extremity of the whiffletree or the trace-80 pin 9, which is commonly carried at the extremity thereof. To connect the trace or the trace-hook 10 to the whiffletree, the springfastener is pulled forwardly, so that the end of the trace may be passed through the looped 85 spring and engaged with the end of the whiffletree, after which the spring is released and snaps back against the whiffletree, with its bowed extremity embracing the trace and extending at the outer side thereof, whereby 90 the trace is held against accidental displacement from the whiffletree.

From the foregoing description it will be apparent that the present device is complete in itself and may be conveniently applied to 95 a whiffletree without altering or changing the latter in any particular; also, the spring-fastener embraces the whiffletree and snugly hugs the same, so that said whiffletree is free from projections, which might catch in the 100 harness.

What is claimed is—

A trace-fastener, comprising a bowed attaching-plate, having opposite perforations

from which the plate is crimped or fluted outwardly to the adjacent edge forming grooves upon the inner or concave side of the plate, and corresponding perforations at the rear 5 of the plate, and a substantially U-shaped spring-wire fastener, having its opposite ends passed inwardly through the respective gutters and the adjacent perforations, the extremities of the wire being provided with in-

wardly-directed hooks or fingers engaged with 10 the rear perforations.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES A. PARSONS.

Witnesses:

R. J. WILSON, WM. OLINGER.