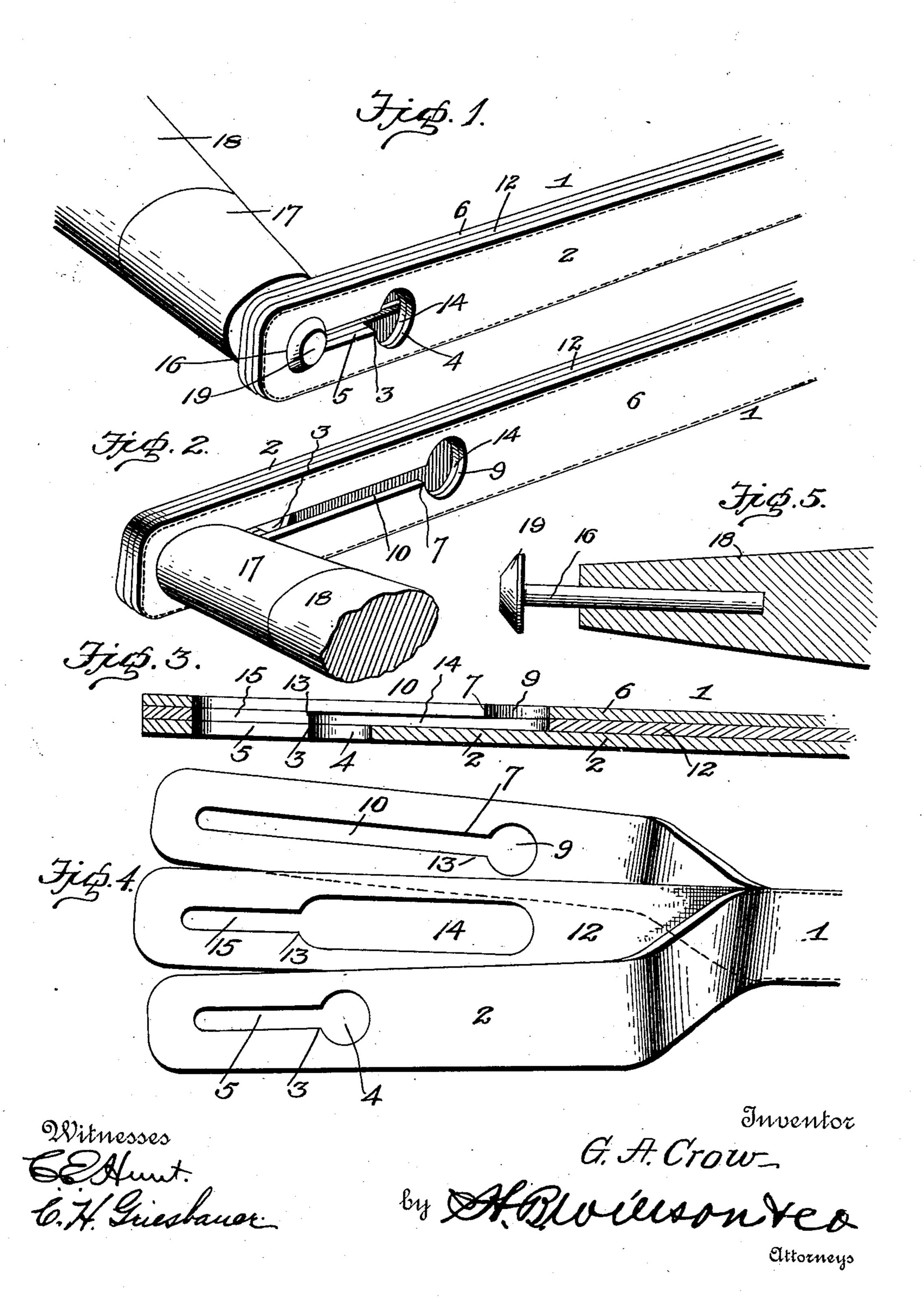
G. A. CROW. WHIFFLETREE AND TRACE CONNECTION. APPLICATION FILED SEPT. 10, 1908.

910,788.

Patented Jan. 26, 1909.



HE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE A. CROW, OF EL DORADO, ARKANSAS.

WHIFFLETREE AND TRACE CONNECTION.

No. 910,788.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed September 10, 1908. Serial No. 452,490.

To all whom it may concern:

Be it known that I, George A. Crow, a citizen of the United States, residing at El Dorado, in the county of Union and State of 5 Arkansas, have invented certain new and useful Improvements in Whiffletree and Trace Connections; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable 10 others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in

whiffletree and trace connections.

The object of the invention is to provide 15 an improved form of whiffletree and trace connection whereby the end of the trace may be quickly and easily engaged with the whiffletree and whereby the trace when thusengaged will not become casually disconnected 20 from the whiffletree.

A further object is to provide a connection of this character which will be simple, strong, inexpensive and durable in construction, reliable and efficient in operation and well 25 adapted to the purpose for which it is de-

signed.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrange-30 ment of parts as will be described and particularly pointed out in the appended claims.

In the accompanying drawing, Figure 1 is a perspective view of the end of the whiffletree and trace showing the same connected 35 together, and looking toward the outer side of the trace; Fig. 2 is a similar view looking toward the inner side of the trace; Fig. 3 is a horizontal sectional view of the end of the trace; Fig. 4 is a side view of the end of the 40 trace showing the parts of the same separated to illustrate the different forms and arrangement of the cock-eye in each part; and Fig. 5 is a detail sectional view of one end of a modified form of whiffletree connection.

Referring more particularly to the drawings, 1 denotes the end of the trace which is preferably formed of leather and constructed in a plurality of parts or layers suitably fastened together as by stitching or riveting. 50 In the present instance the trace is shown as consisting of an outer section or layer, 2, having formed therein adjacent to its end a cock-eye, 3, said eye comprising a substantially circular hole, 4, with which is connect-55 ed the forward end of a slot or elongated opening, 5. The inner section or layer, 6, of

the trace has formed therein a cock-eye, 7, which consists of a substantially circular hole, 9, which is disposed at some distance from the end of the trace and in advance of 60 the hole, 4, in the cock-eye, 3, of the outer layer of the trace. A long slot or passage, 10, connects with the hole, 9, and extends to near the end of the trace, the end of said slot being in alinement with the end of the 65 slot, 5, in the outer layer of the trace.

Between the inner and outer layers or sections, 2 and 6, of the trace is arranged an intermediate layer or section, 12, in which is formed a cock-eye, 13, said cock-eye consist- 70 ing of an elongated passage, 14, the width of which corresponds to the diameter of the holes, 4 and 9, of the cock-eyes, 3 and 7, in the inner and outer layers of the trace. The inner end of the passage, 14, is in alinement 75 with the hole, 9, of the cock-eye, 7, of the inner layer, while the outer end of said passage, 14, is in alinement with the hole, 4, of the cock-eye 3 in the outer layer of the trace, and with said outer end of the passage, 14, is con- 80 nected the forward end of a slot, 15, which extends toward the rear end of the trace and has its outer end wall in alinement with the ends of the slots, 5, 10, of the cock-eyes in the outer and inner sections of the trace.

Adapted to be engaged with the cock-eyes in the end of the trace is a fastening stud, 16, which may be formed integral with the end of a ferrule, 17, which is fastened on the end of the whiffletree, 19, as shown in Figs. 1 and 2 90 of the drawing, or which may be driven or otherwise secured directly in the end of the whiffletree, as shown in Fig. 5. On the outer end of the stud, 16, is formed a head, 19, the inner side of which is flat and disposed at 95 right-angles to the stud, while the outer side of the head is preferably rounded or beveled, as shown, to facilitate the engagement of the

stud with the cock-eyes in the trace.

In connecting the trace with the stud, 16, 100 the head of the stud is first engaged with the hole, 9, of the cock-eye, 7, in the inner trace section, and with the elongated passage, 14, of the cock-eye in the intermediate section, and the stud slipped along in the slot, 10, of 105 said cock-eye, 7, until the head reaches the end of the elongated passage, 14, of the intermediate section, and is in alinement with the hole, 4, in the cock-eye, 3, of the outer trace section, after which said head is pushed 110 through said hole, 4, and the stud then moved rearwardly through the slots of the

cock-eyes in all of the trace sections until said stud engages the rear ends of said slots, when the connection of the trace with the whiffletree will be completed. When the end of the trace has thus been engaged with the stud, 16, on the end of the whiffletree, said trace will be held against casual disengagement and may only be disconnected from the stud by a reversal of the movement just described.

From the foregoing description, taken in connection with the accompanying drawing, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claims.

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

1. A trace end formed of a plurality of sections or layers suitably fastened together, each of said layers having formed therein a cock-eye having an enlarged opening and an elongated slot connected with said enlarged opening, the opening in the cock-eye of one of said layers being out of alinement with the

enlarged opening of the cock-eye of another layer whereby a circuitous passage is formed through said layers of the trace end.

2. A trace end comprising an outer section 35 having formed therein adjacent to its outer end a cock-eye, an inner section having formed therein a cock-eye, said cock-eyes comprising enlarged openings with which are connected slots, the enlarged opening of the 40 cock-eye in the inner section being out of alinement with and arranged in advance of the enlarged opening of the cock-eye in the outer section, and an inner section having formed therein a cock-eye comprising an en- 45 larged elongated portion, the forward end of which is in alinement with the enlarged opening of the inner cock-eye and the outer end of which is in alinement with the enlarged opening of the outer cock-eye, and a slot con- 50 nected at its inner end with the elongated enlarged portion of the cockeye and having its outer end in alinement with the slots of the inner and outer cock-eyes.

In testimony whereof I have hereunto set 55 my hand in presence of two subscribing wit-

nesses.

GEORGE A. CROW.

Witnesses:

T. W. Williams, J. M. McCain.