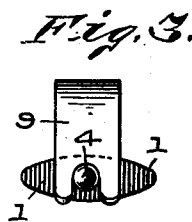
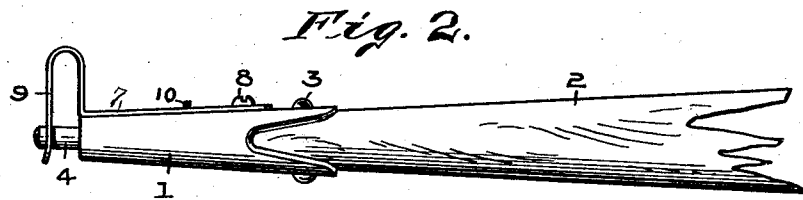
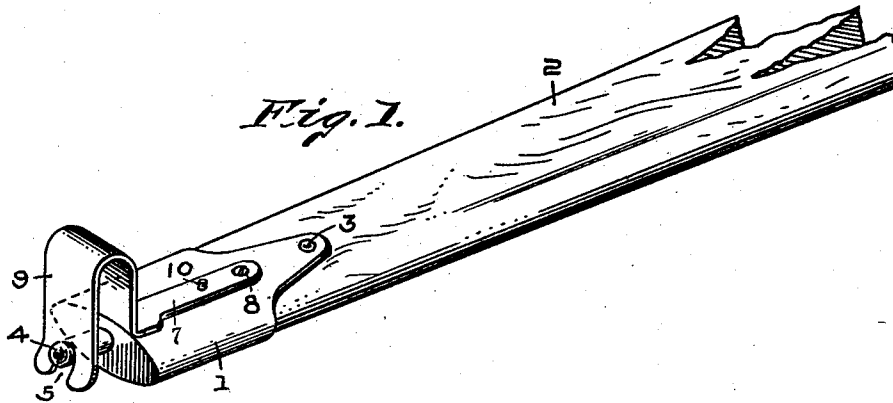


No. 857,986.

PATENTED JUNE 25, 1907.

S. B. FIELD.
TRACE FASTENER.
APPLICATION FILED APR. 9, 1906.



WITNESSES:

J. C. Dyner.
Wm. Hurte.

INVENTOR

Samuel B. Field,
BY *Minton Koerner,*
ATT'YS.

UNITED STATES PATENT OFFICE.

SAMUEL B. FIELD, OF SCOTCH PLAINS, NEW JERSEY.

TRACE-FASTENER.

No. 857,986.

Specification of Letters Patent.

Patented June 25, 1907.

Application filed April 9, 1906. Serial No. 310,876.

To all whom it may concern:

Be it known that I, SAMUEL B. FIELD, a citizen of the United States, residing at Scotch Plains, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Trace-Fasteners, of which the following is a specification.

This invention relates to a trace fastener, and the object of the invention is to provide a means whereby a trace can be so secured to a whiffletree as to prevent accidental displacement of the same; but arranged that the said trace may be easily and readily removed from the whiffletree, when desired.

I accomplish the objects of my invention by the mechanism illustrated in the accompanying drawings in which

Figure 1 is a perspective view of one end of a whiffletree with one of my improved trace fasteners attached thereto. Fig. 2 is a side elevation of the construction shown in Fig. 1. Fig. 3 is a front elevation of the construction shown in Fig. 2.

In the drawings, 1 is a socketed ferrule, which is secured to the end of an ordinary whiffletree 2, by means of a transverse pin 3, and is provided on its front face with an integrally formed pin 4, to which the trace (not shown) is secured. In providing the pin 4, the elongated slots in the trace are dispensed with, which have a tendency to weaken the trace, and a round hole is substituted therefor to correspond with the diameter of the pin 4.

In order to prevent the trace from being accidentally displaced from the pin 4, I provide spring 7, having its forward end bent upward in a U-shape and is provided with a notch 5 which embraces the pin 4 near its outer end. The U-shaped bend 9 is made in order to pass around the trace, when the spring 7 is in operating position. The spring 7 is secured to the ferrule 1 by means of a screw 8. The flexibility of the spring 7 permits it to be bent away from the pin 4 to permit the trace to be inserted and placed on said pin. When the spring is released it im-

mediately returns to normal position, and thus prevents displacement of the trace. In order to prevent the spring 7 from getting out of longitudinal alinement of the pin 4, so as to insure the registration of the two parts after having been disconnected, I provide a pin 10 situated in the ferrule 1 that passes through an aperture in the body of the spring 7. When the spring is bent to remove the member 9 from the pin 4, the spring 7 might swing laterally if it were not for the pin 10. So it will be seen that this latter pin insures a perfect vertical movement of the spring 7, and thus insures that the notch 5 will at all times register with the pin 4.

Having thus fully described my said invention, what I desire to secure by Letters Patent of the United States, is—

1. A trace fastener, comprising a socketed ferrule adapted to engage the end of a whiffletree and having an integrally formed pin on its closed end, a slotted flexible spring adapted to embrace the pin and secured to the ferrule and provided with a guide aperture, and a guide pin on the ferrule to engage the guide aperture in the spring to keep the slotted end of the latter and the pin in alinement.

2. A trace fastener, comprising a socketed ferrule adapted to engage the end of a whiffletree and provided with an integrally formed and longitudinally disposed pin, a flexible U-shaped spring provided with a slotted end to embrace the pin and provided with a guide aperture, means for securing said spring to the ferrule, and a pin in the ferrule to engage the guide aperture in the spring for directing the movement of the latter.

In witness whereof, I, have hereunto set my hand and seal at Plainfield N. J., this, twenty seventh day of March, A. D. one thousand nine hundred and six.

SAMUEL B. FIELD. [L. s.]

Witnesses:

ISABELLA C. FIELD,
ELIZABETH FIELD.