

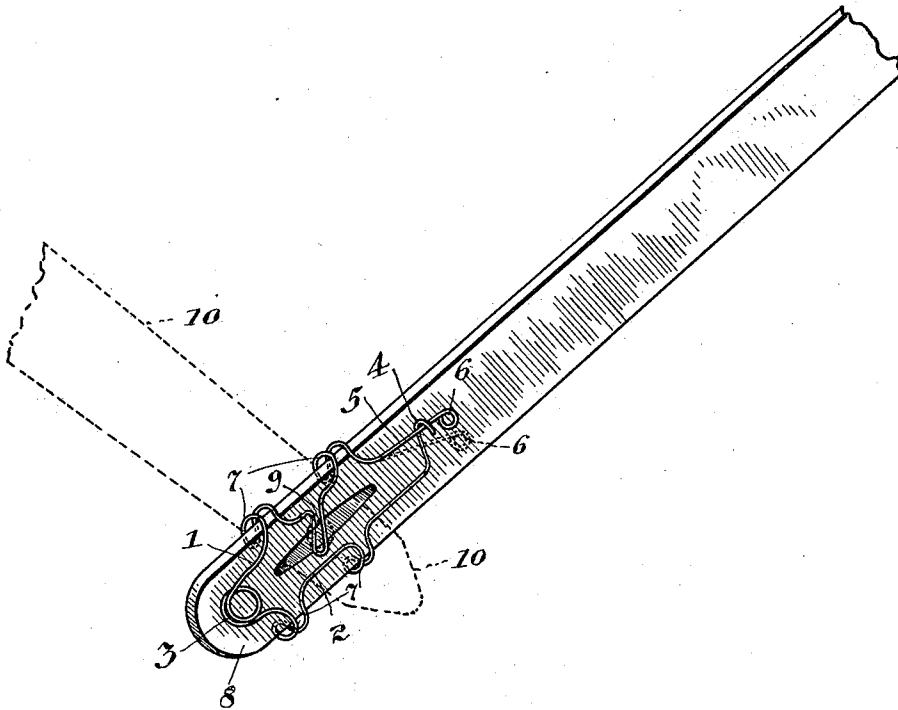
A. E. QUANSTROM.

TUG FASTENER.

APPLICATION FILED MAR. 8, 1911.

1,029,888.

Patented June 18, 1912.



Witnesses

W. G. Smith

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UNITED STATES PATENT OFFICE.

ANDREW E. QUANSTROM, OF CHICAGO, ILLINOIS.

TUG-FASTENER.

1,029,888.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed March 8, 1911. Serial No. 613,146.

To all whom it may concern:

Be it known that I, ANDREW E. QUANSTROM, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Tug-Fasteners, of which the following is a specification.

My invention relates to improvements in tug fasteners, and has for its object the production of a tug fastener of improved construction and operation.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification and which is a perspective view of the end of a tug or trace equipped with a fastener embodying my invention.

The preferred form of construction as illustrated in the drawing comprises a wire member formed of a single piece of spring wire bent into two separable portions 1 and 2 as shown. The portions 1 and 2 are permanently connected together at one end by means of the spring wire coil 3 and at their other end by means of the hook 4 formed on one end of the wire and adapted to engage the other end 5 of the wire as shown. Wire end 5 is provided with an eye 6 which serves as a finger piece for attachment or detachment of the fastener. Each of the portions 1 and 2 is provided with loops bent to form hooks 7 which are adapted to embrace the edges of the trace 8 to hold the fastener in position on the trace as shown. Portion 1 is provided with a downwardly extending loop 9 which forms a projection adapted to be passed through the usual perforation in the end of a whiffle-tree 10.

In use the tug is first placed over the end of the whiffle-tree in the usual manner and then the fastener is placed in position over the end of the tug and whiffle-tree with projection 9 passing through the usual perforation and in the end of the whiffle-tree in which position the fastener may be readily secured by engaging the hook 4 with the wire end 5. The fastener and tug may be readily detached by disengaging end 5 from hook 4 a manipulation which is facilitated by the presence of eye 6.

While I have illustrated and described the preferred construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the exact details of construction set forth, but desire to avail myself of such variations and modifications as fall within the scope of the appended claims.

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

1. A device of the class described comprising a member formed of a single piece of wire bent to form separable portions, each of said portions being provided with two hooks adapted to embrace the edges of a tug and one of said portions being provided with a projection located between said loops and adapted to be passed through the perforation in the end of a whiffle-tree, said portions being connected together at one end by a spring coil, and at the other end by means of a hook on one end of the wire embracing the other end of the wire, substantially as described.

2. A device of the class described comprising a member formed of a single piece of spring wire bent to form separable portions, each of said portions being provided with two hooks adapted to embrace the edges of a tug and one of said portions being provided with a projection located between said loops and adapted to be passed through the perforation in the end of a whiffle-tree, said portions being connected together at one end by a spring coil, at the other end by means of a hook on one end of the wire embracing the other end of the wire, said other end being provided with an eye adapted to serve as a finger piece, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANDREW E. QUANSTROM.

Witnesses:

JOSHUA R. H. POTTS,
W. C. SMITH.