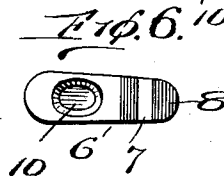
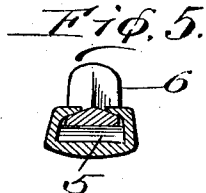
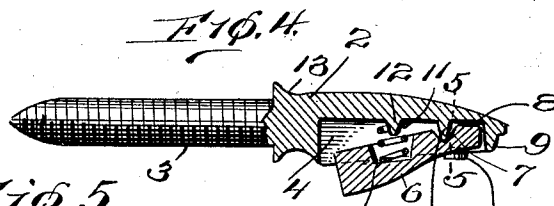
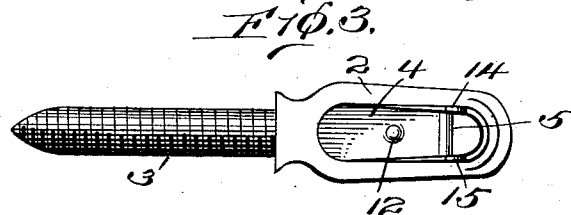
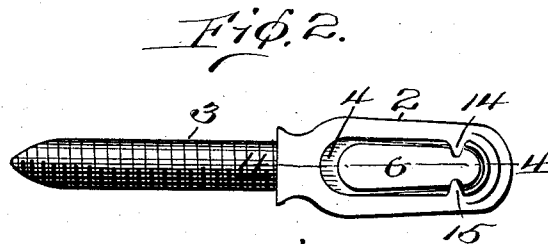
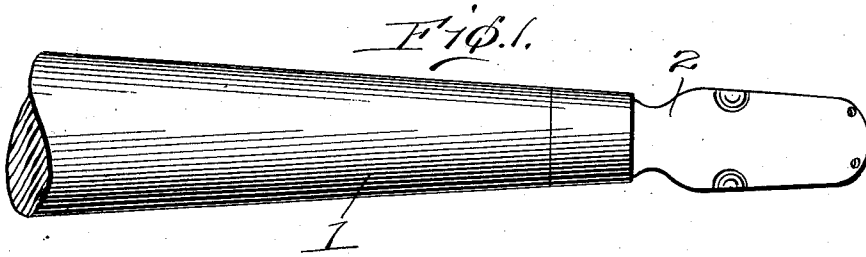


T. A. BAKKEN.
TRACE FASTENER.
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1,009,461.

Patented Nov. 21, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

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TRACE-FASTENER.

1,009,461.

Specification of Letters Patent.

Patented Nov. 21, 1911.

Application filed January 24, 1911. Serial No. 604,488.

To all whom it may concern:

Be it known that I, THORE A. BAKKEN, a citizen of the United States, residing at Soldiers Grove, in the county of Crawford and State of Wisconsin, have invented certain new and useful Improvements in Trace-Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in whiffletree tips or trace fasteners, and particularly to improved means for holding a trace in position with the use of a minimum number of parts.

The object in view is the construction and arrangement of a trace fastener designed to thoroughly accomplish the purpose for which it is constructed, but formed of a comparatively few parts, and practically no parts which will easily get out of order.

A still further object of the invention is the arrangement in a trace fastener, of a head structure arranged with a recess having a ridge or stop projecting across one end and a projecting journal member, the same being associated with a catch pivotally mounted in the recess, which catch is held loosely in position by suitable nibs or ears turned over from the head portion against the catch.

With these and other objects in view the invention comprises certain novel constructions, combinations, and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 is a top plan view of an embodiment of the invention shown applied. Fig. 2 is a bottom plan view of an embodiment of the invention. Fig. 3 is a bottom plan view of the head before the catch and spring have been placed therein. Fig. 4 is a longitudinal vertical section through Fig. 2, approximately on line 4—4. Fig. 5 is a section through Fig. 4 on line 5—5. Fig. 6 is a plan view of the upper face of the catch.

In constructing a trace fastener or whiffletree tip embodying the invention the same is formed with a head, a movable catch, and a spring for normally holding the catch in an outer position. The head is preferably formed of cast material and made in one operation, after which the catch is posi-

tioned loosely in the head, and ears or nibs are turned over the catch for loosely holding the catch properly in a recess formed in the head, a spring being inserted in the recess of the head and projecting into the recess in the catch at the time that the catch is fitted into the head, so that one end of the catch is normally held in an outer position for resisting removal of a trace.

In order that the invention may be more clearly understood an embodiment of the same is shown in the accompanying drawings, in which 1 indicates a whiffletree of any desired kind, and 2 the head of the trace fastener. The head 2 is provided with a threaded shank 3 extending into whiffletree 1, and the head 2 is held in the whiffletree thereby in such a position that the recess 4 of the head 2 will always project downwardly. The head 2 is formed with a rib or projection 5 which extends transversely across the recess 4 and projects into the recess for acting as a journal member for catch 6. Catch 6 is formed with a notched out portion 7 for loosely fitting over rib 5, and is also beveled at 8 so as to permit a proper pivotal movement of the opposite end of the catch for acting as a stop in order to prevent the accidental removal of a trace from head 2. The head 2, in addition to having a rib formed thereon, is provided with a stop or ridge 9 near the outer end of the head, which is designed to assist rib 5 in preventing catch 6 from being forced longitudinally off of the head. Under ordinary circumstances the end of catch 6 will not quite touch ridge 9, but if excess strain is brought to bear thereon in a longitudinal direction the catch may slip slightly over ridge 5, or even bend ridge 5, so that the pressure will be transferred entirely or partly to member 9.

The catch 6 is formed with an opening 10 into which projects spring 11 that normally holds the end of the catch in an outer position. Spring 11 is arranged to fit over projection 12 so as to be properly held in position, the recess 10 accommodating the spring when the catch 6 is forced entirely in the recess 4. Whenever a trace is forced over the outer end of the head 2 to the reduced portion 13 catch 6 will be depressed until the outer surface thereof is substantially flush with the outer lower surface of the head. In order to properly hold catch

6 in place nibs or ears 14 and 15 are cast or formed on the head 2, and are bent over against or almost against the catch 6. It will be noted that the ears 14 and 15 are positioned almost in the same transverse plane as the ridge or pivotal member 5, so that the catch cannot be removed. By this structure it will be observed that the catch is held pivotally in position without the use of ordinary journal members, rivets, and the like, but presents the same advantages and additional advantages over such structures. The head 2 is arranged to be cast in one piece in a completed condition without any machine work, and catch 2 is to be formed in a similar manner, whereby the same may be manufactured at a minimum cost. The spring 11, of course, must be made in the usual manner, and when inserted, together with the catch 6, ears 14 and 15 may be bent over by a hammer or other implement, and the device is complete. It will be evident that the head may be ground or finished in order to take a high polish if desired, and may be ornamented with any desired configuration without departing from the spirit of the invention. It will also be evident that the castings may be made from brass, malle-

able iron, or other metal, provided the same will permit of bending ears 14 and 15 as set forth. The trace fastener is adapted to accommodate any of the ordinary traces, including the leather, chain and ordinary farm harness cock-eye trace. In case the chain trace should be too large the same may be easily made to fit by pressing the sides of the link in any desired manner.

What I claim is:

In a trace fastener, a head formed with a recess portion, a rib extending into said recess portion, a stop arranged at one end of said recess portion, and a pair of ears projecting transversely across said recess portion near said rib, a catch formed with a notch fitting over said rib so that one end of the catch will be in proximity to said stop and beneath said ears, and a spring for resiliently holding one end of said catch out of said recess portion.

In testimony whereof I affix my signature in presence of two witnesses.

THORE A. BAKKEN.

Witnesses:

ROBERT T. LANG,
A. L. KITCHIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."