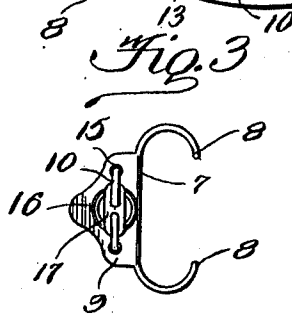
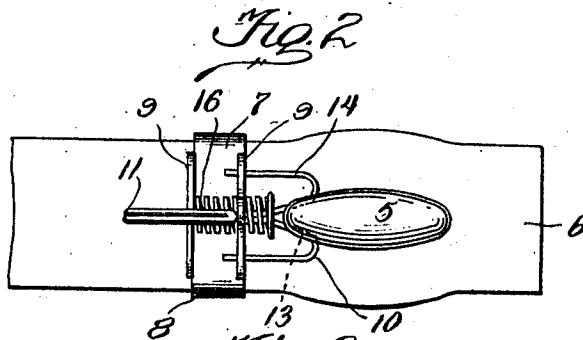
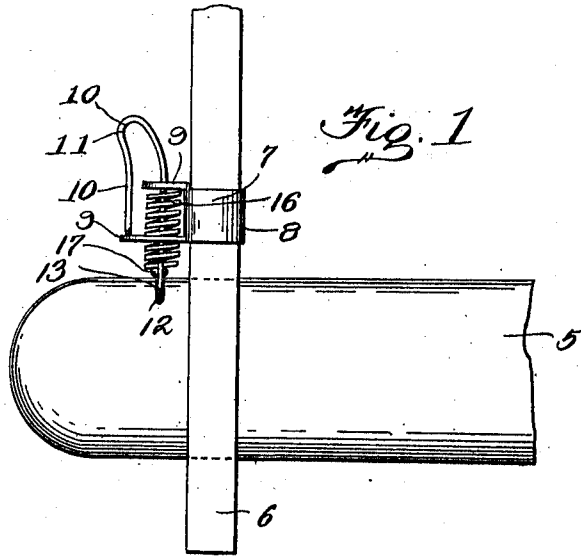


E. V. BURROW.  
TRACE LOCK.  
APPLICATION FILED OCT. 1, 1910.

990,104.

Patented Apr. 18, 1911.



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# UNITED STATES PATENT OFFICE.

EZEKIEL V. BURROW, OF MADISON, ALABAMA.

## TRACE-LOCK.

990,104.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed October 1, 1910. Serial No. 584,908.

To all whom it may concern:

Be it known that I, EZEKIEL V. BURROW, a citizen of the United States, residing at Madison, in the county of Madison and State of Alabama, have invented new and useful Improvements in Trace-Locks, of which the following is a specification.

The invention relates to a trace fastener and more particularly to the class of trace locking devices.

The primary object of the invention is the provision of a device of this character in which a trace end when engaged with a swingletree will be securely locked thereto so as to prevent the wearing of the trace and swingletrees and that will enable the ready and quick attachment and detachment of the trace end to and from the swingle-trees.

Another object of the invention is the provision of a locking device of this character in which the trace end will be securely fastened to a swingletree without possibility of the same becoming accidentally detached from the latter.

A further object of the invention is the provision of a device which may be readily and conveniently mounted upon a harness trace and that will be reliable and efficient in operation and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the claims hereunto appended.

In the accompanying drawing:—Figure 1 is a fragmentary top plan view of a swingletree with the trace connected therewith and the locking device applied thereto constructed in accordance with the invention. Fig. 2 is a side view of the trace with the locking device thereon. Fig. 3 is an end view of the locking device detached from the trace.

Similar characters of reference are employed to designate corresponding parts in the several figures.

Referring to the drawings by numerals, 5 designates the end portion of an ordinary

well-known swingletree, the same being rounded and outwardly tapered at its end in the usual manner for its engagement with the end of a trace 6, the latter being provided near its free end with a suitable opening correspondingly shaped to and receiving the said tapered end of the swingletree 5 for the connection of such trace therewith.

The trace locking device comprises a base plate 7 preferably constructed from metal with its ends 8 inbent to partially surround the cross sectional area of the trace 6 and for the secure clenching of the said plate 7 thereto against the outer face thereof. The plate 7 is provided with outturned alining guide ears 9 in which is slidably mounted a locking member as will be hereinafter more fully described. This locking member comprises a single piece of metal material bent at one end to provide a hook-like extremity 11 and rearwardly diverging yieldable gripping arms 12 to engage in a notch 13 in the forward edge of the swingletree 5, the arms 12 being provided with forwardly extending guide terminals 14 slidably engaging in openings 15 in one guide ear 9 for the guiding of the locking member in its movements.

Surrounding the locking member is a coiled expansion spring 16 one end of which has its bearing against the foremost guide ear 9 and the opposite end thereof has its bearing against an abutment collar 17 secured to said member, the spring being adapted to force the arms of the locking member in position for positive engagement with the swingletree so as to prevent accidental detachment of the trace when engaged with the said swingletree.

What is claimed, is:—

1. A locking device for a trace end comprising a base plate having means for securing it to such trace, guide ears projecting outwardly from said base and in alinement with each other, a locking member slidably supported by said ears and having yieldable gripping arms for engagement with a swingletree, and spring means acting upon said locking member, substantially as described.

2. A locking device comprising a base plate having inturned ends for securing it to

a trace, alining outturned ears formed on  
said base plate and provided with alining  
openings, a locking member slidably fitted  
in said openings and having yieldable rear-  
5 wardly diverging gripping arms for en-  
gagement with a swingletree, a hook terminal  
formed on said member at its opposite end,  
and an expansion spring surrounding the

said member and adapted to act thereon for  
normally holding it in locking position.

In testimony whereof I affix my signa-  
ture in presence of two witnesses.

EZEKIEL V. BURROW.

Witnesses:

THOS. W. CARTER,  
STEPHEN C. GATES.

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

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