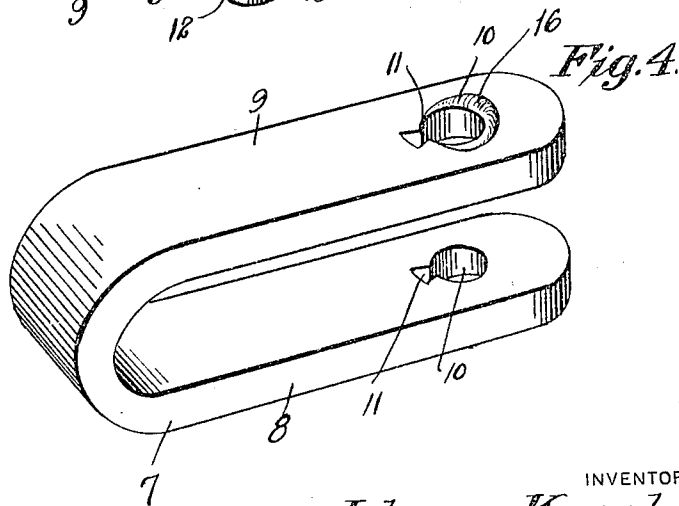
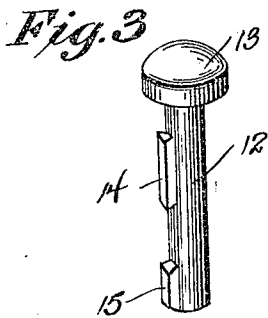
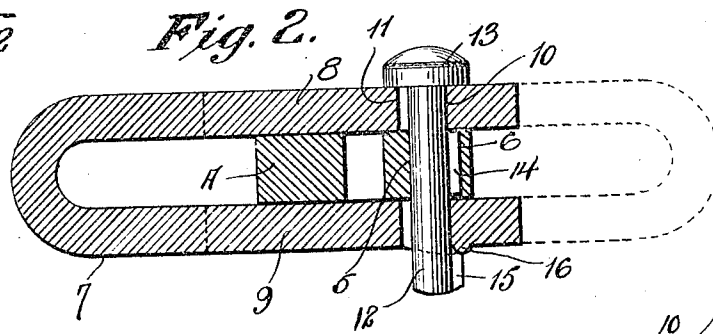
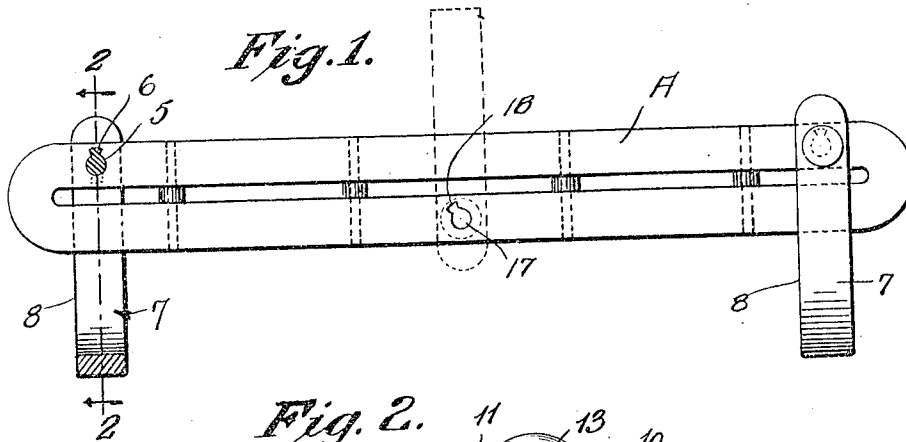


J. KEOGH.
CLEVIS LOCKING DEVICE.
APPLICATION FILED MAR. 4, 1918.

Patented Jan. 28, 1919.

1,292,801.



INVENTOR

John Keogh,

WITNESSES

James F. Brown,
Wm. H. Sullivan

BY

Richard Owen,

ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN KEOGH, OF ST. PETER, MINNESOTA.

CLEVIS-LOCKING DEVICE.

1,292,801.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN KEOGH, a citizen of the United States, residing at St. Peter, in the county of Nicollet and State of Minnesota, have invented certain new and useful Improvements in Clevis-Locking Devices, of which the following is a specification.

This invention relates to an improved device for locking a draft clevis to a swingle-tree or a doubletree.

One of the objects of the invention is to provide a locking device of this character that will automatically be placed in operative position when the clevis is moved to operative position and which will be positively locked against displacement until such time as the clevis is swung or moved to inoperative position.

A further object of the invention is to provide a device of this character which consists of comparatively few parts and is simple in construction, but durable and well adapted to withstand the rough usage to which devices of this character are ordinarily subjected.

For a full description of the invention and the advantages and merits thereof, reference is to be had to the following description and accompanying drawings, in which:—

Figure 1 is a plan view of a doubletree showing the invention applied.

Fig. 2 is a section taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the locking pin.

Fig. 4 is a perspective view of the clevis constructed in accordance with my invention.

Referring to the drawings, wherein for the purpose of illustration, like characters of reference indicate corresponding parts throughout the several views, the doubletree, a conventional form of which is indicated at A, is provided near each end with a suitable opening 5 and a key way 6. The key way communicates with the opening, and preferably extends toward the rear edge of the doubletree as shown to advantage in Figs. 1 and 2 of the drawing. The clevis is of the usual formation which consists of the substantially U-shaped member including the arms 8 and 9 each of which is provided with a pin receiving opening 10 and a key way 11, the latter communicating with the openings and extending toward the

closed end of the clevis, as shown to advantage in Fig. 4 of the drawing.

In Fig. 3 is illustrated the locking pin which consists of the cylindrical shank 12 having a head 13 at one end. Integrally formed with the shank, substantially intermediate the length of the shank is a locking key 14 which is of a length equal to the thickness of the doubletree as shown in Fig. 2. Near the end of the shank 12 is a binding key 15 and this key is adapted to extend beyond the lower side of the clevis when the pin is in operative position, the pin being long enough to extend beyond the bottom of the clevis. The bottom of the clevis, as illustrated in Figs. 2 and 4 of the drawing, is provided with a ridge 16, which extends around the marginal edge of the opening 10 in the lowermost arm of the clevis and this ridge is of tapered formation, its thickest part being diametrically opposite the key way 11 while the ends of the ridge merge into the edge of the opening near the side of the key way 11 so that when the locking key 15 is thrust through the opening, the binding key 15 will pass beyond the arm of the clevis and when the latter is turned, the ridge, which thereby forms a cam surface, will engage the end of the binding key 15 and bind the head of the key tightly against the opposite arm of the clevis to more effectively hold the key against displacement and also prevent free movement of the clevis when in operative position.

When the clevis is being mounted, it is placed upon the end of the doubletree A as indicated by dotted lines in Fig. 2. The key way 6 will then be in alinement with the key ways 11 and the pin may be passed through the alined openings 5 and 10. When the key 14 is in registration with the key way 6, the clevis may be turned by swinging the same over the end of the doubletree to the position shown by full lines and this action will bring the parts to the position shown in Fig. 2 and at the same time cause the cam surface to engage the end of the binding key 15 as above set forth.

In order that the single clevis may be attached to the center of the doubletree A or for the purpose of employing the invention with a swingletree, the opening 17 is provided intermediate the length of the swingletree or doubletree as shown in Fig. 1 of the drawing. The key way 18, however, in this instance is disposed at an ob-

tuse angle with respect to the transverse center line of the doubletree so that it is merely necessary to swing the clevis at a slight angle in order to insert the locking pin, whereupon the clevis may be swung to the position shown by dotted lines in Fig. 1 to bring the key ways 18 and 11 out of alinement thereby causing the locking pin to be held against displacement.

From the foregoing it will be observed that a very simple and durable device has been provided, the details of which embody the preferred form. I desire it to be understood, however, that slight changes may be made in the minor details of construction without departing from the spirit of the invention or the scope of the claims hereunto appended.

I claim:

1. A clevis locking device comprising a supporting member having a clevis mounted thereon, and including spaced arms embracing the said supporting member, a locking pin provided with longitudinally extending keys, and means formed in the said supporting member and in the said clevis to permit insertion of the keys through the said member and clevis when the latter is swung on the member to inoperative position, and to maintain the said key against displacement when the said clevis is swung on the member to the operative position.

2. A clevis locking device comprising a supporting member having a clevis mounted thereon, the latter including spaced arms, each provided with an opening and a key way, the said supporting member also having an opening and a key way, the said key ways being disposed in a position whereby they are in longitudinal alinement when the said clevis is in inoperative position and out

of longitudinal alinement when the said clevis is in operative position, and a key adapted for reception in the said key ways.

3. A clevis locking device comprising a supporting member having a clevis provided with spaced arms embracing the said supporting member, a locking pin extending through the said arm and supporting member and provided at one end with a binding key and means formed on the said clevis for engaging the said binding key when the clevis is rotated on the member.

4. A clevis locking device comprising a supporting member having a clevis mounted thereon, openings formed in the clevis and in the said member, the said openings being provided with key ways, a locking pin having a key intermediate the length adapted for reception in the key way in the said supporting member a binding key carried by the pin and adapted to extend beyond the said clevis and means formed on the clevis and adapted for engagement with the end of the said binding key for exerting a binding action thereon when the said clevis is rotated on the pin.

5. A clevis locking device comprising a supporting member having a clevis mounted thereon, the latter being provided with a ridge of tapered formation, and a locking key extending through the said clevis and the supporting member, and provided at one end with a binding key adapted to engage the said ridge when the clevis is turned on the said pin.

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

JOHN KEOGH.

Witnesses:

M. E. STONE,
FRED M. PARADROME.