H. B. DEAKINS.

CLEVIS.

APPLICATION FILED FEB. 27, 1912.

1,079,476. Patented Nov. 25, 1913.

Fig. 1.

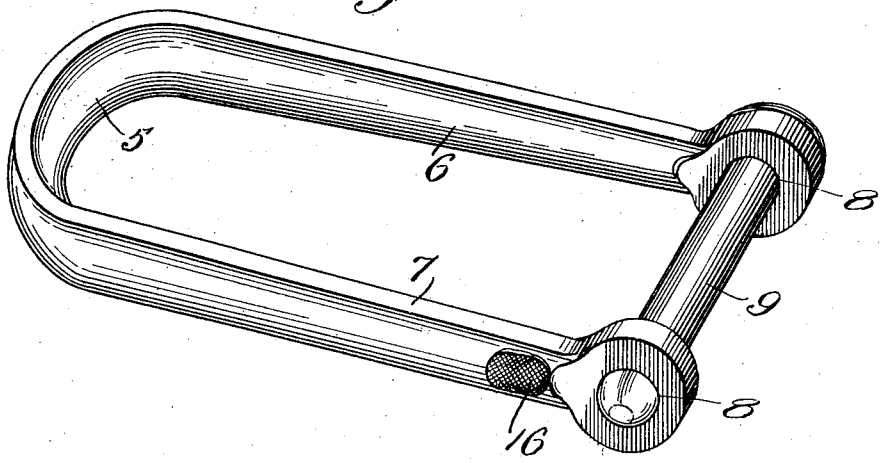


Fig. 2.

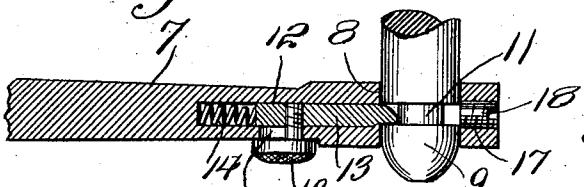


Fig. 3.

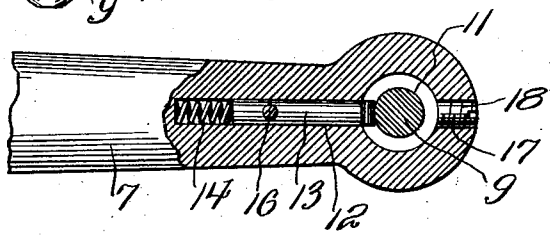
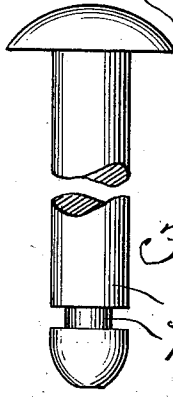


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY B. DEAKINS, OF LOGAN, IOWA.

CLEVIS.

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To all whom it may concern:

Be it known that I, HENRY B. DEAKINS, a citizen of the United States, residing at Logan, in the county of Harrison and State of Iowa, have invented new and useful Improvements in Clevises, of which the following is a specification.

The invention relates to a clevis, and more particularly to the class of clevises having removable coupling pins.

The primary object of the invention is the provision of a clevis in which the coupling pin thereof is capable of being locked in the arms of the clevis, and can be readily and easily removed, when it is desired to detach the clevis, or to fasten the same to a part to which it is to be attached.

Another object of the invention is the provision of a clevis in which the coupling pin may be conveniently locked therein, thus preventing the same from becoming lost or withdrawn.

A further object of the invention is the provision of a clevis which is simple in construction, thoroughly reliable and efficient in its purpose, 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 claim hereunto appended.

In the drawings: Figure 1 is a perspective view of a clevis constructed in accordance with the invention. Fig. 2 is a fragmentary vertical longitudinal sectional view through one of the clevis arms, showing the coupling pin in locked position and in side elevation. Fig. 3 is a fragmentary bottom plan view of the clevis, the same being partly in horizontal section. Fig. 4 is a side elevation of the pin removed from the clevis.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, the clevis comprises the usual style of yoke 5, having the upper terminal or arm 6, and the lower terminal or arm 7. These terminals, at their extremities, are thickened and perforated to form alining eyes 8 for the reception of a coupling pin 9. The pin 9 is of the usual construction in this instance, with the exception that at one end it is provided with a bolt-like head, while its opposite end is slightly rounded and spaced therefrom is formed an annular groove 11.

Formed in the lower terminal or arm 7 and opening into the eye 8 thereon is a longitudinally disposed bolt receiving socket or recess 12, in which is slidably fitted a locking bolt 13, the same being forced into engagement with the groove 11 by means of a coiled expansion spring 14 fitted within the recess or socket 12 rearwardly of the said bolt. Communicating with the socket or recess 12 and provided in the arm or terminal 7, adjacent to the eye 8, is a guide slot 15, through which is projected a finger engaging lug 16, the latter being threaded in the bolt, and is designed to retract the same, when it is desired to disengage the said bolt from the groove 11 in the pin, thus permitting the latter to be detached or removed from the clevis.

To enable the bolt to be inserted in the recess or socket 12 in the arm or terminal 7, there is provided in alinement with the said socket or recess, at a diametrically opposite point therefrom in the eye 8, an opening 17, in which is threaded a plug 18. Thus upon the removal of this plug, the bolt may be inserted in the socket or recess 12, or removed therefrom, as will be obvious.

It will be seen that there is provided a very simple manner of securely locking a clevis pin in position in a clevis, and thereby the danger of any accidental withdrawal of the pin and its loss is overcome. Furthermore, the groove 11 in the pin is concealed within one eye 8 on the clevis, so as to prevent the clogging thereof, or the filling of the same with dirt or other foreign matter, which would necessarily interfere with the engagement of the locking bolt in said groove.

What is claimed is:

The combination with a clevis having alining eye terminals at the free ends of its limbs, of a clevis bolt provided with a head at one end and an outwardly tapering opposite end, and also provided with an annular groove contiguous to the said tapered end and adapted to be concealed within one of the eyes when the said pin has been inserted in both eyes, one of the limbs of the said clevis being provided with a guide bore intersecting its eye terminal and also opening through the outer side edge of the latter, a

latch bolt slidably fitted within the bore and having an outwardly beveled end cooperative with the tapered end of the clevis bolt for automatically snapping the latch in the annular groove in the bolt, a finger button located exteriorly upon one of the limbs for manual manipulation and having a shank engaging the latch bolt to permit the retracting of the latter from the annular groove in the clevis bolt, a spring located within the bore rearwardly of the latch bolt for normally projecting it into the eye terminal for positive engagement with the clevis bolt, and a removable plug inserted in the outer end of the bore for closing the same and adapted when removed to permit the extracting of the latch bolt from the said bore.

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

HENRY B. DEAKINS.

Witnesses:

VERNON J. FINLEY,

FERRIS FINLEY.

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