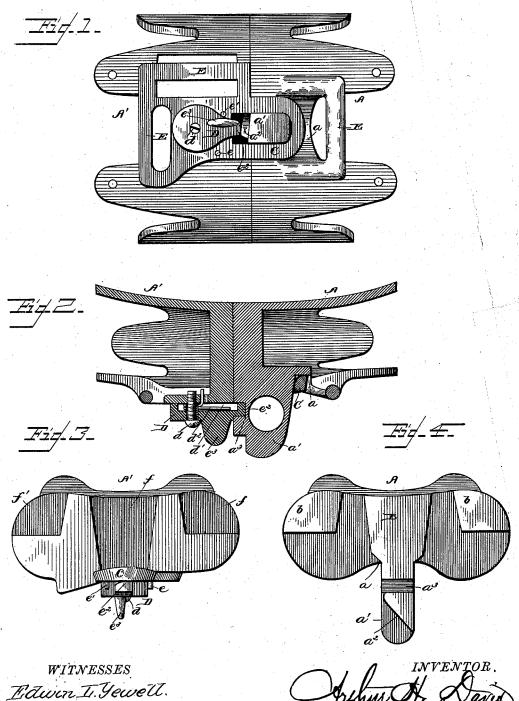
(No Model.)

A. H. DAVIS & G. KEITH.

HORSE COLLAR FASTENING.

No. 384,227.

Patented June 5, 1888.



Edwin I. Yewell. John Kinders Fr.

UNITED STATES PATENT OFFICE.

ARTHUR H. DAVIS AND GEORGE KEITH, OF EARLVILLE, ILLINOIS.

HORSE-COLLAR FASTENING.

SPECIFICATION forming part of Letters Patent No. 384,227, dated June 5, 1888.

Application filed March 29, 1888. Serial No. 268,790. (No model.)

To all whom it may concern:

Be it known that we, ARTHUR H. DAVIS and GEORGE KEITH, citizens of the United States of America, residing at Earlville, in the 5 county of La Salle and State of Illinois, have invented certain new and useful Improvements in Collar Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in collar fasteners and couplings, having for its object the provision of new and highly-efficient means for effecting the automatic coupling of the parts, and to have the parts located on the outer face of the parts coupled, and to provide as near as possible for a smooth outer face of the couplings.

The invention therefore comprises the detail construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims

In the accompanying drawings, Figure 1 is a bottom plan view of our invention. Fig. 2 is a longitudinal sectional view thereof. Figs. 3 and 4 are views showing parts detached or uncoupled.

Referring to the drawings, A A' indicate the irons or coupling-frames, designed to be secured 30 to the respective ends of the collar, as is customary, by means of nails, screws, or rivets passed through apertures in projecting portions of each iron or coupling-frame. The iron or frame A is provided in its central front sur 35 face with an inwardly curved portion or recess, a, from which projects a post or stud, a', having in its lower surface an inclined groove, a', and a horizontal slot or recess, a', which opens from the rear outer end of said inclined

40 groove.

B is a dovetail formed on the under surface of the upper iron, A, and said iron is provided at its outer ends with two short studs or shoulders, b b, as shown.

45 The lower iron or frame, A', is provided in its outer front face with an upwardly-projecting loop, C, through an aperture in which the stud or post a' of the iron A is designed to project, and said loop is designed to fit within the 50 central recess, a, whereby an approximately-smooth outer surface is obtained.

D is a button secured by means of a screw, d, passed therethrough, and the same is provided with a hole or aperture, d', wherein is secured a spring, d^2 , the other end of which projects 55 through a hole or aperture in the front of the iron A', whereby said button is normally held in a vertical position. Two stop-pins, e e', limit the movement of this button in either direction.

The spring held button D is provided with a nose, e^2 , slightly grooved on its inner and outer surfaces, as shown, and the same is also provided with a lug or head, e^3 , whereby said button, together with its nose, can be moved 65 out of its normally-vertical plane, the return movement of said button being effected by its inclosed spring.

The upper surface of the iron A'is provided with a dovetail groove or recess, f, as shown, 70 and at its outer ends is provided with two recesses, f'f', as shown.

The irons or frames A A' are each provided with cross-bars E, around which looped portions of straps of a horse's harness are passed. 75

In practice, when it is desired to effect the coupling of the parts, the post or stud a' of the iron A is inserted through the loops C of the other iron, and at the same time the dovetail B of the iron A is passed into its groove or re- 80 cess f in the other iron, and upon insertion of said stud or post through said loop the inclined groove thereof will come in contact with the nose of the button D, and will force said button as against the action of its spring into con-85 tact with the stop-pin e', and when said nose reaches or is at the point of conjunction of the inclined groove or recess and the slot of said post or stud, said nose will immediately enter said slot by reason of its spring, thus effecting 90 the connection between the two irons. At the same time the dovetail will have reached the full extent of its movement in its groove or recess, and the short studs b b of the iron A will fit snugly into the recesses formed therefor in 95 the adjoining iron, whereby a firm and secure coupling of the parts is effected.

From the foregoing description it will be seen that by reason of securing the loop of one iron in a recess in the adjoining iron more room is obtained for attaching the looped portions of straps of the harness, and that all the parts

of the coupling are on the outer face of said irons, thereby avoiding the inconvenience in securing the parts when the coupling devices are located within the irons, and it will also be seen that our invention embodies advantages in points of simplicity, durability, general efficiency, and inexpensiveness.

We claim as our invention-

1. As an improvement in collar fasteners or 10 couplings, the herein-described irons or frames having the stud or post provided with an inclined groove and a slot, the pivotally-secured spring-held button having a central hole or aperture, and the spring inclosed in said hole 15 or aperture, substantially as shown and described.

2. The combination, with the iron or frame A, having a groove or recess, a, and a stud or post provided with an inclined groove and a 20 horizontal slot or recess, of the frame A', having a loop fitting over said stud or post and resting in said groove or recess a, and the spring-held button having a nose entering said inclined groove and horizontal slot or recess,

25 substantially as shown and described.

3. As an improvement in fasteners or collar-couplings, the iron or frame having the central groove or recess, the stud or post having an inclined groove and a slot, the button having a projecting nose, the spring located 30 in said button, and the stop pins, substantially as shown and described.

4. The combination, with the iron or frame having the dovetail and the short studs, a central curved portion, and the stud or post hav- 35 ing an inclined groove and a slot, of the iron or frame having a loop, the spring-held button provided with a nose, and the lug or head and the stop pins, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

ARTHUR H. DAVIS.

GEORGE $\underset{\text{mark.}}{\overset{\text{his}}{\times}}$ KEITH.

Witnesses:

JAMES D. LAMATTER. CHAS. Hoss.