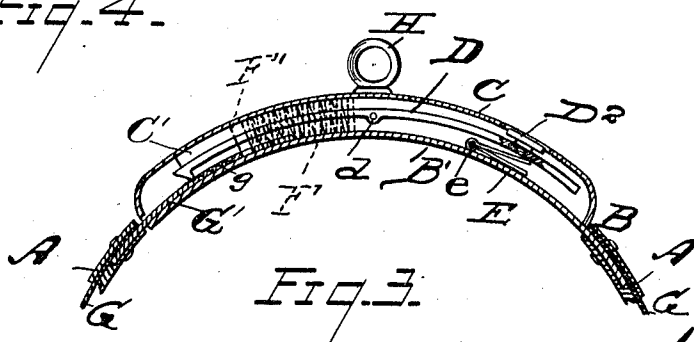
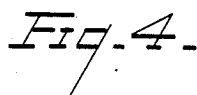
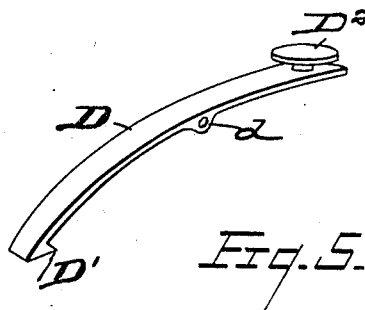
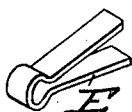
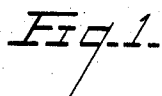


1,020,242.

Fig. 1 and Fig. 2 are detailed perspective views of a mechanical device. The device consists of a main curved body with internal components labeled A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, A', B', C', D', E', F', G', H', I', J', K', L', M', N', O', P', Q', R', S', T', U', V', W', X', Y', Z', A'', B'', C'', D'', E'', F'', G'', H'', I'', J'', K'', L'', M'', N'', O'', P'', Q'', R'', S'', T'', U'', V'', W'', X'', Y'', Z'', A''', B''', C''', D''', E''', F''', G''', H''', I''', J''', K''', L''', M''', N''', O''', P''', Q''', R''', S''', T''', U''', V''', W''', X''', Y''', Z'''. The device is shown in two states: Fig. 1 is a perspective view of the device in its closed position, and Fig. 2 is a perspective view of the device in its open position, showing the internal components and the mechanism for opening and closing the device. The device is shown in a perspective view, with the main body and the internal components clearly visible. The device is shown in a perspective view, with the main body and the internal components clearly visible. The device is shown in a perspective view, with the main body and the internal components clearly visible.



Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM WILSON, OF BIRMINGHAM, MICHIGAN.

COLLAR COUPLING OR FASTENER.

1,020,242.

Specification of Letters Patent.

Patented Mar. 12, 1912.

Application filed April 13, 1911. Serial No. 620,757.

To all whom it may concern:

Be it known that I, WILLIAM WILSON, citizen of the United States, residing at Birmingham, county of Oakland, State of Michigan, have invented a certain new and useful Improvement in Collar Couplings or Fasteners, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in collar couplings or fasteners, shown in the accompanying drawings and more particularly pointed out in the following specification and claims.

The object of my invention is to provide a quick engaging coupling device for collars—more especially dog collars—adapted for adjustment to meet individual requirements,—the construction being such that the collar may be readily released and the free end automatically forced out of the housing carrying the engaging or coupling device.

Other advantages and improvements will hereafter appear.

In the drawings accompanying this specification:—Figure 1 is a perspective view of a fragment of a collar with parts of the case carrying the coupling means broken away and in section to more clearly show the construction;—the free end of the collar being in released position. Fig. 2 is a similar perspective view showing the free end of the collar engaged by the coupling device or latch. Fig. 3 is a longitudinal section, the free end of the collar being engaged by the spring actuated latch. Fig. 4 is a perspective view of the spring employed to force the latch into locking engagement with the collar. Fig. 5 is a perspective view of the latch.

Referring now to the letters of reference placed upon the drawings:—A denotes the collar.

B indicates the case or shell of the coupling device secured to one end of the collar,—the drawing showing it engaged thereto by rivets *b* projecting through the strap and the lower wall of the case B.

C is a cover plate secured to the case B provided with depending walls *C'*, *C'*, spaced from the side walls of the case and from each other,—the edge of the walls be-

ing separated from the bottom plate *B'* to provide for the passage of the free end of the collar beneath the walls as will be hereafter explained.

D is a swinging spring actuated latch pivoted at *d* in the walls *C'*, *C'*. The latch D is provided at one end with a hook *D'* and at its opposite end with a push button *D*² lodged in an aperture, or a depression formed in the cover plate C;—the top surface of the push button *D*² lying below the plane of the plate C to provide against accidental release of the latch through the depression of the button.

E is a spring,—one end of which bears against the underside of the latch; the other against the plate *B'* of the case.

e is a transverse pin supported in the walls *C'*, *C'*, to secure the spring E against displacement.

F, F, denote springs lodged between the side walls of the case B and the walls *C'* of the cover plate,—one end of each bearing against cross partitions *C*², *C*², of the case.

F', F', are bumper blocks engaged to the opposite ends of the springs F.

G is a spring band lodged within the collar and secured at one end to the case B. A plate *G'*—relatively thicker—formed with a stepped or ratchet face *g* adapted to be engaged by the hooked end of the latch D is attached to the free end of the spring band;—the spring band and the projecting end piece *G'* may however, be integral if desired.

H is a swivel ring supported in the wall of the case B to receive the engaging end of a chain or leash.

Having indicated the several parts by reference letters, the construction and operation of the device will be readily understood. To engage the free end of the collar, the end of the plate *G'* is forced against the spring actuated bumper blocks F', F', compressing the springs F, F. The hook *D'* of the spring actuated latch D will thereupon successively engage the ratchet teeth *g* as the end of the collar is forced into the case until the proper adjustment of the collar is obtained,—the spring E holding the hooked end of the latch in engagement with the ratchet teeth while the springs F maintain the ratchet toothed plate in locking relation with the hook on the end of the latch. When it is desired to release the collar the push button *D*² is de-

pressed throwing the hooked end of the latch out of engagement with the ratchet *g*,—the springs *F* at the same time forcing the free end of the collar out of the case *B*.

5 While I prefer to employ the spring band *G* as it maintains the free end of the collar in position for readily entering the latch case, it may be dispensed with and the ratchet plate *G'* secured directly to the collar strap.

10 Having thus described my invention, what I claim is:—

1. In a collar coupling, the collar, a latch case secured to one end of the collar, a swinging latch bar pivoted within the case provided with a hook portion at one end to engage the free end of the collar, the other end of the latch projecting through the wall of the case whereby it may be actuated, a ratchet face plate projecting from the free end of the collar adapted to enter the case to be engaged by the hooked end of the latch bar, a pair of springs housed within the case adapted to bear against the end plate, and a spring to force the hooked end of the latch bar in locking relation with the ratchet plate.

2. In a collar coupling, the collar, a latch case secured to one end of the collar, a swinging latch bar pivoted within the case provided with a hook portion at one end to engage the free end of the collar, the other end of the latch projecting through the wall of the case whereby it may be actuated, a spring band housed within the collar secured at one end to the case, its free end carrying a projecting ratchet face adapted to enter the case to be engaged by the hooked end of the latch bar, a pair of springs housed within the case adapted to bear against the end plate, and a spring to force the hooked end of the latch bar in locking relation with the ratchet plate.

3. In a collar coupling, the collar, a latch case secured to one end of the collar having partitions forming separate chambers their edges spaced from one of its walls for the passage of the free end of the collar, a swinging latch bar pivoted between the partition walls, having one end provided with a hook to engage the free end of the collar, the other end of the latch bar projecting through the case for manually operating the bar, a plate carried by the free end of the collar adapted for engagement by the hooked end of the latch bar, a pair of springs carrying bumper plates lodged between the walls of the case adapted to yieldingly bear against the end of said plate, and a spring for forcing the latch bar into locking relation with the plate.

4. In a collar coupling, the collar, a latch case secured to one end of the collar having partitions forming separate chambers their edges spaced from one of its walls for the passage of the free end of the collar, a swinging latch bar pivoted between the partition walls, having one end provided with a hook to engage the free end of the collar, a push button secured to the other end of the latch bar for manually operating it, a plate carried by the free end of the collar adapted for engagement by the hooked end of the latch bar, a pair of springs carrying bumper plates lodged between the walls of the case adapted to yieldingly bear against the end of said plate, and a spring for forcing the latch bar into locking relation with the plate.

In testimony whereof, I sign this specification in the presence of two witnesses.

WILLIAM WILSON.

Witnesses:

GRACE E. WYNKOOP,
SAMUEL E. THOMAS.