F. P. BARNEY.

GARMENT CLASP.

APPLICATION FILED OCT. 17, 1913.

1,151,556. Patented Aug. 31, 1915.

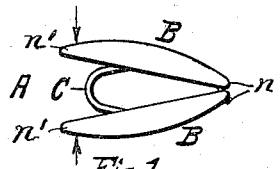


Fig. 1.

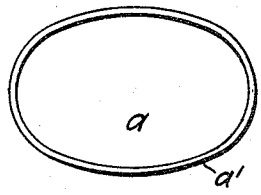


Fig 6.

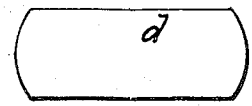


Fig. 7.

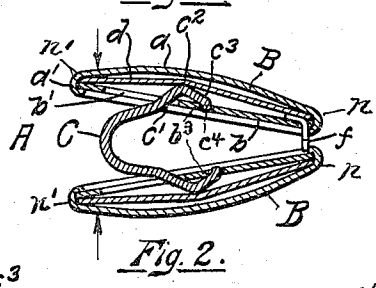


Fig. 2.

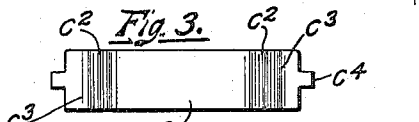


Fig. 3.

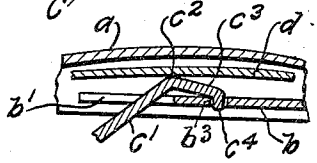


Fig. 4.

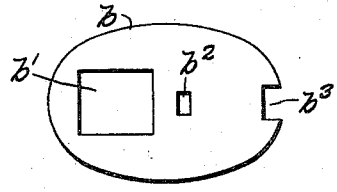


Fig. 8.

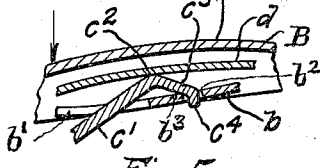


Fig. 5.

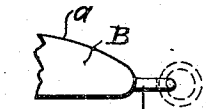


Fig. 9.

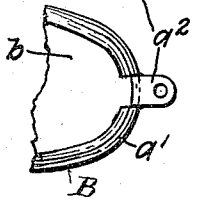


Fig. 10.

WITNESSES.

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GARMENT-CLASP.

1,151,556. Specification of Letters Patent. Patented Aug. 31, 1915.

Application filed October 17, 1913. Serial No. 795,808.

To all whom it may concern:

Be it known that I, FRANK P. BARNEY, a citizen of the United States, residing at Chartley, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Garment-Clasps, of which the following is a specification.

This invention relates generally to the class of garment-clasps in which a pair of oppositely disposed self-closing heads are connected to a frame or body member, and it consists in the novel construction and arrangement of parts, substantially as hereinafter set forth and claimed.

In garment clasps or holders, as usually devised, the assembling of the parts and securing them in the proper relation to one another materially increases the cost of manufacture. In certain clasps of this type the heads are provided with lateral ears through which a pin supporting a spring extends, the ends of the spring being adapted to close the heads; in other forms of clasps the bar or yoke itself, connecting the heads, is yielding or resilient, its tension acting to keep the gripping or jaw ends of the heads normally closed. In my improved clasp device the yoke member is non-yielding, that is, the yoke is practically rigid and stationary relatively to the spring-pressed head members tiltingly connected to it. In other words, the normal force or pressure exerted by the user in opening the jaws exceeds the normal resistance of the springs in the heads, the yoke itself meanwhile remaining relatively unchanged. The members of the improved clasp are simple and inexpensively produced and assembled; the device is solderless and rivetless; and its efficiency is materially increased by reason of the improved yoke and spring construction.

In the accompanying sheet of drawings, illustrating my improved garment-clasp, Figure 1 is a side elevation, in enlarged scale; Fig. 2 is a vertical section, further enlarged, taken longitudinally through the center of the device; Fig. 3 is a plan view of the blank from which the yoke is formed; Fig. 4 is an enlarged section of a portion of the head, showing the normal relative position of the spring, etc.; Fig. 5 is a similar view, showing the relation of the parts when the head is tilted, as in opening the jaws, the spring then being under increased tension or pressure; Fig. 6 is an inverted plan view of the shoe, its flange being unbent; Fig. 7 is a plan view of a metal inner lining or bearing plate; Fig. 8 is a similar view of the tempered steel resilient disks adapted to be secured in the tiltingly movable heads; Fig. 9 is a side elevation showing the front portion of the head arranged to suspend an article therefrom, while at the same time capable of being in normal use as a garment-clasp; and Fig. 10 is an inverted plan view of the same.

The following describes more in detail the construction of my improved garment-clasp: The article as a whole is designated by the letter A,—it comprises the yoke or U-shaped frame or connecting bar member C and the oppositely arranged tiltable spring-resisted heads or fronts B, B.

The yoke member C is produced from the hardened German silver blank c having reduced ends c^4 and bent to a substantially U-shaped form; the centrally bent part of the yoke may be additionally stiffened, as indicated at m, Fig. 6. The yoke is practically non-resilient and non-yielding or stationary relatively to the heads B. The opposed arms c^1, c^1 of the yoke extend in a divergent manner and are provided each with a projection c^2, on which the corresponding head B is adapted to tilt or rock in a manner somewhat analogous to a knuckle-joint; the said parts c^2 merge into inclined portions c^3 terminating in the reduced angularly bent ends c^4.

Each head or front B (see Fig. 2) consists of a suitably shaped recessed shallow cap or shoe a having a peripheral flange a^1 adapted to be inturned, as in forming a rolled edge; said shoe also forms the outer member of the head. Fig. 6 represents the inverted shoe before bending its rim a^1. Each head is also provided with a tempered thin steel flat back disk b; an inner lining member d, preferably of steel, may be employed to form a bearing for the joint C^2 to bear against, in lieu of pressing against the shoe, thereby reducing the wear and friction. The said spring disk b is provided with alining openings b^1, b^2, b^3. The larger opening b^1 is located in the rear portion, the smaller one, b^2, intermediate the other two openings, being adapted to retain the bent end c^4 of the yoke. A notched or roughened angular gripping member f, Fig. 2, is or may be positioned between the forward ends of the members d, b, its downwardly bent portion extending through the

end opening or notch b^3 and being rigidly secured in place by inwardly rolling the flange a^1 of the cap.

The members d and b are placed superimposed in the cavity of the shoe a, the member d being the inner one, and secured therein by bending the flange a^1 to form a rolled edge in a well-known manner. An end portion of the yoke C extends through the opening b^1 and is in normal engagement with the adjacent inner faces of the members d, b, said projection c^2 of the yoke bearing against the lining member d, and having the bent end c^4 inserted in the opening b^2 to prevent both lateral and endwise movements of the head. The clasp is in the normally closed position when the forward ends n, n of the heads B are in substantial engagement, the lower or outer spring b then being under normal tension.

The practically inflexible knee portion, c^2, on which the head B is adapted to tilt or swing, is preferably located at or rearwardly of the center of the head, while at the same time the opposed side or face of the yoke practically bears against the contiguous surface b^3 of the spring b. Now, upon manually pressing the rear ends n^1, n^1 of the opposed heads toward each other—see arrow-direction in Figs. 1 and 2—the heads are caused to be tilted on the members c^2 to open the jaws, the engagement of the resilient members b with the non-yielding or relatively stationary ends of the yoke, meanwhile acting as fulcra to forcibly depress the respective springs slightly at that point, thereby temporarily increasing their force or tension. Fig. 5 indicates sectionally, in an exaggerated degree, a portion of the head in which is shown the relation of the parts when the head is rearwardly tilted, as in opening the jaws. Upon releasing the opened jaws the reaction of the springs act with somewhat greater force, the clasping pressure being normal when the jaws are fully closed.

Figs. 9 and 10 represent the head or front of my improved clasp provided with a perforated extension or ear a^2 adapted to receive the attaching ring of a watch-fob or other article, while at the same time the clasp as a whole is adapted to be employed as a garment-clasp.

It is obvious that in assembling the parts the relation of the confined end portions of the yoke to the rigidly connected spring and shoe members should be such that the spring is given a normal degree of tension to render the jaws of the heads self-closing.

What I claim and desire to secure by U. S. Letters Patent is:—

1. A garment-clasp comprising two opposed clasping head members capable of limited tiltable movement, each member consisting of an outer cap, a back plate having alined perforations rigidly secured to said cap and a spring confined between the cap and back plate, an integral stationary yoke member positioned between said heads, said yoke being non-resilient and having a pair of oppositely disposed arms, the free ends of the arms angularly bent and extending through the perforations of the respective back plates with the bent portions being in continuous frictional engagement with the inner faces of the springs, whereby the said head members are adapted to be angularly tilted and slide a limited extent on the spring-pressed arms.

2. In a garment clasp, a pair of head members, a back plate secured in each of said members and each being provided with alined openings of different sizes, a spring positioned between each head member and back plate, a yoke pivotally connecting the head members, comprising a pair of apposed angularly bent arms with reduced ends, the said arms received in the larger back plate openings with the reduced ends in the smaller openings and contacting the springs at the bent portions to hold the head members in yieldingly closed position.

3. In a garment clasp, a pair of head members, springs and back plates carried by each member, said back plates having alined openings therein, and a yoke forming a pivotal connection between the members, comprising angularly bent arm ends each received in one of said plate openings to engage one of said springs, and directed outwardly through the other opening whereby the head members are yieldingly held in closed position.

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

FRANK P. BARNEY.

Witnesses:
GEO. H. REMINGTON,
CHARLES C. REMINGTON.

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