

March 6, 1951

W. EVANS

2,544,147

CLASP

Filed Dec. 28, 1945

FIG. 1

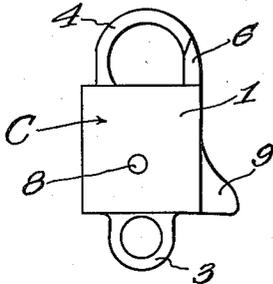


FIG. 2

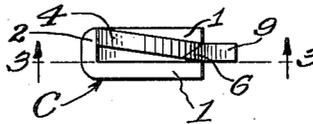


FIG. 3

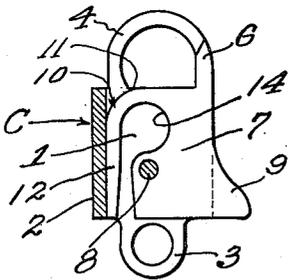
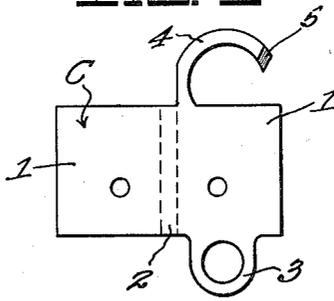


FIG. 4



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## UNITED STATES PATENT OFFICE

2,544,147

CLASP

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Application December 28, 1945, Serial No. 637,632

1 Claim. (Cl. 24-233)

1

This invention relates to clasps and has relation more particularly to a device of this kind especially designed and adapted to be used in connection with jewelry, and it is an object of the invention to provide a device of this kind of a snap type and wherein a fixed prong is rigid with the casing of the clasp and a swinging prong has rigid therewith an element coacting with a wall of the casing and operating in a manner to normally maintain the second or movable prong in closed position.

Another object of the invention is to provide a clasp comprising a rigid or fixed prong and a cooperating swinging prong to provide, when closed, a retaining loop or ring and wherein the swinging prong has rigid therewith an element possessing sufficient inherent resiliency to provide means for maintaining the swinging prong normally closed with respect to the fixed prong and, furthermore, wherein the swinging prong carries means whereby said swinging prong may be manually moved into open position with respect to the fixed prong.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved clasp whereby certain important advantages are attained, as will be hereinafter more fully set forth.

In order that my invention may be better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in side elevation of a clasp constructed in accordance with an embodiment of the invention;

Figure 2 is a view in top plan of the device as illustrated in Figure 1;

Figure 3 is a view similar to Figure 1 with a side plate of the casing removed and the intermediate wall of the casing shown in section; and

Figure 4 is a view in blank of the casing.

While the invention as herein embodied is particularly designed and adapted for use in connection with jewelry, it is to be stated that the same can be employed for other purposes without departing from the principles of the invention as herein embodied.

It is also to be stated that, in practice, when the clasp is employed in connection with jewelry, it is generally of a size about one-fourth of what is illustrated in the accompanying drawings.

In the embodiment of the invention as illus-

2

trated in the accompanying drawings, the casing C is formed of metal, plastic or other material possessing the proper qualifications.

In the embodiment of the invention as herein illustrated and as shown in Figure 4 of the drawings, the casing C is formed from one sheet of material of requisite dimensions and design and preferably rectangular and which has its opposite end portions returned in overlying relation to provide the side walls 1 spaced apart a required distance and with the rear marginal portions of the side walls 1 connected by the intermediate or back wall 2.

One of the side walls 1 has extending outwardly from one end thereof and rigid or integral therewith a closed retaining ring 3 and at the opposite end this wall has extending outwardly therefrom and rigid or integral therewith an arcuate fixed prong 4, herein disclosed as of a size in excess of a semicircle although I do not wish to be limited in this respect.

This fixed prong 4 is connected with its side wall 1 preferably at a point immediately adjacent to the intermediate or back wall 2 and this prong 4, and particularly its outer portion, is disposed inwardly on a predetermined incline, as illustrated in Figure 2, to bring the outer or free end of this prong 4 substantially directly above the space between the side walls 1 of the casing C. The outer or free extremity of the prong 4 is herein disclosed as suitably beveled, as at 5, although it may be otherwise formed as preferred.

The swinging prong 6 of the clasp is carried by an outer corner of a plate 7 which is disposed between the side walls 1 and is held therebetween for rocking movement by a pin or other suitable pintle 8 which is disposed through the side walls 1 of the casing C and through the rear portion of the plate 7. This pin or pintle 8 is preferably positioned below the longitudinal center of the casing C and the plate 7 and at the transverse centers of the side walls 1 and closely adjacent to the rear margin of the plate 7.

The plate 7 is of a width less than that of the side walls 1 of the casing C and the location of the pin or pintle 8 is such that when the prong 6 is in its normally closed position, as illustrated in Figures 1 and 3, the outer upper longitudinal margin of the plate 7 is substantially flush with the adjacent free margins of the side walls 1 of the clasp while the lower or opposite marginal portion of the plate 7 is provided with an extending piece or lug 9 of preferred design to provide means whereby the plate 7 may be readily rocked by a digit of the hand to swing the prong

3  
6 into open position with respect to the prong 4. As is particularly illustrated in Figure 2, the prong 6 is also disposed on an incline or twist to assure effective closing coaction between the free extremities of the prongs 4 and 6.

By having the plate 7 of a width less than the width of the side walls 1 of the casing C or of such form as to provide a space between the rear edge of the applied plate 7 and the intermediate or back wall 2 of the casing, the requisite swinging movement of the plate 7 is permitted.

The end portion of the plate 7 carrying the prong 6 has rigid or integral therewith an elongated arm or prong 10 possessing the desired inherent resiliency and which arm or prong immediately adjacent its connection with the plate 7 is disposed on an abrupt curvature, as at 11, and continued by a substantially elongated straight portion 12 which has direct contact with the inner face of the intermediate or back wall 2 of the casing C.

The plate 7 above the pin or pintle 8 is reduced in width, as at 14, from its inner margin to increase the desired resiliency of the upper portion of the arm or prong 10.

As is clearly illustrated in Figure 3, the arm or prong 10 throughout its major part or portion 12 has close contact with the intermediate or back wall 2. The inherent tendency of this portion 12 is to maintain its straight position so that, as the plate 7 is swung in a direction to move the prong 6 into open position, the upper part of the portion 12, which will flex away from the intermediate or back wall 2, will tend to return to its normal straight position when retaining hold is removed from the prong 6, whereupon the prong 6 will automatically be returned to closed position with respect to the prong 4, thus assuring the prongs 4 and 6 normally constituting a closed retaining ring.

It is believed to be apparent that as the plate 7 is rocked to swing the prong 6 outwardly, the part of the portion 12 of the arm or prong 10 immediately adjacent to the rounded portion 11 will have substantially a rolling action with respect to the intermediate or back wall 2.

From the foregoing description it is thought to

4  
be obvious that a clasp constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated.

I claim:

5 A clasp of the character described, comprising a casing having two spaced parallel side walls and an intermediate back wall joining adjacent longitudinal edges of the side walls, a partial ring element integral with one end edge of one side wall, a ring integral with the opposite end edge of a side wall, a plate member fitting snugly between said side walls, a pivot pin connected between the side walls and passing through the plate, a second partial ring element carried by and extending from the end edge of the plate member adjacent to the end edge of the first side wall from which the first partial ring element extends, said ring elements being adapted to be brought together to form a complete ring, said plate member having a longitudinally extending slot formed therein from and opening through the other end edge thereof and closely approaching the first mentioned end edge, said slot being disposed between the pivot pin and the longitudinal edge of the plate nearer to said back wall, and the portion of the plate between the slot and the said back wall forming a resilient arm bearing against the said back wall and functioning as a spring to maintain the plate member in a position in which said ring elements are joined together.

WHITING EVANS.

#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

Number	Name	Date
628,619	Alwood	July 11, 1899
659,686	Mitchell	Oct. 16, 1900
804,175	Sherkel	Nov. 7, 1905
1,771,427	Waterhouse	July 29, 1930
2,166,666	Rolan	July 18, 1939
2,236,207	Bowder	Mar. 25, 1941
2,283,328	Goodwin	May 19, 1942