

UNITED STATES PATENT OFFICE

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CLIP

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2 Claims. (Cl. 24—259)

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This invention relates to a spring clip.

An object of this invention is to provide a spring clip which is adapted to encircle or partially encircle a portion of a supporting member so that articles may be supported on either side of the supporting member through cooperation of the gripping jaws of the clip with the supporting member.

Another object of the invention is to provide a spring clip which has an opening therein, which opening may encircle a portion of a supporting member, and wherein a pair of gripping jaws depend from said opening in substantially parallel alignment with the axis of said opening, whereby articles of merchandise may be supported in parallel alignment with a supporting member, and supported on either side of the supporting member.

In the drawings:

Figure 1 is a perspective view of the clip;

Figure 2 is a sectional view taken on the line 2—2 of Figure 3;

Figure 3 is a vertical sectional view of the clip taken on line 3—3 of Figure 2, showing a portion of its supporting member in dotted lines; and

Figure 4 is a perspective view of a blank showing the successive stamping and forming steps to produce the clip.

The clip, as shown in Fig. 1, comprises a body portion formed of substantially parallel side walls 10 formed of flat stock and substantially parallel end walls 11 to provide a substantially rectangular opening 12. The opening 12 is of substantial depth and extends in a parallel direction to the face of the stock forming the side walls 10. A pair of arcuately shaped gripping jaws 14 depend from the side walls 10 and are provided with cut-out portions 16. Finger tabs 18 extend upwardly from the free end of the gripping jaws 14 in diverging relationship, and are adapted to contact the arcuate portion of the jaws 14 to provide a fulcrum point when the tab or tabs are moved inwardly of the support for spreading the jaws.

It is important to note that the depending gripping jaws 14 are in parallel alignment with the axis of the opening 12, thus enabling the opening 12 to encircle a support 20 as shown in dotted lines in Fig. 3. By this arrangement, each of the gripping jaws 14 will cooperate with the flat surfaces of the supporting member 20 so that articles may be secured between the supporting member and each of the jaws 14, thereby enabling articles to be releasably secured on opposed sides of the supporting member. The ar-

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ticles to be secured will be in substantially the same horizontal plane, and a pair of articles may be secured to the supporting member by means of a single clip.

5 Fig. 4 illustrates the preferred method of forming the clip as shown in Fig. 1. An elongated strip of flat stock metal 30 is utilized, and the six sequential forming steps appear from top to bottom.

10 The first stamping step, as shown in the upper portion of the strip 30, cuts a configuration of metal from the strip to provide metal from which the body portion and jaws and finger tabs are ultimately formed.

15 The second step further cuts the openings 16 which ultimately appear in a portion of the gripping jaws, and also forms reinforcing ridges 32 which will ultimately appear lengthwise of the finger tabs 18. In this step, also, a further cutting operation takes place to substantially sever the body portion of the clip from the strip 30.

20 The third step is purely a bending operation which partially forms the gripping jaws to take an arcuate shape, and the finger tabs.

25 The fourth step shows a further bending operation wherein the finger tabs are further bent toward their ultimate position, and simultaneously therewith, one of the end walls 11 is partially formed.

30 In the fifth step, the body portion is completely formed to take its ultimate shape, and simultaneously therewith, the gripping jaws are positioned in opposed relationship. Also, in this bending operation, the finger tabs are further bent inwardly in substantially contacting relationship to the arcuate portion of the gripping jaws.

35 The sixth step is a severance of the body portion from the strip and thus forms the completed clip as shown in Fig. 1.

40 In my copending application Serial No. 98,867, filed June 13, 1949, for Display Support, I have claimed the combination of the clip disclosed herein with a supporting member therefor.

I claim:

45 1. A clip formed of spring metal adapted to encircle a portion of a supporting member wherein articles may be supported on either side of the member by the clip, said clip comprising a body portion of flat stock bent about itself to form an opening of substantial depth parallel to the face of the stock adapted to encircle a portion of a supporting member, a pair of arcuately shaped gripping jaws depending from said body portion in parallel alignment with the axis of said open-

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ing, and finger tabs extending upwardly from the free end of said gripping jaws adapted to be moved relatively inwardly to contact the arcuate portion of said jaws for spreading the same.

2. A clip formed of a single piece of spring metal adapted to encircle a portion of a supporting member wherein articles may be supported on either side of the member by the clip, said clip comprising a body portion of flat stock bent about itself to form an opening of substantial depth parallel to the face of the stock and of rectangular shape in cross section and adapted to encircle a portion of a supporting member, a pair of arcuately shaped opposed gripping jaws depending from said body portion in parallel alignment with the axis of said opening, and finger tabs extending upwardly from the free end of said gripping jaws in diverging relation to each other and adapted to be moved relatively

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inwardly to contact the arcuate portion of said jaws for spreading the same.

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