Jan. 31, 1950 G. C. TERRY 2,496,109

CLOTHES CLAMP

Filed Nov. 1, 1945

FIG. 1.

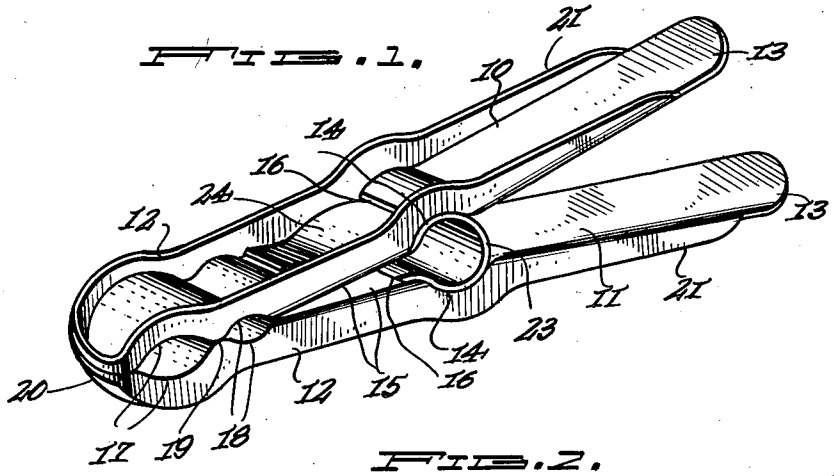

FIG. 2.

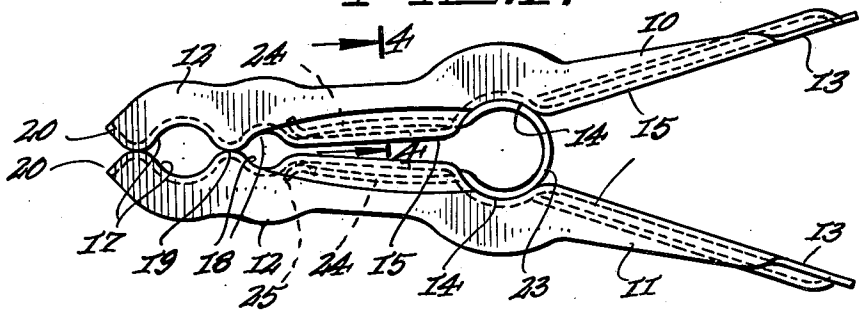

FIG. 3.

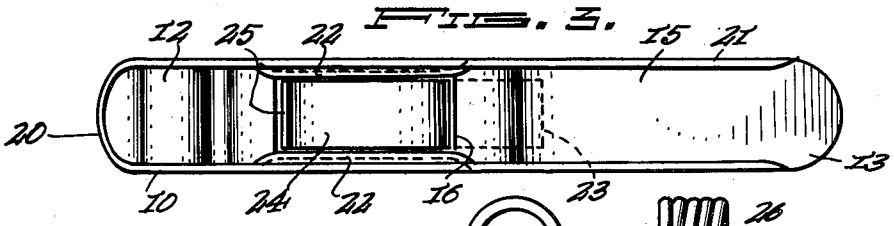

FIG. 4.

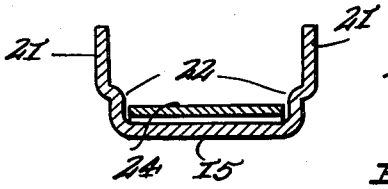

FIG. 5.

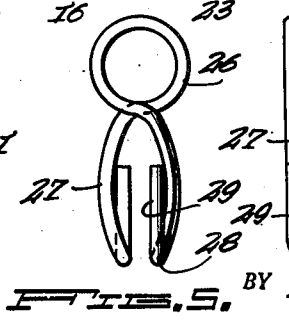

FIG. 6.

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CLOTHES CLAMP

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1 Claim. (Cl. 24—137)

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This invention relates generally to clamps and while not limited thereto the invention has particular reference to an improved clamp for fastening clothes and the like in depending relation from a line for drying or airing.

The invention has for an object an improved clamp of the indicated character in which a spring member pivotally connects the clamping members together and tensions the same against relative separation of the clamping ends thereof and which also functions to retain the parts in assembled relation.

The invention also comprehends an improved clamp including a spring member having an arcuate or coiled bight portion and oppositely disposed mating free ends which engage through apertures in the confronting walls of the clamping members to thereby pivotally connect the clamping members together and tension the clamping ends thereof against relative separation.

The invention further has in view a clamp of the indicated character in which the clamping members are formed with outwardly projecting portions engaged by the free ends of the spring member for retaining the clamping members in longitudinal alignment.

The invention also includes clamping members having recesses in the confronting walls thereof and apertures opening therethrough forwardly of the recesses for receiving the free ends of the spring through said apertures with the arcuate or coiled portion thereof engaging in said recesses, the spring functioning to pivotally connect the members together and to tension the clamping ends of the said members for grippingly engaging an article therebetween.

With the foregoing and other objects in view reference is now made to the following specification and accompanying drawings in which the preferred embodiments are illustrated.

In the drawings:

Fig. 1 is a perspective view of a clamp constructed in accordance with the invention.

Fig. 2 is a side view thereof.

Fig. 3 is a top plan view of the same.

Fig. 4 is a vertical sectional view taken on line 4—4 of Fig. 2.

Fig. 5 is a side view of a modified form of spring member.

Fig. 6 is a top plan view thereof.

Referring to the drawings by characters of reference, the clamp includes mating elongated members 10 and 11 preferably fashioned of metal such as aluminum or other rustless or non-corrosive material, which members are identical, and each consists of a clamping portion 12 at the forward end thereof and a hand manipulating portion 13 at the opposite end, and between said portions the said members are formed substantially medial of their length with mating transversely extending arcuate recesses 14 in the confronting walls 15 thereof. The said clamping portions 12 are each provided with a rectangular slot 16 opening through the wall 15 thereof at the juncture of the recess 14 with the clamping portion 12, and adjacent the forward ends of said clamping portions the walls 15 thereof are formed with oppositely disposed mating arcuate recesses 17 and 18 forming transversely extending ribs 19 between said recesses which provides means for grippingly engaging articles between the said clamping portions. The ends of said clamping portions 12 each terminate in an outwardly flared lip 20 to thereby provide a smooth entrance between the said portions for facilitating the insertion of articles therebetween.

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The hand manipulating portions 13 of the said members 10 and 11 diverge outwardly from the arcuate recesses 14 so as to provide a sufficient clearance therebetween to permit of the inward movement thereof for opening or spreading the clamping portions 12 apart in order to permit of the insertion of articles between the clamping portions. Extending along the opposite longitudinal edges of the confronting walls 15 of each of the members 10 and 11 is an outwardly projecting peripheral flange 21 which provides side walls for the said members 10 and 11 and serves to strengthen the walls 15 thereof. Between the recesses 14 and 18 each of the flanges 21 of the clamping portions 12 converges inwardly as at 22 adjacent the walls 15 to provide a restricted space therebetween for a purpose which will be hereinafter set forth.

In order to pivotally connect the members 10 and 11 together, a spring member fashioned from flat spring material is provided which consists of an arcuate portion 23 and oppositely disposed mating free ends 24 extending forwardly from the arcuate or bight portion and which are outwardly bowed and have outwardly curved terminals 25.

The spring member is arranged with the arcuate portion 23 disposed between the members 10 and 11 and contacting with the outer faces defining the recesses 14 with the free ends 24 of said spring protruding through the slots 16 of the confronting walls 15 and engaging in the restricted spaces formed by the converging por-

tions 22 of the flanges 21 and with the terminals 25 of said free ends 24 located adjacent the arcuate recesses 18. The free ends 24 of the said spring are spread apart when inserted through the slots 16 so that the free ends respectively exert inward tension on the clamping portions 12 of the members 10 and 11 to thereby normally retain the said clamping portions in closed relation, and the said clamping portions may be opened or spread apart by an inward movement of the hand manipulating portions 13 with the arcuate portion 23 of the spring serving as the fulcrum or pivotal point thereof.

Instead of the spring member fashioned from flat spring material hereinbefore described the spring member may be fashioned from a length of spring wire as illustrated in Figs. 5 and 6 of the drawings. In this form the spring member consists of a helical coil 26 comprising a plurality of adjacent convolutions and oppositely disposed mating free ends 27 projecting outwardly from the outermost convolutions. One of the free ends 27 extends forwardly from one side of the convolution at one end while the opposite free end 27 extends forwardly from the opposite side of the convolution at the opposite end so that said free ends cross each other adjacent the coil. The free ends 27 are outwardly bowed longitudinally and at the forward end thereof are bent laterally as at 28 with the terminals 29 extending rearwardly in parallel relation with the opposite free end. The said spring is adapted to be employed in a manner similar to the form hereinbefore described, the same being engaged in the recesses 14 to pivotally connect the members 10 and 11 together with the free ends of the spring protruding through the slots 16 and engaging in the restricted space defined by the converging portions 22 of the flanges 21 of the said members and with the transversely extending portions 28 of said free ends tensioned against the outer faces of the walls 15 for normally retaining the clamping members 12 in closed relation. The free ends of the said spring members engage at the opposite sides with the inner faces of the converging walls 22 of the flanges 21 for maintaining the members 10 and 11 in longitudinal alignment.

What is claimed is:

In a clamp of the indicated character, a pair of confronting aligned mating members each having a bottom wall, and each consisting of a clamping portion at one end thereof, a hand manipulating portion at the opposite end and a transversely extending recess formed in the bottom wall thereof and located between said clamping and manipulating portions, said clamping portions having mating slots opening through the bottom walls thereof and longitudinally extending outwardly projecting rims at the opposite sides thereof, and a flat spring member formed into an arcuate portion and oppositely disposed mating free ends located with said arcuate portion interfitted in said recesses and with the free ends protruding through said slots and tensioned against the other faces of the said bottom walls between said rims and functioning to connect the said members together for outward swinging movement of the clamping portions against the tension of said spring member for inserting and grippingly engaging an article therebetween and for retaining said mating members in longitudinal alignment.

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