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(54) **BEACH CLAMP**

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(57) **ABSTRACT**

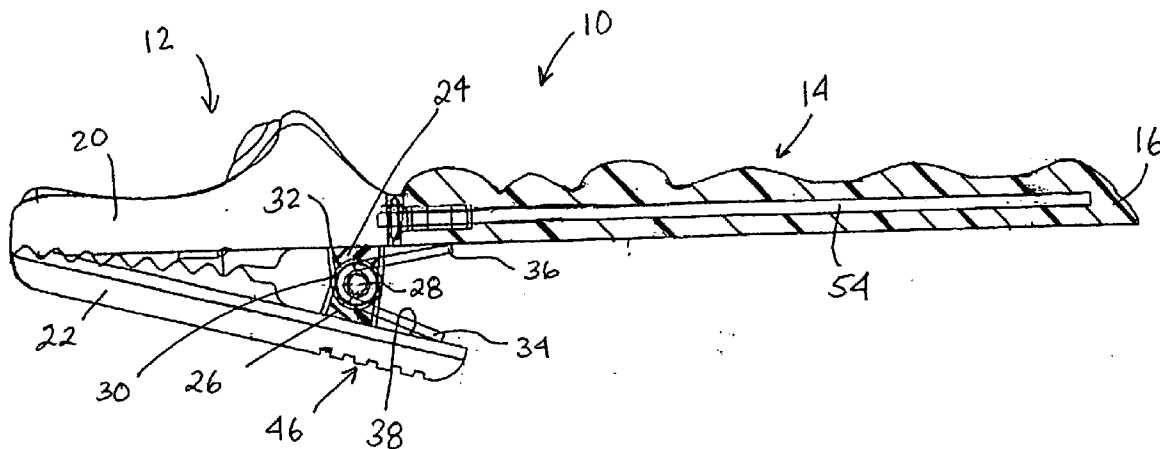
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The disclosure provides a device which can be used to secure an article, such as a blanket, towel, sheet or similar article, in place on a sandy or dirt surface, or on the surface of a chair, or to hang an article from a railing, line, chair, etc. to facilitate drying the article, keeping the article clean, or keeping soiled articles separated from other articles or surfaces. The device comprises a clamp portion attached to a malleable body portion. The body portion can be bent into an "L" shape and used as an anchor or into a "U" or "J" shape and used as a hook.

Related U.S. Application Data

(60) Provisional application No. 60/920,760, filed on Mar. 29, 2007.



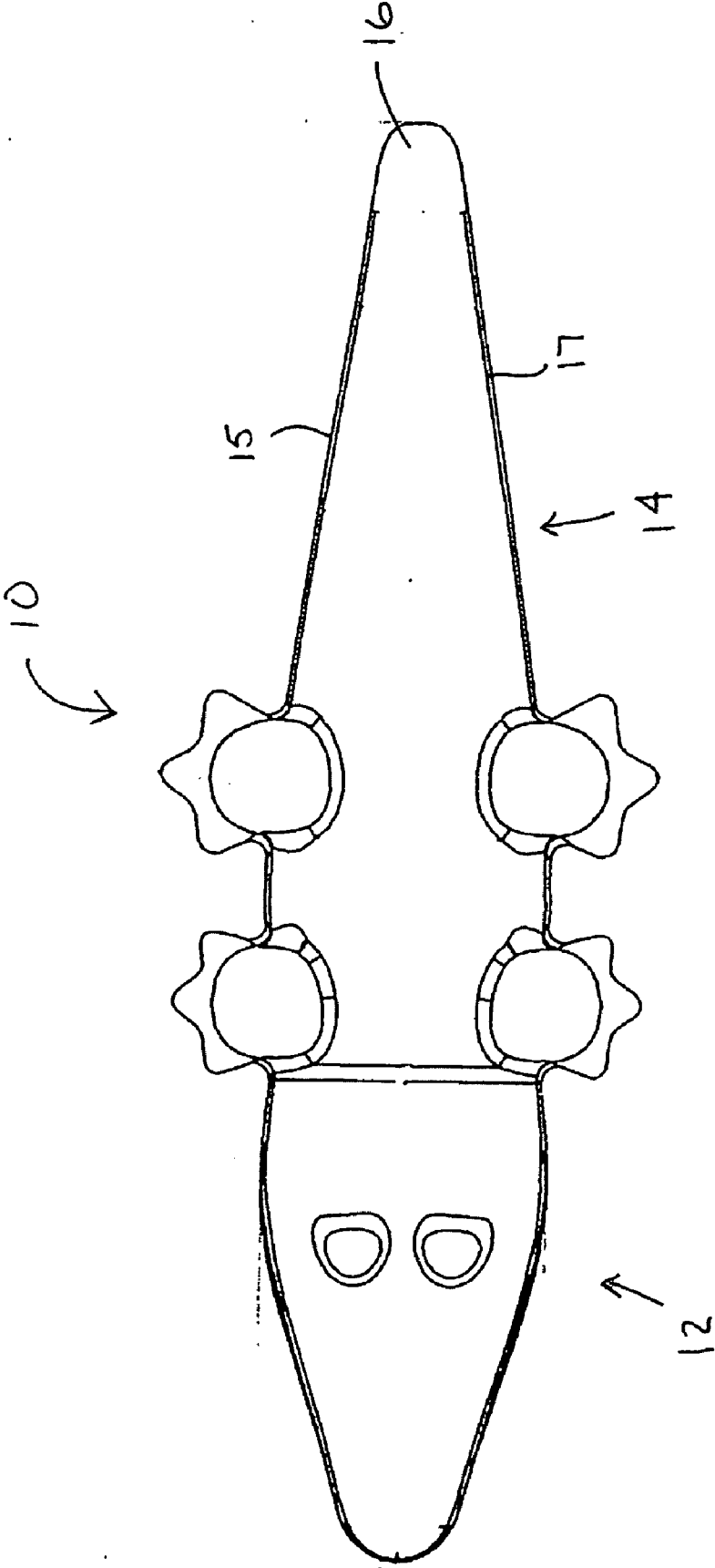


FIG 1

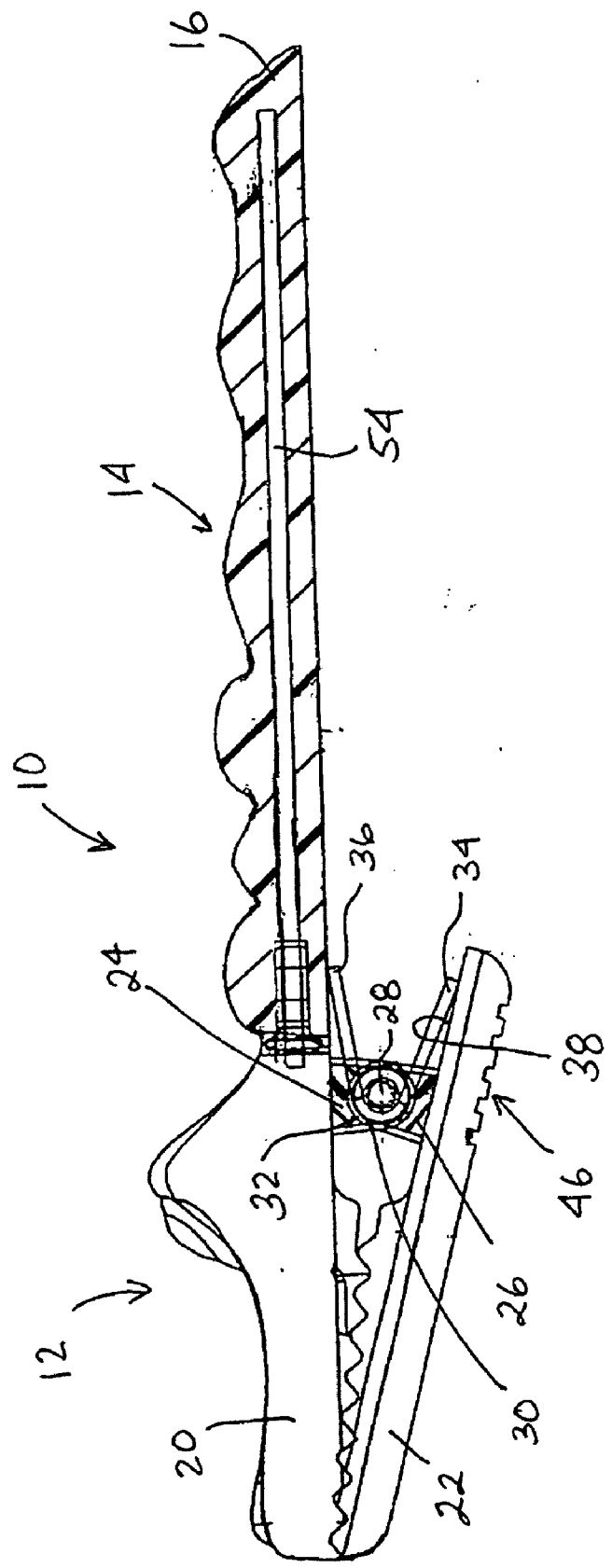


FIG 2

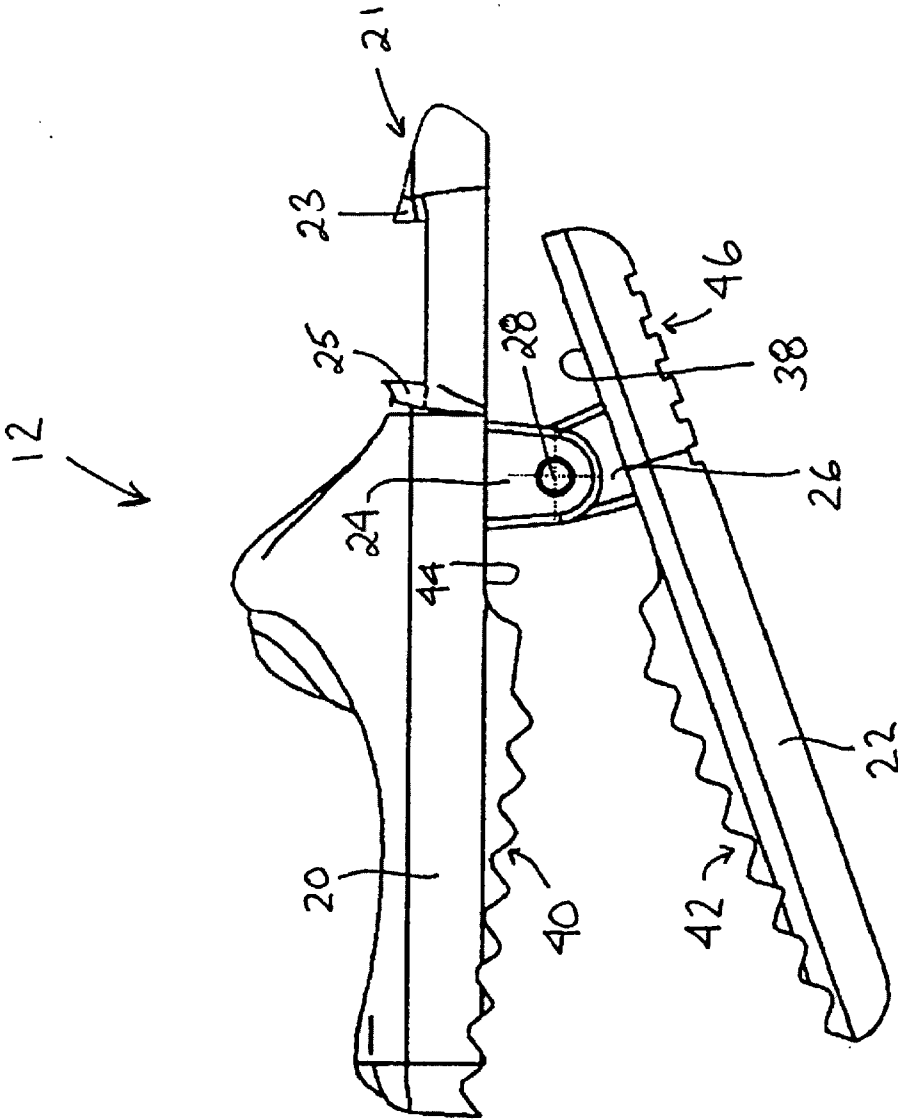


FIG 2A

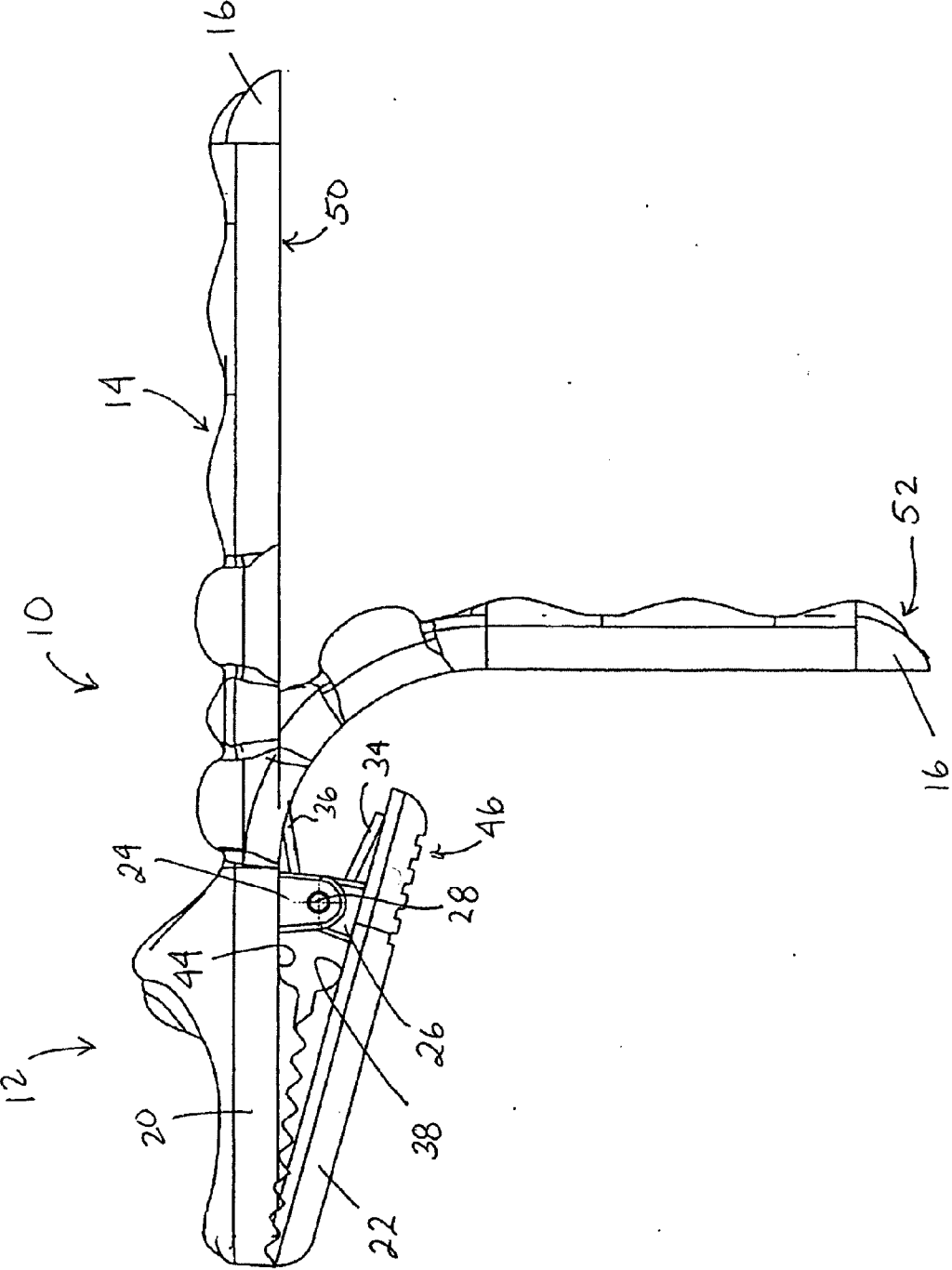


FIG 3

BEACH CLAMP

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 60/920,760 filed Mar. 29, 2007 for BEACH CLAMP.

FIELD OF THE DISCLOSURE

[0002] The disclosure relates to clamps for use in securing towels and similar light weight articles.

BACKGROUND OF THE DISCLOSURE

[0003] A near universal practice for anyone who intends to spend a day of recreation at the beach is to bring along some type of device to enable the beachgoer to be separated from the sand while enjoying the beach experience. Various types of chairs are common. A more common practice, however, is to use a simple covering such as a towel, blanket, sheet, tarp or mat which is placed on top of the sand and the beachgoers place themselves on top of the covering.

[0004] These covers tend to be lightweight for ease of carrying the cover to the designated spot on the beach. Because the covering is of light weight, they tend to be difficult to secure in place, especially when they are not occupied. Obviously, when occupied the cover tends to stay generally in place, at least in the location(s) of the cover that are occupied by an individual. Even when occupied, however, the corners and edges of the covering are still prone to move and flap around, particularly if a wind is present as it typically is at the ocean. Similar problems are encountered on picnics and the like, or any occasion where a covering needs to be secured to the ground.

[0005] Various techniques have been employed for the purpose of keeping the covering secured in place when the covering is occupied and especially when it is unoccupied. For example, it is common practice to weigh down the corners or edges of the covering. Coolers, bags, shoes, rocks, piles of sand, chairs and other items are typically placed at the corners or edges of the covering in an attempt to maintain it in place. Generally, this is not considered a desirable solution.

[0006] Placing sand on the covering to keep it in place tends to defeat the purpose of bringing the using the covering because the surface of the cover occupied by the beachgoer accumulates sand. Placing various personal articles on the covering to keep it in place is also not desirable because the means of securing the covering is lost if those articles (e.g., shoes, cooler, etc.) are needed by the beachgoer. Furthermore, most personal articles, like shoes, brought to the beach tend to be lightweight and incapable of doing a good job at securing the covering in place. Coolers and chairs may be heavy enough, but it is not typical to have enough coolers or chairs to adequately secure the covering in place. Rocks, bricks and other heavy items are effective, but not always available and terribly impractical to bring along.

[0007] Another common practice is to use a towel or other covering to cover a chair prior to sitting in the chair, especially in outdoor settings. For example, it might be desired to cover the chair surface if the surface is dirty, rough, hot, cold, abrasive, wet, clammy feeling, or otherwise produces an uncomfortable or undesirable sensation, particularly when in contact with bare skin. When using a towel or other covering for such applications, it is difficult to keep the covering in

place when leaning forward or when the chair is not occupied. Several attempts have been proposed to address this inconvenience. Most of those proposed solutions, however, take the form of specialized coverings that use pocket constructions that slip over the back of the chair, elastic or other types of strapping, etc. which are not readily adapted for application to a common beach or bath towel. Thus, there is a need for a simple and effective solution for securing a covering in place on a chair or on a sandy or dirt surface.

SUMMARY OF THE EMBODIMENTS

[0008] The disclosure provides a device which can be used to secure a sand covering, such as a blanket, towel, sheet or similar article, in place, particularly on a sandy or dirt surface. The device is lightweight, simple in design and operation, easy to transport and effective in use. In addition, the device may be used to attach a covering to a chair surface. The device may also be used to hang an article, such as a bathing suit, towel, sheet, hat, etc. from a railing, line, chair, etc. to facilitate drying the article, keeping the article clean, or keeping soiled articles separated from other articles or surfaces.

[0009] In one embodiment, the device comprises a clamp attached to an elongated body member. The body member is malleable and can be bent or positioned relative to the clamp. In one embodiment, the clamp comprises two jaws that are pivoted together for relative movement toward and away from one another.

[0010] In one embodiment, the body portion is bendable into generally an "L" shape. In another embodiment, the body member is infinitely bendable between a straight shape and generally a "U" or "J" shape. The body member may have a distal end that is tapered or pointed to facilitate inserting the body member into the sand. In other embodiments, the body member may be hinged.

[0011] Additional objects and advantages of the disclosure will be set forth in part in the description which follows, and/or can be learned by practice of the disclosure. The objects and advantages of the disclosure will be realized and attained by means of the elements and combinations particularly pointed out in the appended claims.

[0012] It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only and are not restrictive of the disclosure, as claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] FIG. 1 is a top plan view of an embodiment.

[0014] FIG. 2 is a partly sectioned side view of an embodiment.

[0015] FIG. 2A is a side view of the clamp portion of an embodiment.

[0016] FIG. 3 is a side elevation view particularly illustrating the body portion of an embodiment.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0017] With reference first being made to FIG. 1, a top plan view of an embodiment of a device is illustrated therein. As seen therein, the device 10 comprises a clamp portion 12 and a body portion 14. In the embodiment shown in the figures, the device 10 is configured to resemble an alligator. It is understood that the specific fanciful appearance of the device

is not a critical part of the embodiments and other suitable configurations and designs may be selected as desired.

[0018] Quite apart from the fanciful appearance of the device 10, the distal end 16 of the body portion 14, as seen in FIG. 1, may be tapered. As will be described below, tapering the distal end 16 of the body portion 14 can facilitate the insertion of the body portion into the sand or ground.

[0019] With reference now being made to FIG. 2, a partially sectioned side view of the device is seen therein. As illustrated, the clamp portion 12 comprises an upper jaw 20 and a lower jaw 22 (see also FIG. 2A). The upper and lower jaws are mounted for relative movement toward and away from one another between closed and open positions. The closed position is illustrated in FIG. 2 while FIG. 2A illustrates the jaws in a partly open position.

[0020] The mounting of the jaws 20, 22 for such movement may be accomplished by any desired configuration or structural elements. In the embodiment shown in FIGS. 2 and 2A, each of upper and lower jaws 20, 22 is provided with a projection member 24, 26, respectively. The projection members 24, 26 house a pivot pin 28, which forms a pivot axis for the jaws 20, 22.

[0021] The jaws 20, 22 are biased into the closed position by any suitable biasing member. In the embodiment shown, and as best seen in FIG. 2, the biasing member comprises a torsion spring 30. In the embodiment shown, the coiled portion 32 of torsion spring 30 is disposed about the pivot pin 28 and the legs 34, 36 are positioned to contact the inside surface 38 of lower jaw 22 and the body portion 14, respectively. As will be apparent to those skilled in the art, other alternatives for biasing the jaws 20, 22 in a closed position are possible and within the scope of the disclosure. The biasing pressure of the jaws will be varied to the amount required for the particular intended application of the device 10.

[0022] Each of the upper and lower jaws 20, 22 may be provided with a series of serrations 40, 42 on their inner surfaces 44, 38, respectively. The serrations, which are optional but preferred, facilitate the grip of the jaws on a towel, sheet or other article clamped therein. As is known, the jaws are opened by actuating the upper or lower jaw, or both, to counteract the biasing force of the spring 30, for example. If desired, one or both of the upper and lower jaws 20, 22 may be provided with a textured region, such as region 46 on lower jaw 22, to provide a grip region for actuating the jaws. As best seen in FIG. 2A, in the embodiment shown, the upper jaw 20 remains relatively stationary as lower jaw 22 is actuated and pivots away from the upper jaw. Other configurations are, of course, possible and are contemplated by this disclosure.

[0023] As seen in FIG. 3, the body portion 14 of device 10 is malleable and can be bent or positioned relative to the clamp portion 12. The term "malleable" is used to mean that the body portion can be bent into a desired position and will remain in the bent position indefinitely until acted upon. In particular, FIG. 3 shows the body portion in a first position 50 and a second position 52. When in position 52, the body portion 14 is oriented generally at 90° relative to the clamp portion 12 whereby the device forms a general "L" shape. In the embodiment shown, the body member 14 is infinitely bendable between positions 50 and 52 and may be even further bent toward clamp portion 12 if desired. In some embodiments, it may be desired (for reasons explained below) to make body portion 14 sufficiently bendable that

distal edge 16 may be positioned below (or above) the clamp portion 12, whereby the device would form a general "U" or "J" shape.

[0024] This feature may be accomplished by making the body portion 14 of a malleable material such as copper, aluminum, lead or the like. Alternatively, the body portion 14 may simply incorporate malleable material having such properties. In the embodiment shown in the Figures, the body portion 14 includes a single wire 54 generally centrally located in the body 14. The wire 54 provides the desired degree of malleability to the body portion 14.

[0025] In other embodiments, multiple malleable elements may be used. For example, a wire may be located along each of the longitudinal edges 15, 17 of the body 14 (see FIG. 1) if desired. In still other embodiments, the malleable element may comprise a flat piece of metal or other malleable material. In yet other embodiments, the body portion 14 may be segmented and the segments joined by hinged sections, or the body portion 14 may be joined to the clamp portion 12 to permit the body portion to be pivoted such that the device assumes the general "L" shape illustrated in FIG. 3. In such embodiments, it will be appreciated that the body portion 14 can be formed to be relatively rigid, and/or may be made of relatively rigid materials such as polycarbonate. In addition, such embodiments would incorporate stops, detents, or ratchet-type mechanisms into the hinged sections to enable the body portion 14 to remain in the bent position.

[0026] In particularly preferred embodiments, the body portion 14 is made of a soft, flexible material that is inexpensive, readily available, flexible, and is capable of being molded such that the body portion can have a desired external appearance. Examples of preferred materials include thermoplastic materials, thermoplastic elastomers, open and closed cell foams, etc. In such embodiments, the body portion 14 will include one or more malleable members as mentioned above.

[0027] In use, the jaws 20, 22 are opened against the biasing force or tension spring 30. A towel, sheet, blanket or other article is placed within the jaws and the jaws are allowed to close, clamping the article therebetween. The biasing force of tension spring 30 will hold the article securely between the jaws. The body portion 14 is then used in a desired fashion to "anchor" the device, and thus the article, in place.

[0028] For example, the device may be used to attach a covering to a surface of a chair. In such embodiments, the body portion 14 is positioned into a desired shape and used to anchor the covering, such as a towel, to the framing members of a chair, thereby keeping the towel in place when the occupant bends forward, stands up, or otherwise moves about. Alternatively, the body portion 14 may be bent into a general "L" shape as seen in FIG. 3 and the distal end 16 of the body portion 14 inserted into the sand or dirt. In other embodiments, the body portion 14 may be bent further into a general "J" or "U" shape and used as a hook to attach the device to the leg of a beach chair, beach umbrella, sign post, etc. and thereby secure the article in place. In yet other embodiments, the device may be used to hang an article (towel, hat, bathing suit, etc.) from a railing, clothes line, back of a chair or the like.

[0029] When intended for use in a beach environment, it is generally preferred not to use metals to fabricate the body portion 14 because metals tend to conduct heat and can get very hot in a beach environment and would also be prone to develop rust or corrosion in a salt water environment. When

intended for use to anchor an article to a dirt surface, it may be preferable to make the body portion of a thicker and/or more robust material such as thicker metals or rigid plastics. Such applications may also benefit from using the hinged or segmented body embodiments discussed above.

[0030] The upper jaw, lower jaw and body portion may be formed of similar or dissimilar materials, as desired. In some embodiments, it may be beneficial to form the clamp portion **12** of a relatively rigid plastic and the body portion **14** of a soft elastomer, for example. In addition, the upper and lower jaws and the body portion **14** may be formed of any suitable technique, such as injection molding, pressure forming, etc.

[0031] The body portion **14** may be attached to the clamp portion **12** in any known or convenient manner. For example, the clamp and body may be joined using adhesives, fasteners, friction, or other suitable techniques. In some embodiments, it may be desirable to form the body portion **14** as an integral member with one of the upper or lower jaws. Similarly, the malleable member, such as wire **54**, may be incorporated into the body portion **14** in any known manner. For example, with reference again to FIGS. **2** and **2A**, in the embodiment shown, upper jaw **20** has a barbed projection **21** which includes barbed elements **23**, **25**. The barbed elements **23**, **25** provide a gripping action to retain body portion **14** against clamp portion **12**. The barbed projection **21** may have a bore to accommodate wire **54** as seen in FIG. **2**.

1. A device comprising a clamp portion attached to a malleable body portion.

2. The device of claim **1**, wherein the body portion is elongated.

3. The device of claim **2**, wherein the body portion has a tapered distal edge.

4. The device of claim **1**, wherein the body portion incorporates at least one malleable element.

5. The device of claim **4**, wherein the malleable element comprises a metal wire.

6. The device of claim **5**, wherein the metal wire is generally centrally located along a longitudinal axis of the body portion.

7. The device of claim **1**, wherein the body portion comprises a thermoplastic material.

8. The device of claim **1**, wherein the clamp portion comprises an upper jaw and a lower jaw.

9. The device of claim **8**, wherein the upper and lower jaws are pivotally movable toward and away from each other and further comprising a biasing means for biasing the upper and lower jaws together.

10. The device of claim **1**, wherein the body portion is bendable to a position generally 90° relative to a longitudinal axis of the device.

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