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Tinney(10) **Pub. No.: US 2016/0242535 A1**(43) **Pub. Date: Aug. 25, 2016**(54) **OBJECT CARRYING SYSTEM**(71) Applicant: **Stephen I. Tinney**, Chicago, IL (US)(72) Inventor: **Stephen I. Tinney**, Chicago, IL (US)(21) Appl. No.: **15/008,168**(22) Filed: **Jan. 27, 2016****Related U.S. Application Data**

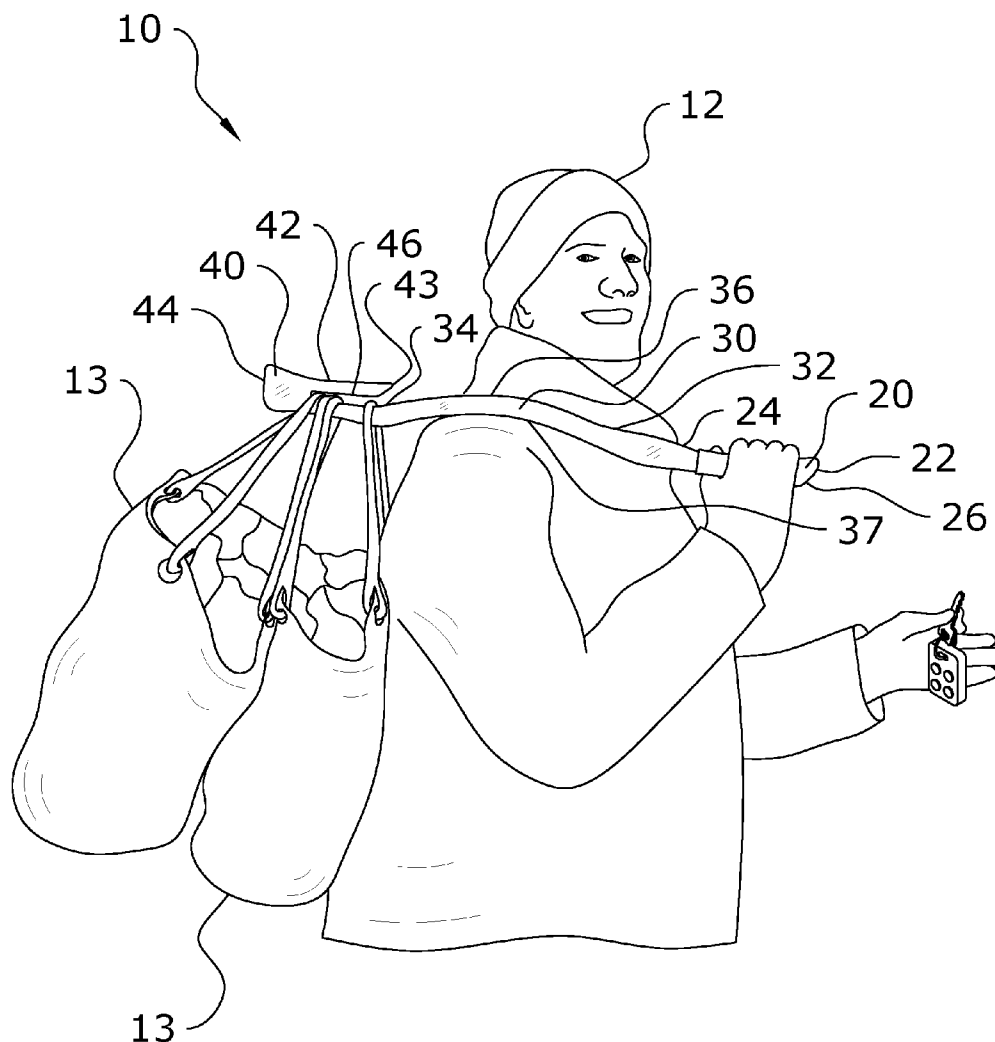
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(57)

ABSTRACT

An object carrying system for transporting objects more efficiently through redistribution of weight. The object carrying system generally includes a handle portion, a fulcrum portion, and a receiver portion. The handle portion is adapted to be grasped by one hand of a user while an object may be retained within the receiver portion. The fulcrum portion, which is positioned between the handle and receiver portions, comprises an upwardly-curved configuration which is adapted to rest on the shoulder of the user when carrying the object. By positioning the object in the receiver portion, positioning the fulcrum portion over the shoulder, and pulling downwardly on the handle portion, the weight of the object may be effectively distributed from the arms of the user to the shoulder, thus greatly reducing discomfort when carrying an object with the present invention.



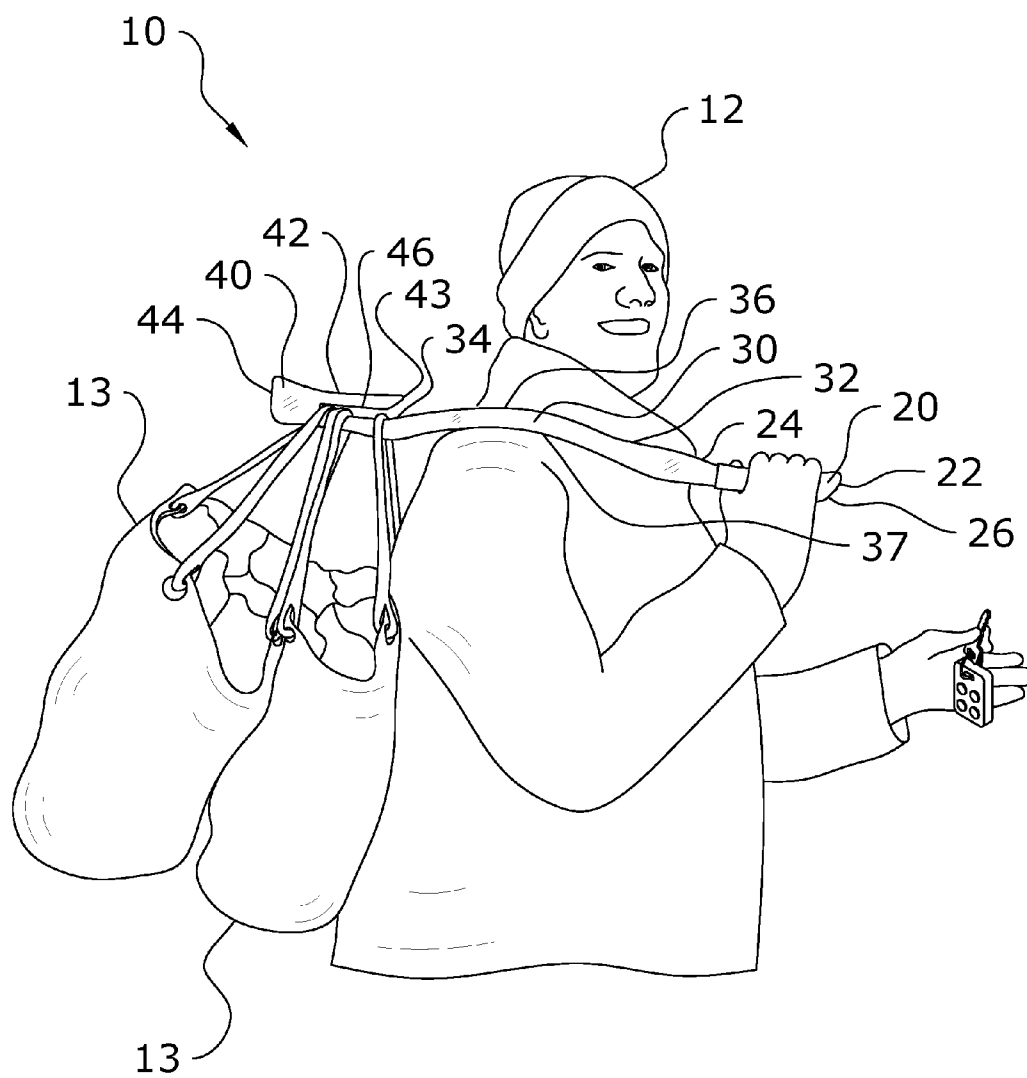
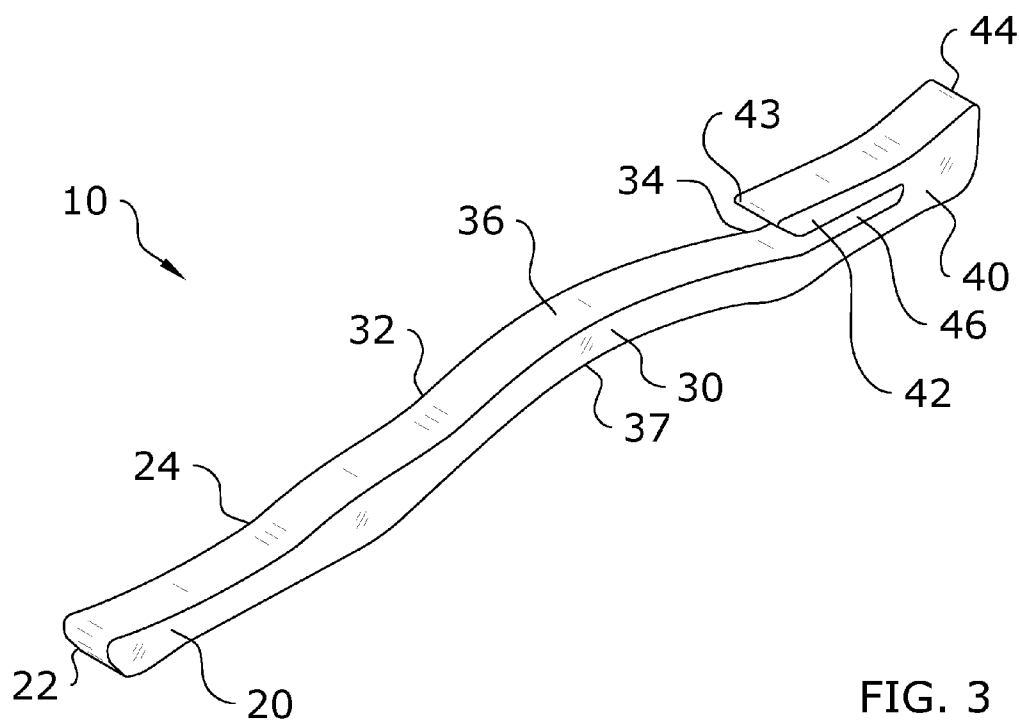
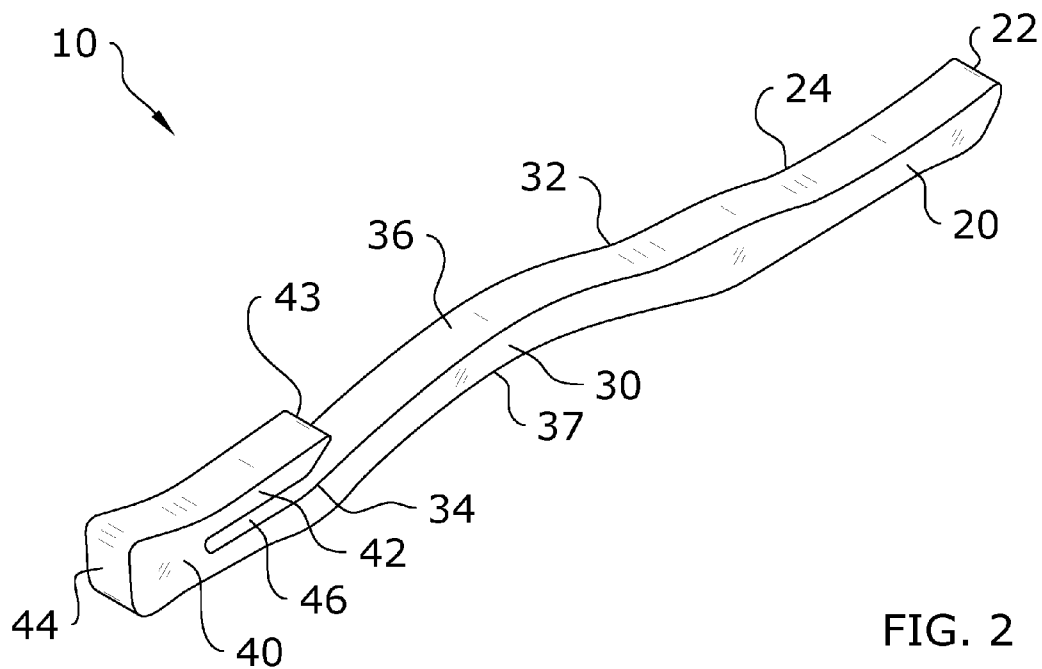


FIG. 1



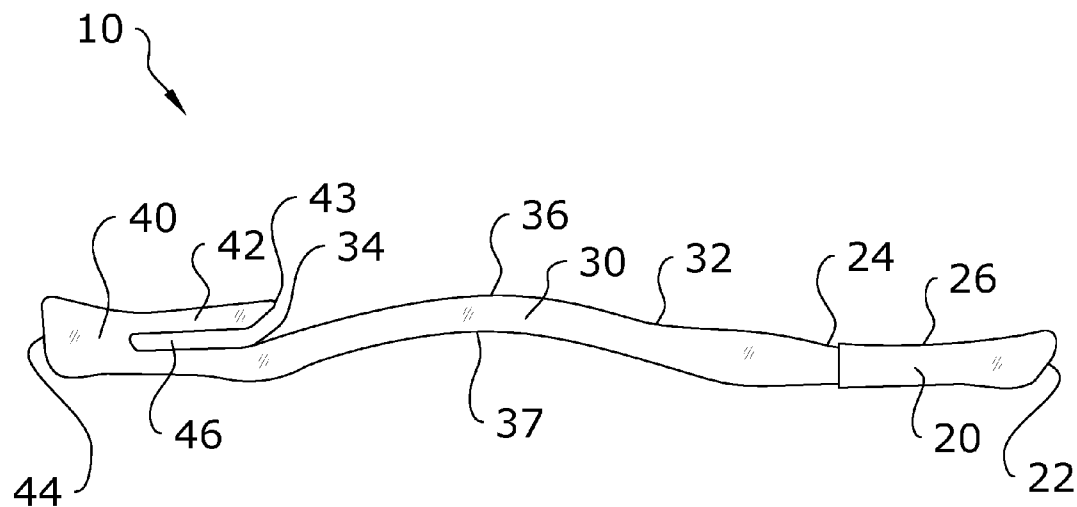


FIG. 6

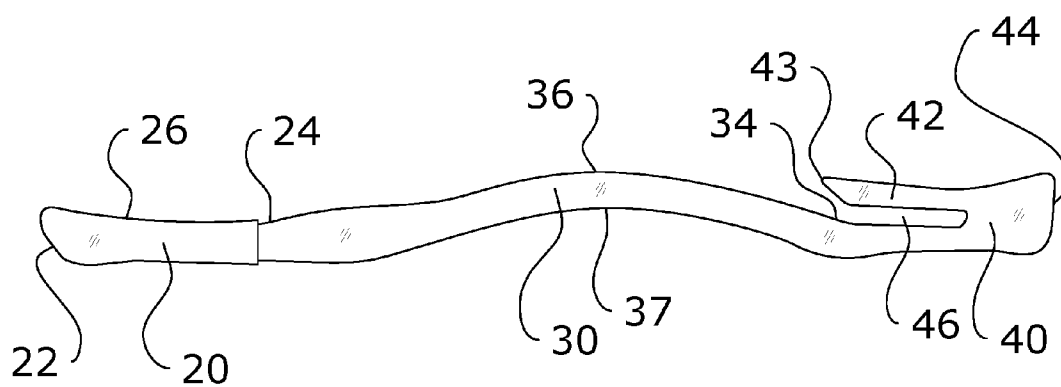


FIG. 7

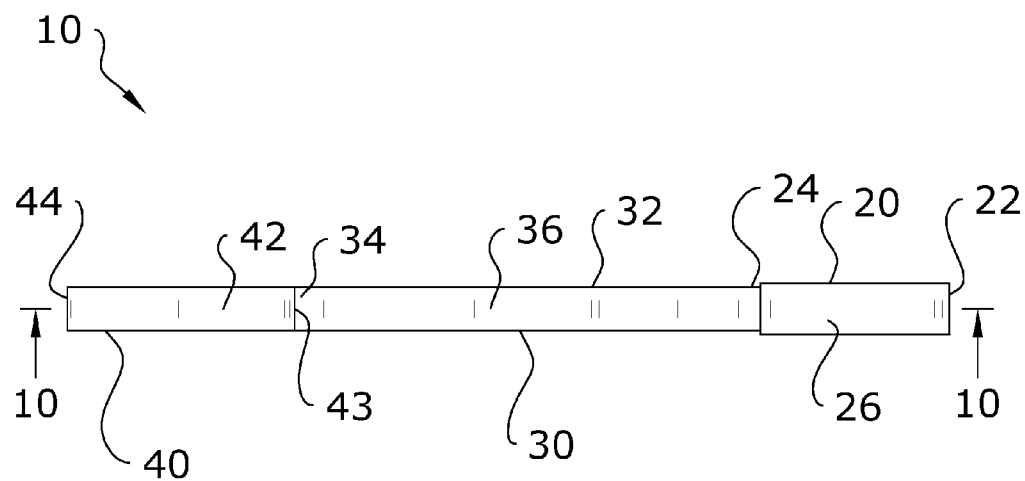


FIG. 8

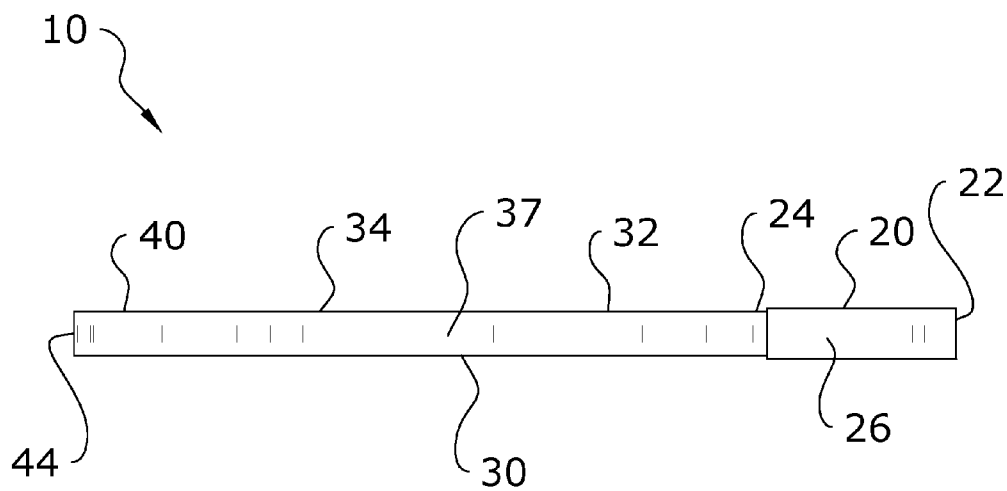


FIG. 9

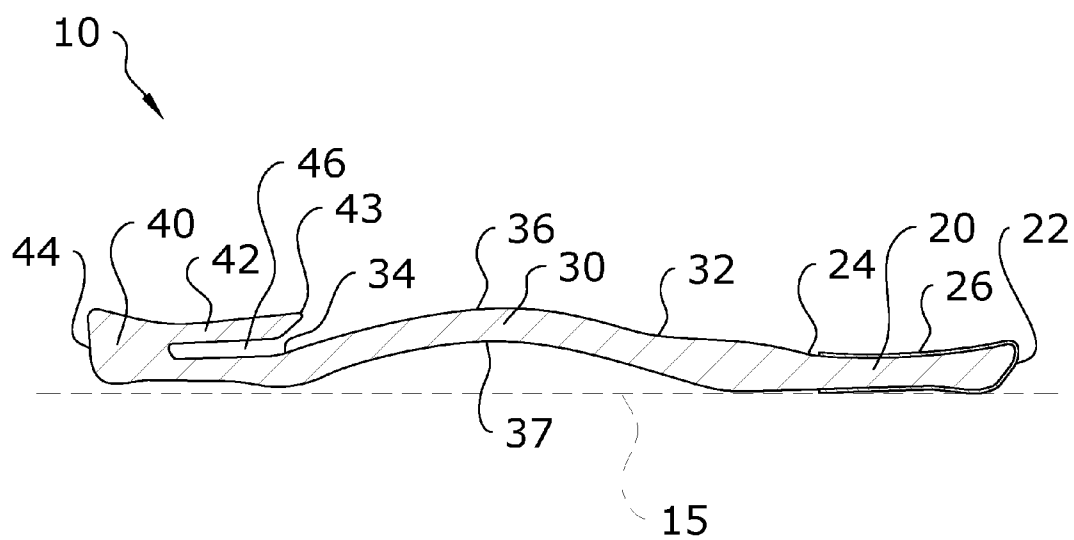


FIG. 10

OBJECT CARRYING SYSTEM**CROSS REFERENCE TO RELATED APPLICATIONS**

[0001] I hereby claim benefit under Title 35, United States Code, Section 119(e) of U.S. provisional patent application Ser. No. 62/120,106 filed Feb. 24, 2015. The 62/120,106 application is currently pending. The 62/120,106 application is hereby incorporated by reference into this application.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not applicable to this application.

BACKGROUND

[0003] 1. Field

[0004] Example embodiments in general relate to an object carrying system for transporting objects more efficiently through redistribution of weight.

[0005] 2. Related Art

[0006] Any discussion of the related art throughout the specification should in no way be considered as an admission that such related art is widely known or forms part of common general knowledge in the field.

[0007] Carrying sticks such as bindle sticks have been in use for many years. In a common configuration, a long stick from a tree or an elongated piece of wood is used to retain an object on a distal end, with the stick or piece of wood being rested on a user's shoulder. In modern popular culture, the conventional bindle stick is commonly portrayed as a stick with cloth or a blanket tied around one end for carrying items over one's shoulder.

[0008] While the conventional design of a bindle stick has been suitable for transporting objects, it suffers from a number of shortcomings. The stick is typically linear in design, and thus will often dig into one's shoulder causing pain and discomfort; particularly on longer journeys. Further, the weight of the object is focused on the portion resting on the shoulder, causing undue stress on the individual due to the lack of weight distribution to aid in transport.

SUMMARY

[0009] An example embodiment of the present invention is directed to an object carrying system. The object carrying system includes a handle portion, a fulcrum portion, and a receiver portion. The handle portion is adapted to be grasped by one hand of a user while an object may be retained within the receiver portion. The fulcrum portion, which is positioned between the handle and receiver portions, comprises an upwardly-curved configuration which is adapted to rest on the shoulder of the user when carrying the object. By positioning the object in the receiver portion, positioning the fulcrum portion over the shoulder, and pulling downwardly on the handle portion, the weight of the object may be effectively distributed from the arms of the user to the shoulder, thus greatly reducing discomfort when carrying an object with the present invention.

[0010] There has thus been outlined, rather broadly, some of the features of the object carrying system in order that the detailed description thereof may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the object carrying system that will be described hereinafter and that will

form the subject matter of the claims appended hereto. In this respect, before explaining at least one embodiment of the object carrying system in detail, it is to be understood that the object carrying system is not limited in its application to the details of construction or to the arrangements of the components set forth in the following description or illustrated in the drawings. The object carrying system is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of the description and should not be regarded as limiting.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] Example embodiments will become more fully understood from the detailed description given herein below and the accompanying drawings, wherein like elements are represented by like reference characters, which are given by way of illustration only and thus are not limitative of the example embodiments herein.

[0012] FIG. 1 is a perspective view of an object carrying system in accordance with an example embodiment.

[0013] FIG. 2 is a frontal upper perspective view of an exemplary embodiment of the present invention.

[0014] FIG. 3 is a rear upper perspective view of an exemplary embodiment of the present invention.

[0015] FIG. 4 is a frontal upper perspective view of an exemplary embodiment of the present invention with a handle cover installed.

[0016] FIG. 5 is a rear upper perspective view of an exemplary embodiment of the present invention with a handle cover installed.

[0017] FIG. 6 is a first side view of an exemplary embodiment of the present invention with a handle cover installed.

[0018] FIG. 7 is a second side view of an exemplary embodiment of the present invention with a handle cover installed.

[0019] FIG. 8 is a top view of an exemplary embodiment of the present invention.

[0020] FIG. 9 is a bottom view of an exemplary embodiment of the present invention.

[0021] FIG. 10 is a side sectional view of an exemplary embodiment of the present invention.

DETAILED DESCRIPTION**A. Overview**

[0022] An example object carrying system generally comprises a handle portion 20, a fulcrum portion 30, and a receiver portion 40. The handle portion 20 is adapted to be grasped by one hand of a user 12 while an object 13 may be retained within the receiver portion 40. The fulcrum portion 30, which is positioned between the handle and receiver portions 20, 40, comprises an upwardly-curved configuration which is adapted to rest on the shoulder of the user 12 when carrying the object 13. By positioning the object 13 in the receiver portion 40, positioning the fulcrum portion 30 over the shoulder, and pulling downwardly on the handle portion 20, the weight of the object 13 may be effectively distributed from the arms of the user 12 to the shoulder, thus greatly reducing discomfort when carrying an object 13 with the present invention.

[0023] It should be appreciated that the present invention may be utilized to aid in carrying a wide range of objects 13.

The present invention may be utilized to carry one or more objects 13. The present invention is particularly suitable for carrying bags, such as a bag of groceries. However, the functionality of the present invention should in no way be so limited. Any type of object 13 may be carried by the receiver portion 40, and the overall configuration of the present invention may vary depending on the type of objects 13 being carried.

[0024] It should also be appreciated that the shape, size, configuration, dimensions, and materials of the present invention may vary in different embodiments. The present invention should not be construed as limited in any of the above-mentioned regards. Any type of material may be utilized so long as the material is durable enough to function without bending, warping, or breaking from the weight of the object 13.

B. Handle Portion

[0025] As shown throughout the figures, an exemplary embodiment of the present invention includes a handle portion 20 which is adapted to be gripped with one or both hands of a user 12 when the present invention is in use. The handle portion 20 may be integrally formed with the other portions 30, 40 of the present invention as shown in the exemplary figures, or may be a discrete, connected portion in other embodiments.

[0026] As shown in FIG. 1, the handle portion 20 generally comprises a first end 22 and a second end 24. The first end 22 of the handle portion 20 is adapted to be grasped by a user with one or both hands when the present invention is in use. The second end 24 of the handle portion 20 is either connected to or integrally formed with the fulcrum portion 30. It should be appreciated that the handle portion 20 may comprise various sizes, orientations, and configurations in different embodiments. Thus, the exemplary figures should not be construed as limiting the scope of the present invention in those regards.

[0027] In some embodiments, the handle portion 20 may be comprised of an ergonomic configuration to improve comfort during use. The handle portion 20 is pulled downwardly by a user 12 with varying pressure to balance the weight from the object 13 on the receiver portion 40. The handle portion 20 may also function as a placeholder for other objects 13, such as bags, to help aid in the balance of weight on the user's 12 shoulder when the present invention is in use.

[0028] As shown in FIGS. 4-7, the handle portion 20 may include a cover 26. The cover 26 may comprise a tubular piece of material which fits over the handle portion 20 to improve comfort for the user 12. The cover 26 will preferably comprise a soft, malleable material such as plastic or rubber, though other types of materials may be utilized in different embodiments of the present invention. The cover 26 may be removably or fixedly secured to the handle portion 20. Additionally, the cover 26 may be positioned to substantially cover the full length of the handle portion 20, or may be positioned to cover only a portion of the handle portion 20.

C. Fulcrum Portion

[0029] As shown throughout the figures, an exemplary embodiment of the present invention includes a fulcrum portion 30 which is positioned between the handle portion 20 and

the receiver portion 40. The fulcrum portion 30 may be connected to or integrally formed with the handle portion 20 and the receiver portion 40.

[0030] The fulcrum portion 30 comprises a curved portion which is adapted to fit over the shoulder of a user 12 as shown in FIG. 1. The fulcrum portion 30 acts as a fulcrum for the present invention to aid in redistributing weight and thus improving comfort of a user 12 when the present invention is in use. The fulcrum portion 30 acts as a fulcrum to support the weight of the object 13 on the receiver portion 40 while the user 12 is pulling down on the handle portion 20.

[0031] The fulcrum portion 30 generally comprises a first end 32 and a second end 34. The first end 32 of the fulcrum portion 30 is either connected to or integrally formed with the handle portion 20. The second end 34 of the fulcrum portion 30 is either connected to or integrally formed with the receiver portion 40 as shown in the figures. When in use, the present invention will generally pivot about the shoulder of the user 12 at the fulcrum portion 30.

[0032] The fulcrum portion 30 curves upwardly from its junction with the handle portion 20 to its midpoint and curves downwardly from its midpoint to its junction with the receiver portion 40. The shape, size, angle, and configuration of the curve of the fulcrum portion 30 may vary in different embodiments. The angle of the fulcrum portion 30 may vary in different embodiments.

[0033] Generally, the fulcrum portion 30 will comprise an outer curve 36 and an inner curve 37, wherein the inner curve 37 rests against the user's 12 shoulder. The inner curve 37 may include padding which is either integrally or removably connected thereto, which aids in comfort for the user 12 of the present invention.

D. Receiver Portion

[0034] As shown throughout the figures, an exemplary embodiment of the present invention includes a receiver portion 40 which is adapted to removably retain an object 13 to be carried by the present invention. The shape, size, placement, orientation, and configuration of the receiver portion 40 may vary in different embodiments. Thus, the exemplary figures and descriptions herein should not be construed as limiting in those regards.

[0035] The receiver portion 40 may comprise a hook configuration, wherein the object 13 is removably retained therein. In a preferred embodiment as shown in the figures, the receiver portion 40 comprises a projection 42 which extends toward the handle portion 20 and fulcrum portion 30 of the present invention. The projection 42 may comprise an inner end 43 which faces toward the fulcrum portion 30 and an outer end 44 which faces away from the fulcrum portion 30.

[0036] The projection 42 will preferably define a slot 46 into which the object 13 may be removably inserted to carry the object 13. The shape, size, orientation, and configuration of the slot 46 may vary in different embodiments of the present invention. Thus, the scope of the present invention should not be construed as limited by exemplary figures and descriptions herein in those regards.

[0037] As best shown in FIGS. 6 and 7, the inner end 43 of the projection 42 will generally be angled. In a preferred embodiment, the angle of the inner end 43 of the projection 42 will be substantially the same or equal to the angle of the outer curve 36 of the fulcrum portion 30. This configuration

ensures that the object **13** may easily be inserted and removed from the slot **46** without being caught up on the projection **42**.

[0038] As shown in FIG. **10**, the inner end **43** of the projection **42** will preferably terminate near the outer curve **36** of the fulcrum portion **30**, leaving only a small gap between the inner end **43** of the projection **42** and the fulcrum portion **30**. This configuration reduces the risk that the object **13** will inadvertently slide out of the slot **46**, though this risk may be further minimized by the manner in which the present invention is oriented on a user's **12** shoulder.

[0039] FIG. **10** illustrates a longitudinal axis **15** extending along the lower end of the handle portion **20**. In some embodiments, the receiver portion **40** will not be aligned with this longitudinal axis **15**. More specifically as shown in FIG. **10**, the receiver portion **40** may be at a slightly higher elevation than the longitudinal axis **15** of the handle portion **20**. In other embodiments, the receiver portion **40** may be aligned with the longitudinal axis **15** of the handle portion **20**.

E. Operation of Preferred Embodiment

[0040] An exemplary embodiment of the present invention comprises a practical tool which redistributes the weight of objects **13** such as groceries from the traditional hand of a user **12** (when the user **12** is carrying such objects **13**) to a more durable part of the human form: the shoulder. Using the concept of a fulcrum and lever aids in eliminating pain in the hands and arms while also providing the added benefit of a free hand which can be used to do other things, such as carry keys.

[0041] In use, the user **12** first places the object **13** or objects **13** onto the receiver portion **40**, such as by inserted the objects **13** or objects **13** into the slot **46** thereof. The user **12** may then grasp and lift the fulcrum portion **30** onto one of their shoulders with one hand, with the inner curve **37** being rested against the shoulder as shown in FIG. **1**. When lifting, the user **12** may place their other hand on the handle portion **20** and push downwardly to balance the weight when bringing the present invention onto the shoulder. The user **12** then uses the hand of the above-mentioned shoulder to pull downwardly on the handle portion **20** in order to balance the weight from the objects **13** on the receiver portion.

[0042] Such a design configuration aids the user **12** in redistributing the weight from the objects **13** being carried using the shoulder which the fulcrum portion **30** rests on, with the present invention functioning largely as a lever able to pivot about the shoulder via the fulcrum portion **30**. These principles allow the present invention to be functional and practical for lifting more weight with less effort.

[0043] As the user **12** travels with the object **13** in the receiver portion **40**, the user **12** may freely rotate the present invention about the shoulder via its fulcrum portion **30** to aid in comfort. The weight of the objects **13** will be directed to the shoulder, rather than the arms, which will considerably lessen the effort necessary for carrying the objects **13** when compared with traditional, linear carrying devices.

[0044] Upon reaching a destination, the user **12** will retain the handle portion **20** in a first hand while, with their second hand, the user **12** grasps the fulcrum portion **30** and lifts it off the shoulder. The present invention may then slowly be lowered to the ground, at which point the object **13** may easily be removed from the receiver portion **40**.

[0045] Unless otherwise defined, all technical and scientific terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this

invention belongs. Although methods and materials similar to or equivalent to those described herein can be used in the practice or testing of the object carrying system, suitable methods and materials are described above. All publications, patent applications, patents, and other references mentioned herein are incorporated by reference in their entirety to the extent allowed by applicable law and regulations. The object carrying system may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive. Any headings utilized within the description are for convenience only and have no legal or limiting effect.

What is claimed is:

1. An object carrying device, comprising:
 - a handle portion;
 - a fulcrum portion connected to the handle portion, wherein the fulcrum portion comprises a curved configuration; and
 - a receiver portion for removably receiving an object, wherein the receiver portion is connected to the fulcrum portion.
2. The object carrying device of claim 1, wherein the handle portion, the fulcrum portion, and the receiver portion are integrally formed of a unitary structure.
3. The object carrying device of claim 1, wherein the fulcrum portion extends upwardly from the handle portion and the receiver portion.
4. The object carrying device of claim 3, wherein the fulcrum portion is adapted to rest on a user's shoulder.
5. The object carrying device of claim 1, wherein the receiver portion comprises a projection.
6. The object carrying device of claim 5, wherein the projection extends toward the handle portion.
7. The object carrying device of claim 5, wherein the projection defines a slot.
8. The object carrying device of claim 7, wherein the object is removably secured within the slot.
9. The object carrying device of claim 7, wherein the projection comprises an inner end oriented at a first angle.
10. The object carrying device of claim 9, wherein an outer curve of the fulcrum portion is oriented at a second angle, wherein the first angle is equal to the second angle.
11. An object carrying device, comprising:
 - a handle portion adapted to be gripped by a user;
 - a fulcrum portion connected to the second end of the handle portion, wherein the fulcrum portion comprises an upwardly-curved configuration; and
 - a receiver portion, wherein the receiver portion includes a slot for removably receiving an object, wherein the receiver portion is connected to the fulcrum portion.
12. The object carrying device of claim 11, wherein the handle portion, the fulcrum portion, and the receiver portion are integrally formed of a unitary structure.
13. The object carrying device of claim 11, further comprising a removable handle cover.
14. The object carrying device of claim 11, wherein the handle portion comprises an ergonomic configuration.
15. The object carrying device of claim 11, further comprising a longitudinal axis extending through the handle portion, wherein the receiver portion is not aligned with the longitudinal axis extending through the handle portion.
16. The object carrying device of claim 11, wherein the receiver portion comprises a projection.

17. The object carrying device of claim 16, wherein the projection extends toward the handle portion.

18. The object carrying device of claim 17, wherein the slot is defined by the projection.

19. The object carrying device of claim 17, wherein the projection comprises an inner end and an outer end, wherein the inner end of the projection terminates near the fulcrum portion.

20. An object carrying device, comprising:

a handle portion adapted to be gripped by a user;

a cover removably secured over the handle portion;

a fulcrum portion connected to the second end of the handle portion, wherein the fulcrum portion comprises an upwardly-curved configuration; and

a receiver portion comprising a projection, wherein the projection defines a slot for removably receiving an object, wherein the receiver portion is connected to the fulcrum portion, wherein the projection terminates near the fulcrum portion.

* * * * *