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(54) RETAIL HANGER DISPLAY SYSTEM

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Related U.S. Application Data

(63) Continuation-in-part of application No. 09/641,001, filed on Aug. 17, 2000, now abandoned. Continuation-in-part of application No. 10/377,490, filed on Feb. 27, 2003.

(60) Provisional application No. 60/360,339, filed on Feb. 27, 2002.

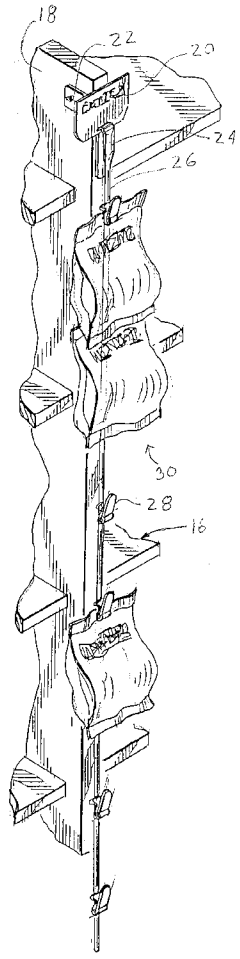
Publication Classification

(51) **Int. Cl.**[7] **A47F 5/08**

(52) **U.S. Cl.** **211/113**; 211/118; 211/85.15

(57) **ABSTRACT**

A retail display system for increasing density of merchandising of products, by using the otherwise unused space of existing display configurations. A hanger display configuration, which may hold vertical strip displays, is installed in such a manner as to adapt to a diverse range of product packaging and shelving fixture types, efficiently provide signage, pricing and scanning information, and to reduce theft. The hanger display configuration can be manufactured for a specific product and specific quantity of such product. Faceplates have clamps on the back for clamping the faceplates to seldom-used non-shelve portions of the rack display and other store fixtures, such as bars, stanchions, corners, etc.



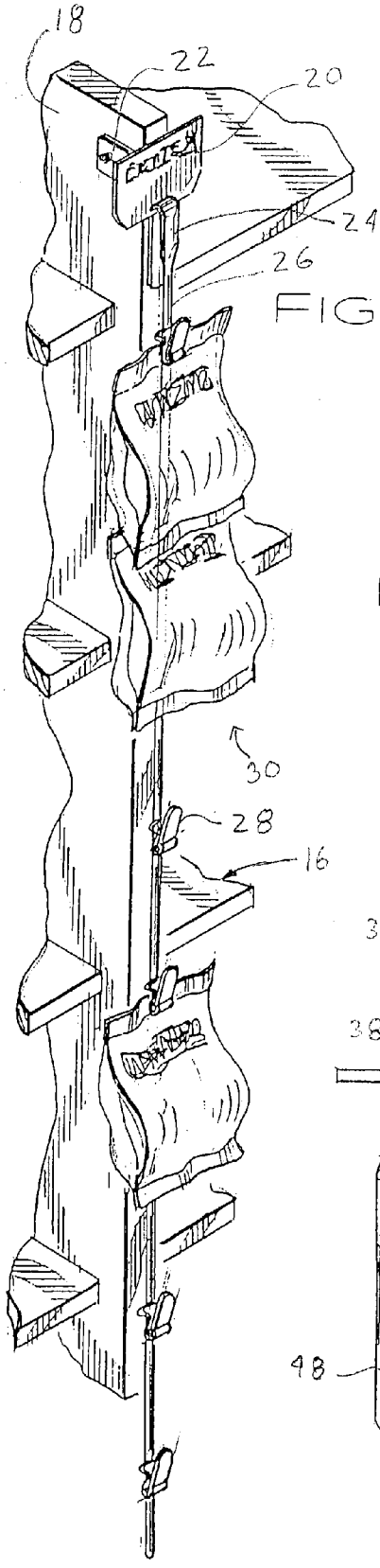


FIG. 1

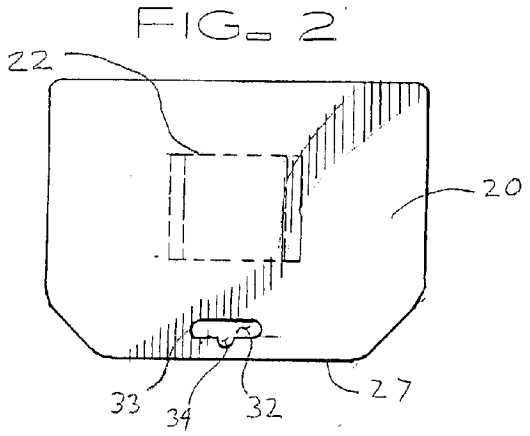


FIG. 2

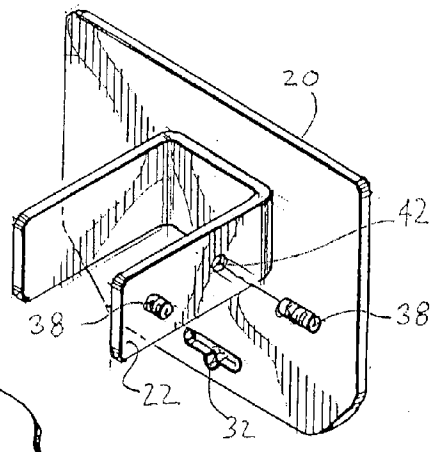


FIG. 3

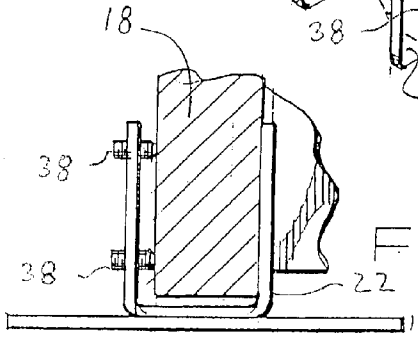


FIG. 4

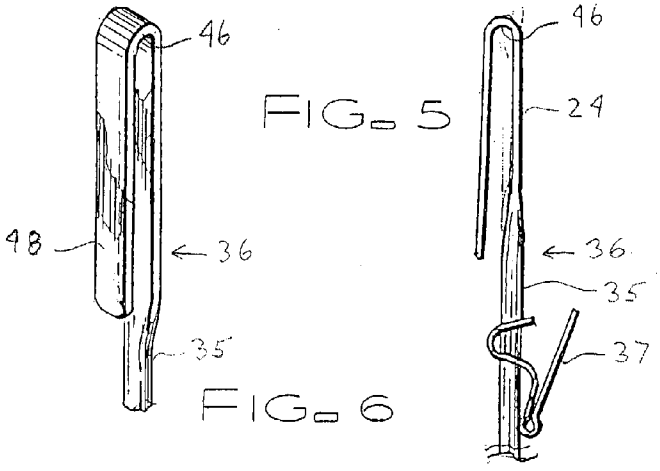


FIG. 5

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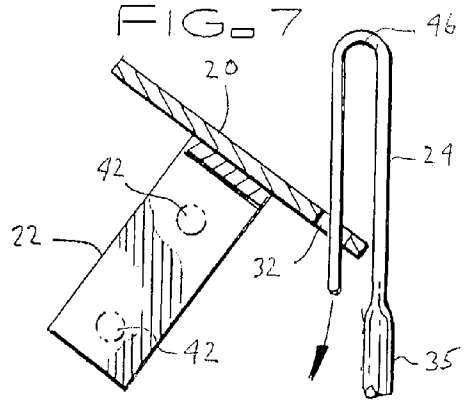

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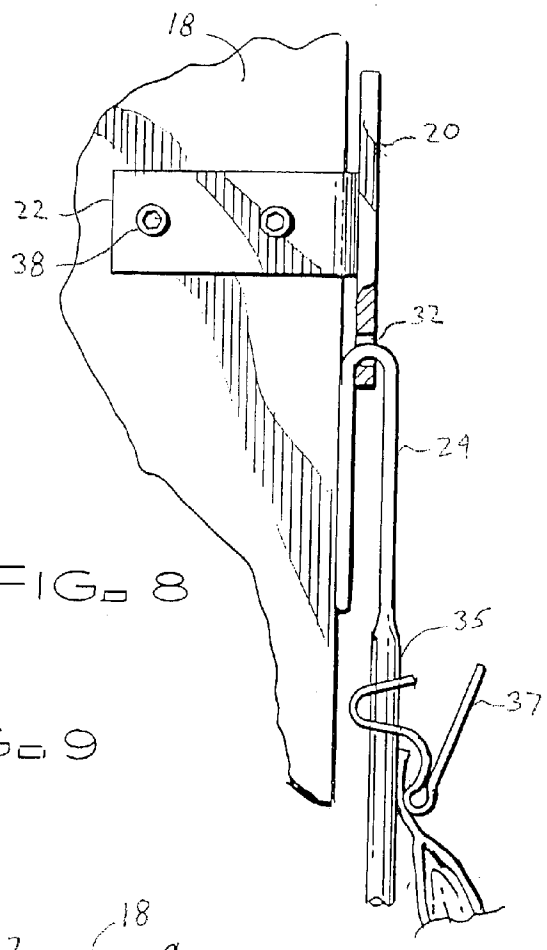


FIG. 8

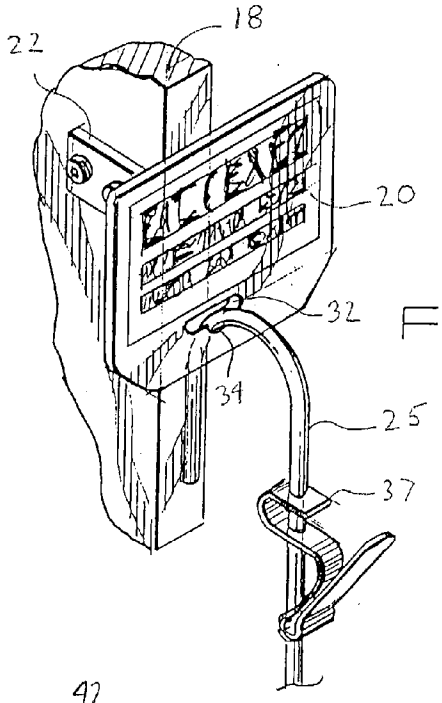


FIG. 9

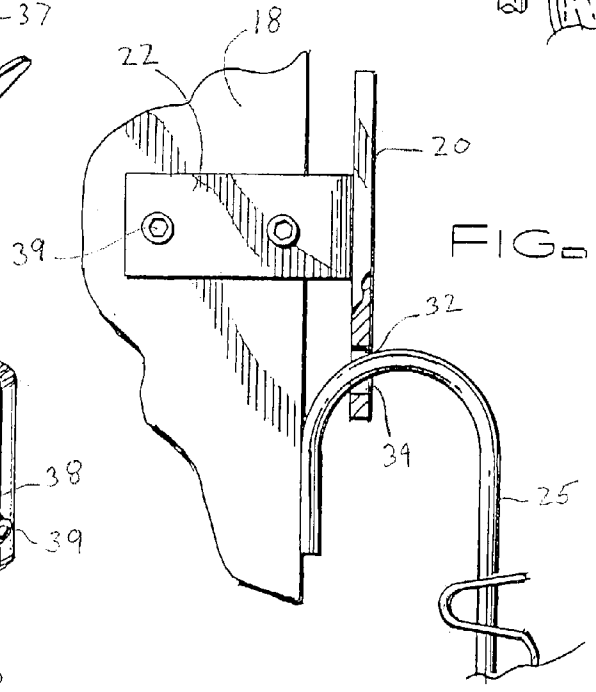


FIG. 10

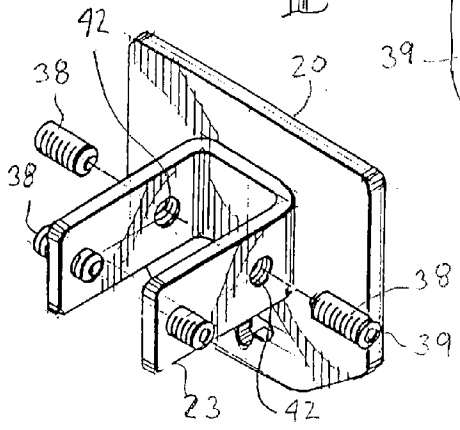


FIG. 12

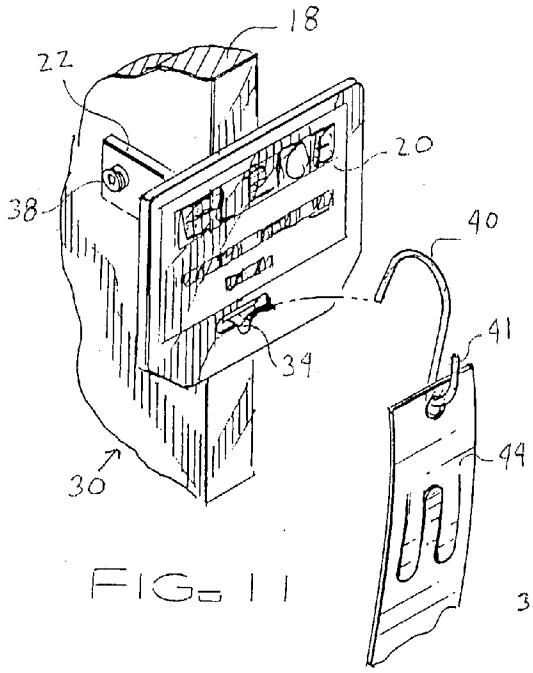


FIG. 11

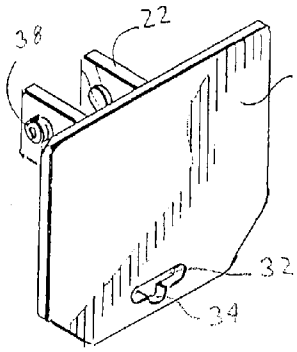


FIG. 13

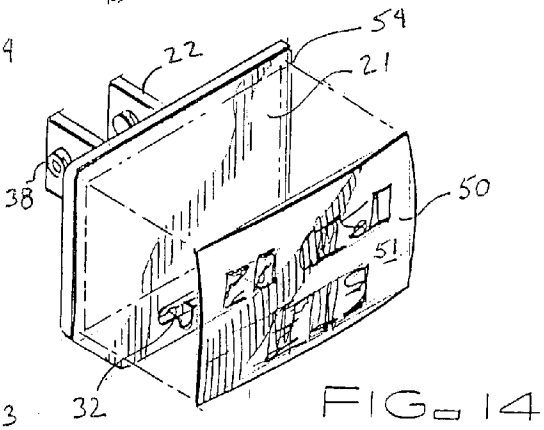


FIG. 14

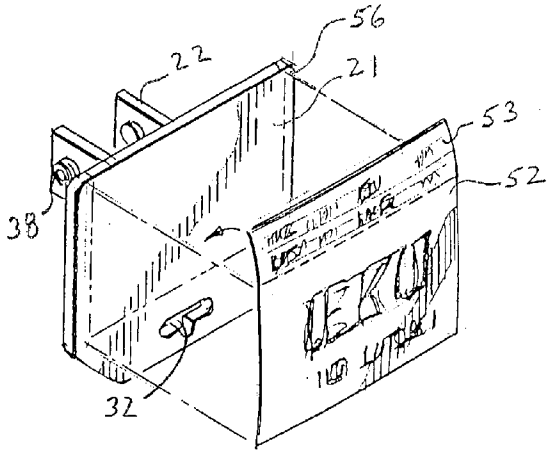


FIG. 15A

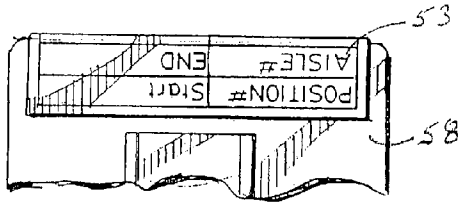
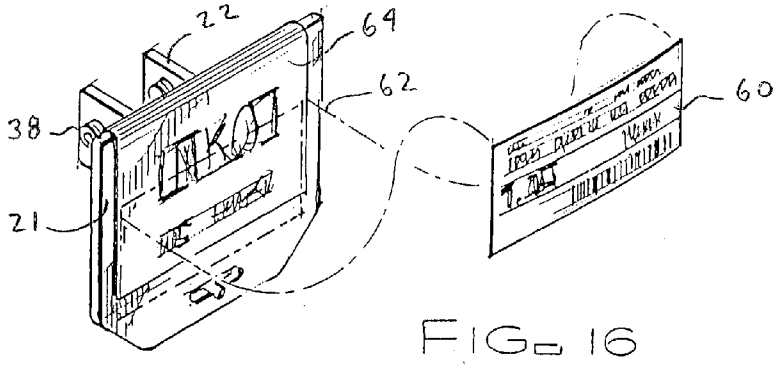


FIG. 15B



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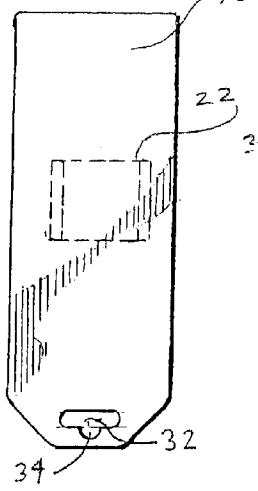


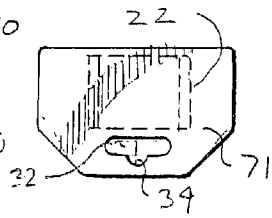
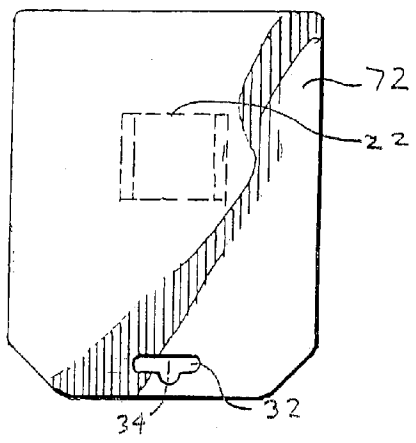
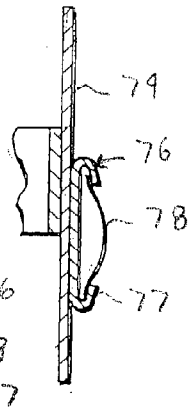


FIG. 18

FIG. 19





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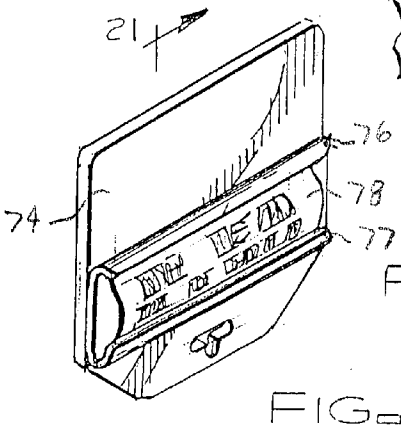
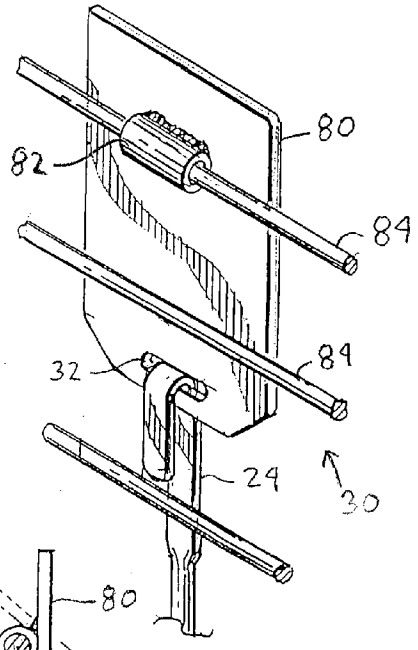
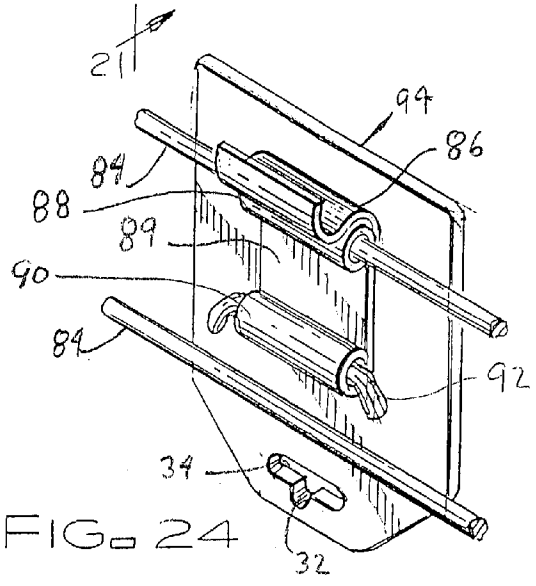


FIG. 20

FIG. 22





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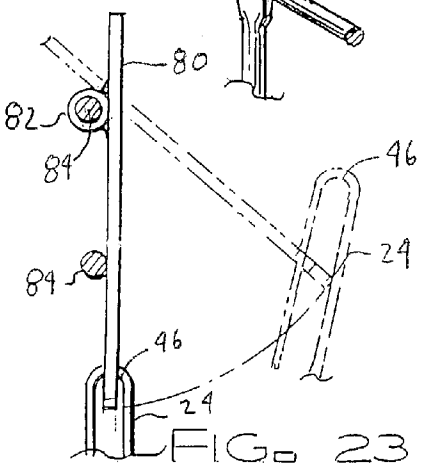

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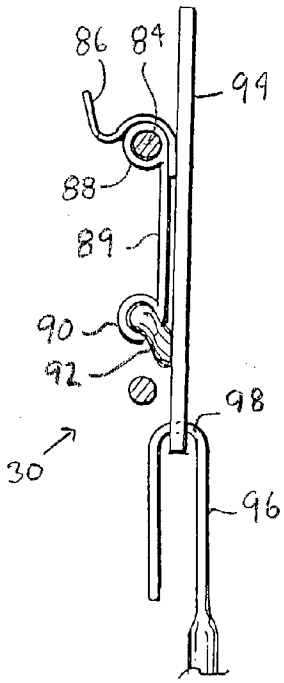

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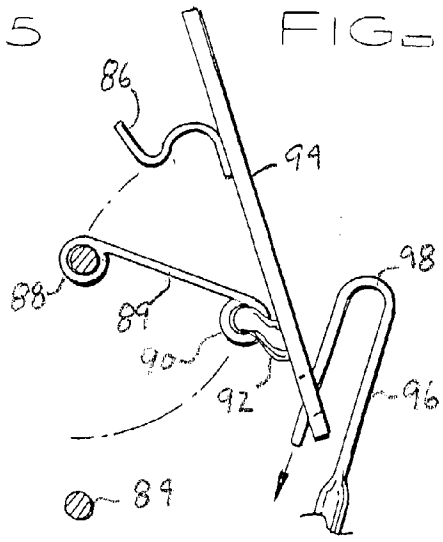

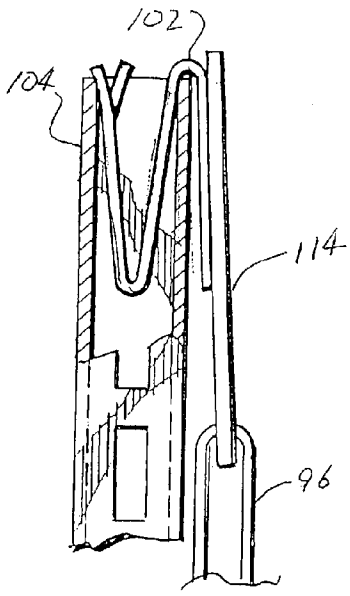

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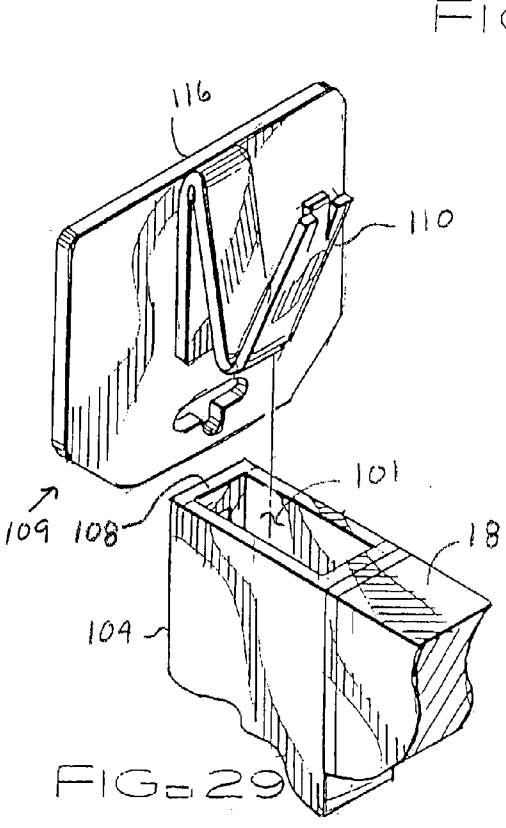

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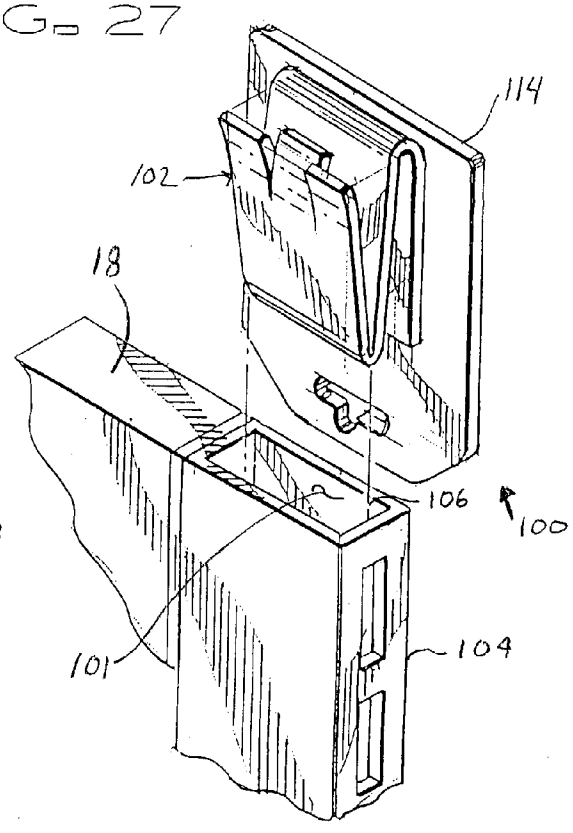

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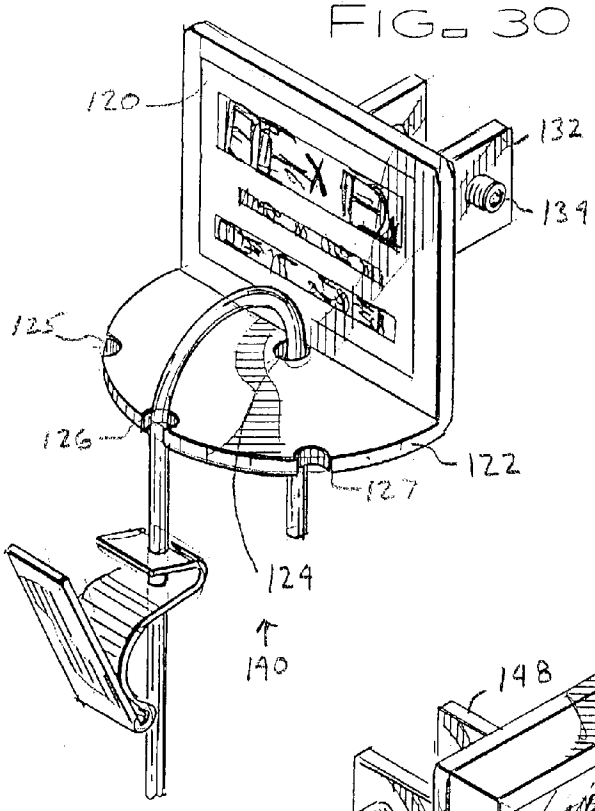

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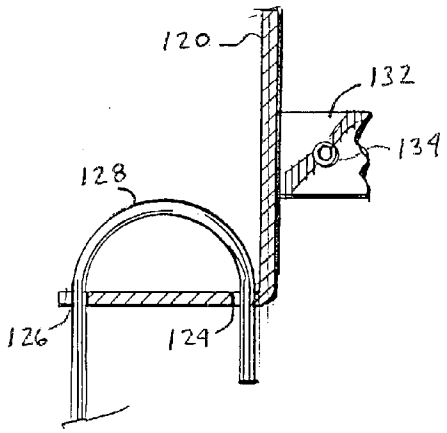

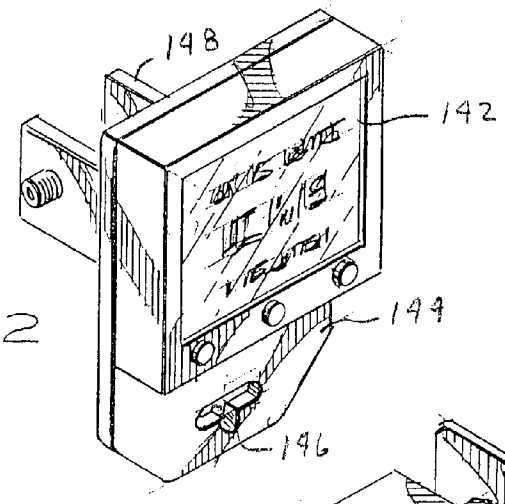

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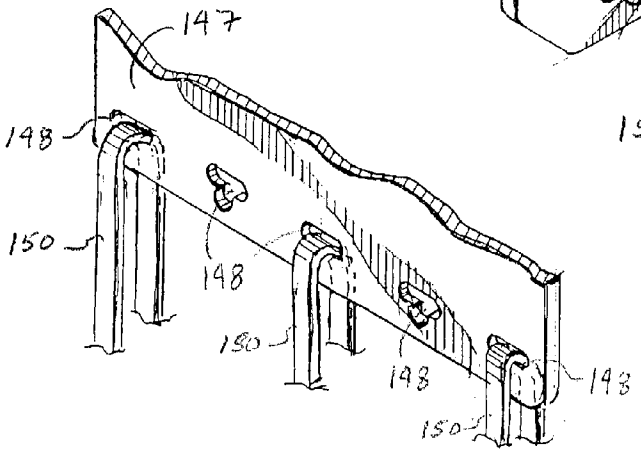


FIG. 33

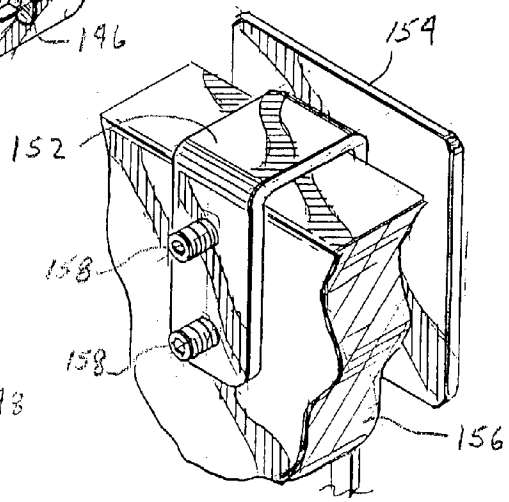


FIG. 34

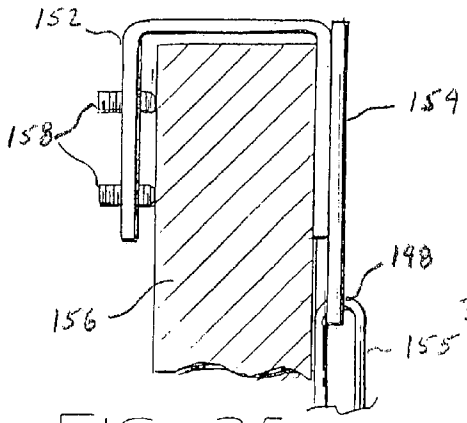
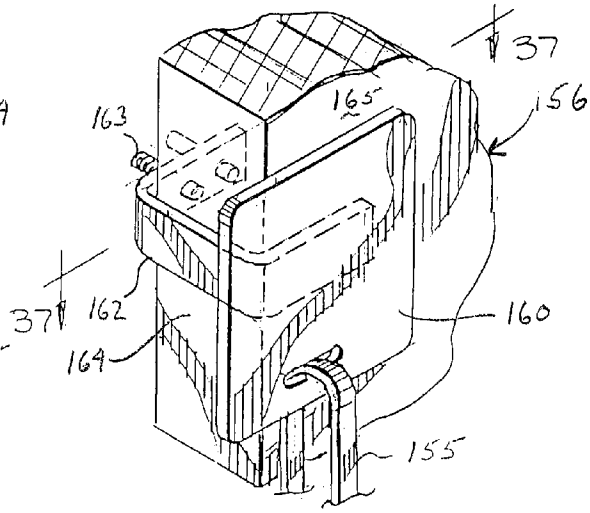


FIG. 35



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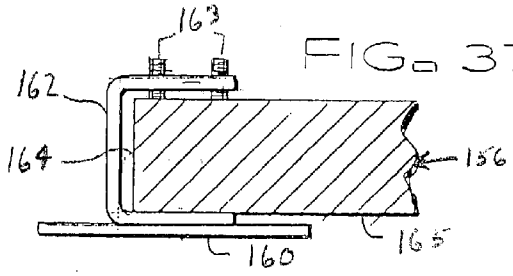

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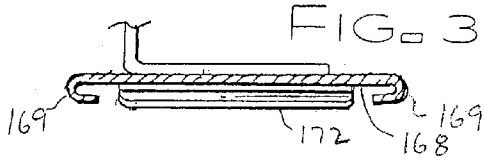

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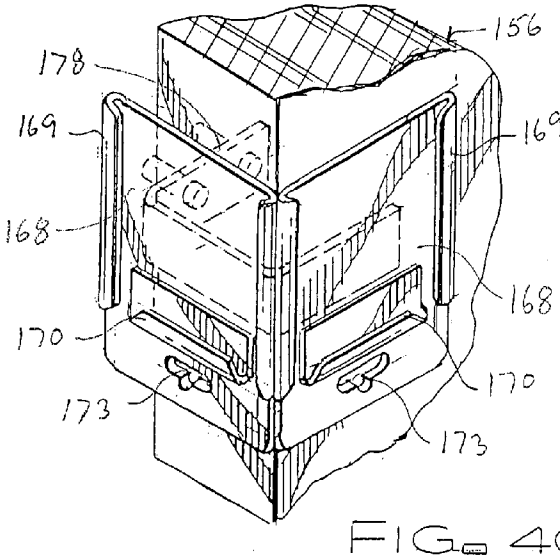

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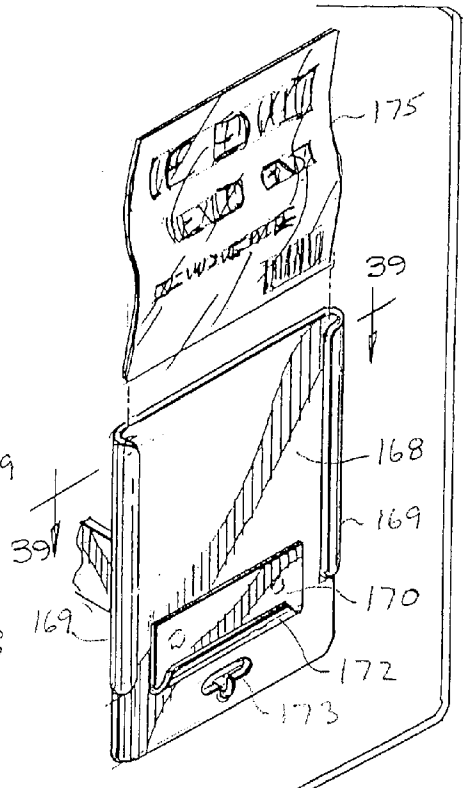
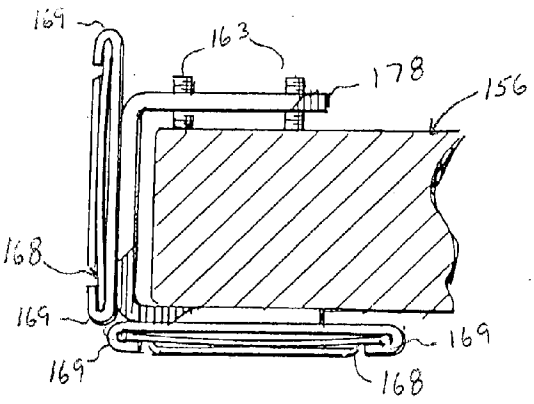


FIG. 38

FIG. 41



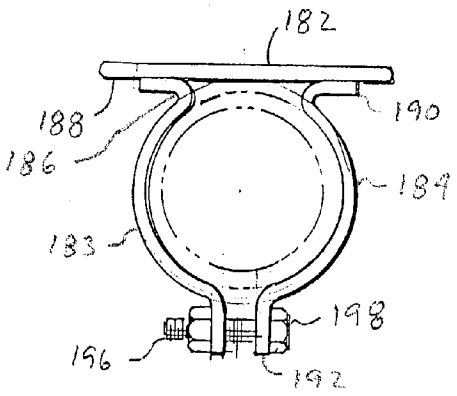


FIG. 43

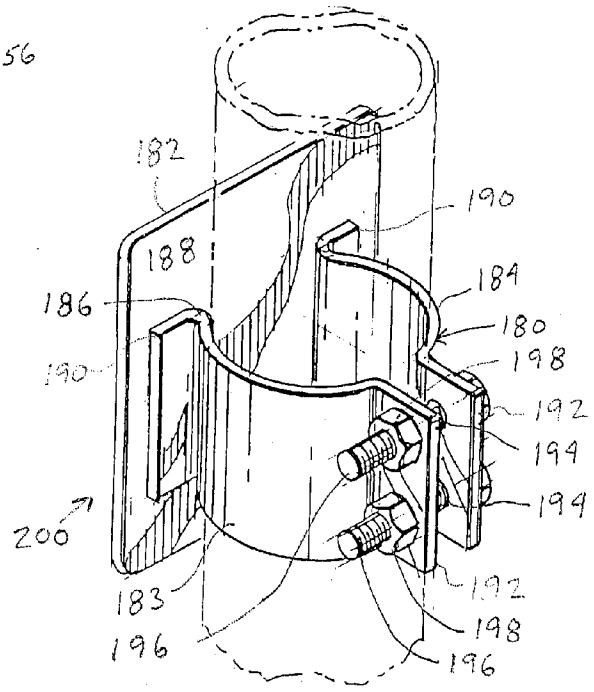


FIG. 42

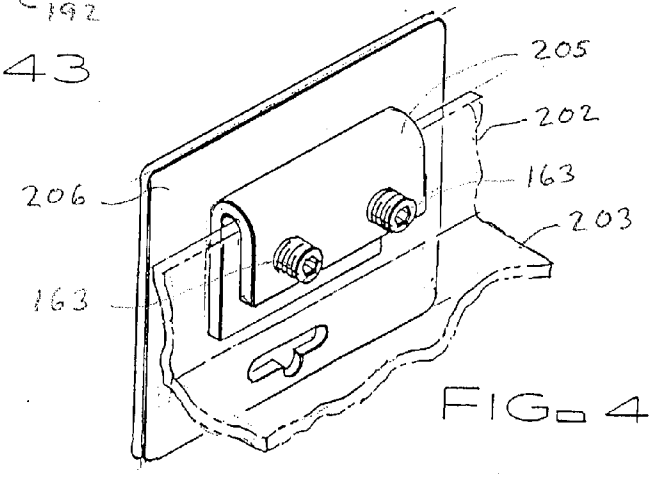


FIG. 44

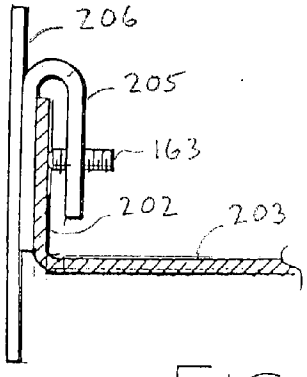


FIG. 45

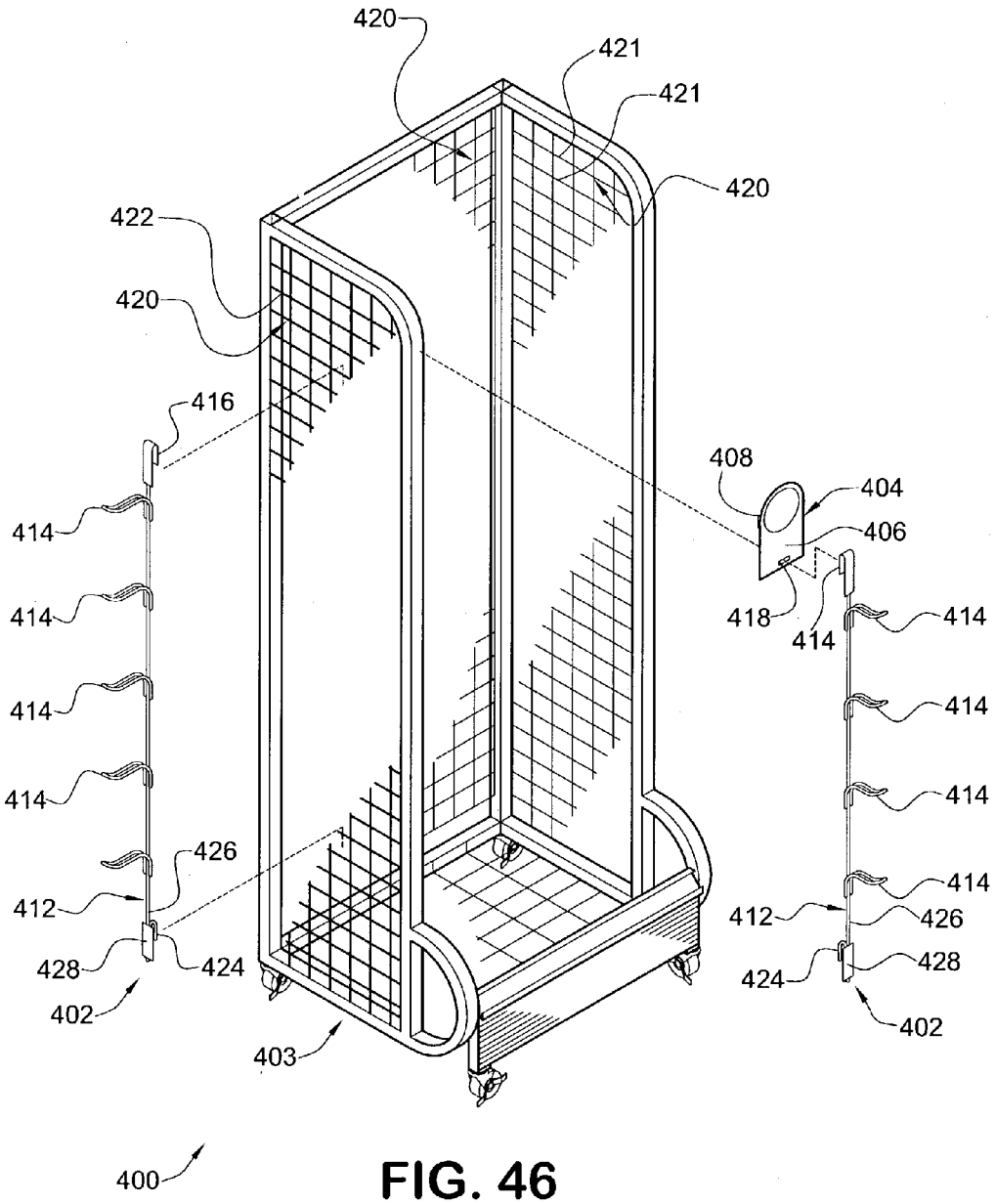

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FIG. 46

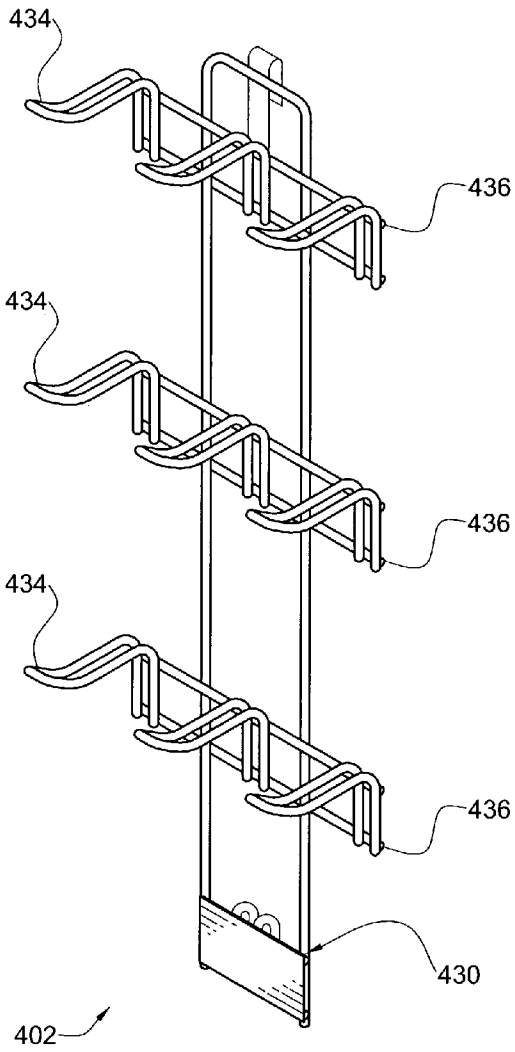

FIG. 47

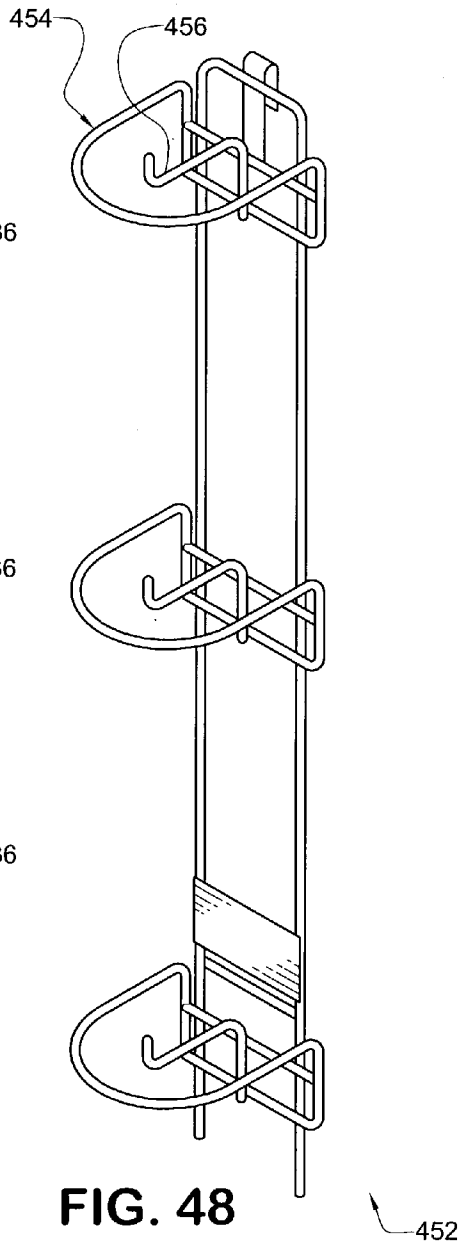

FIG. 48

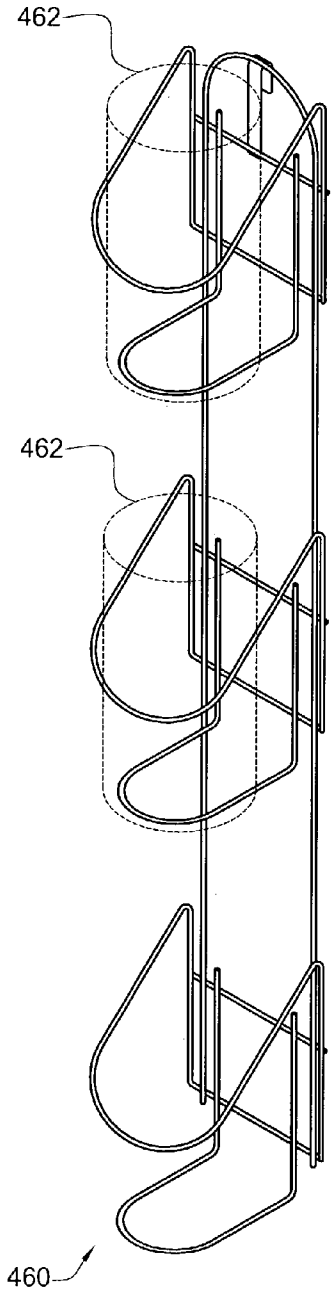

FIG. 49

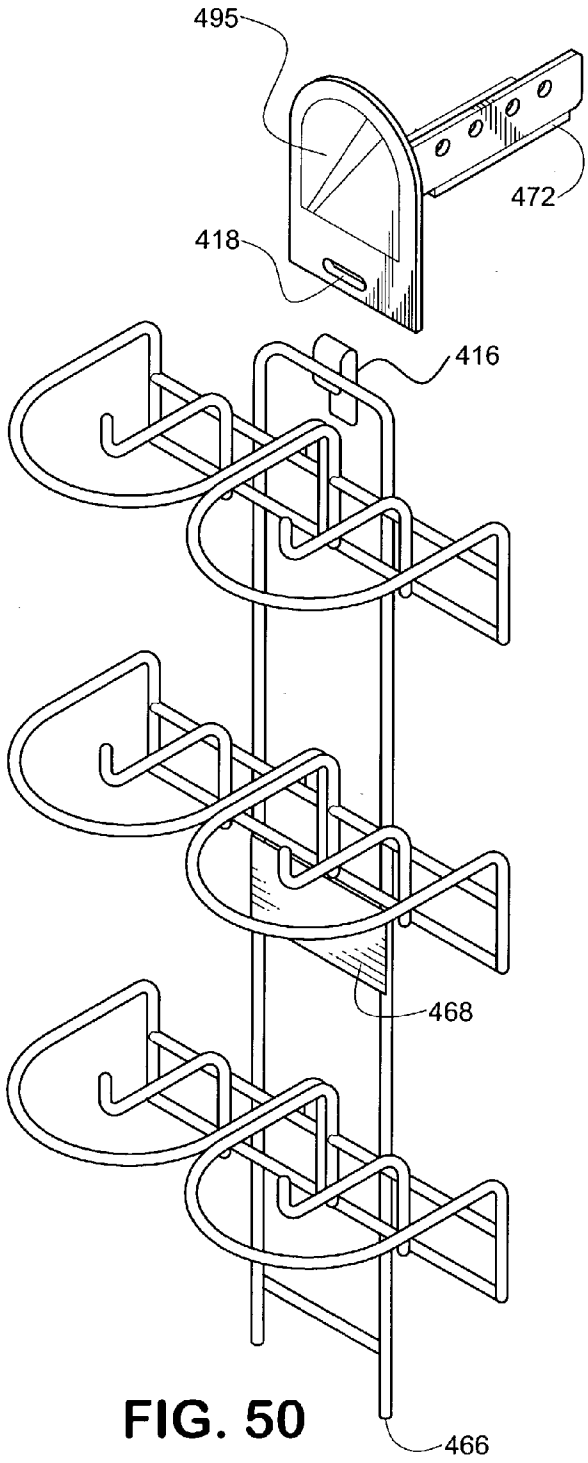

FIG. 50

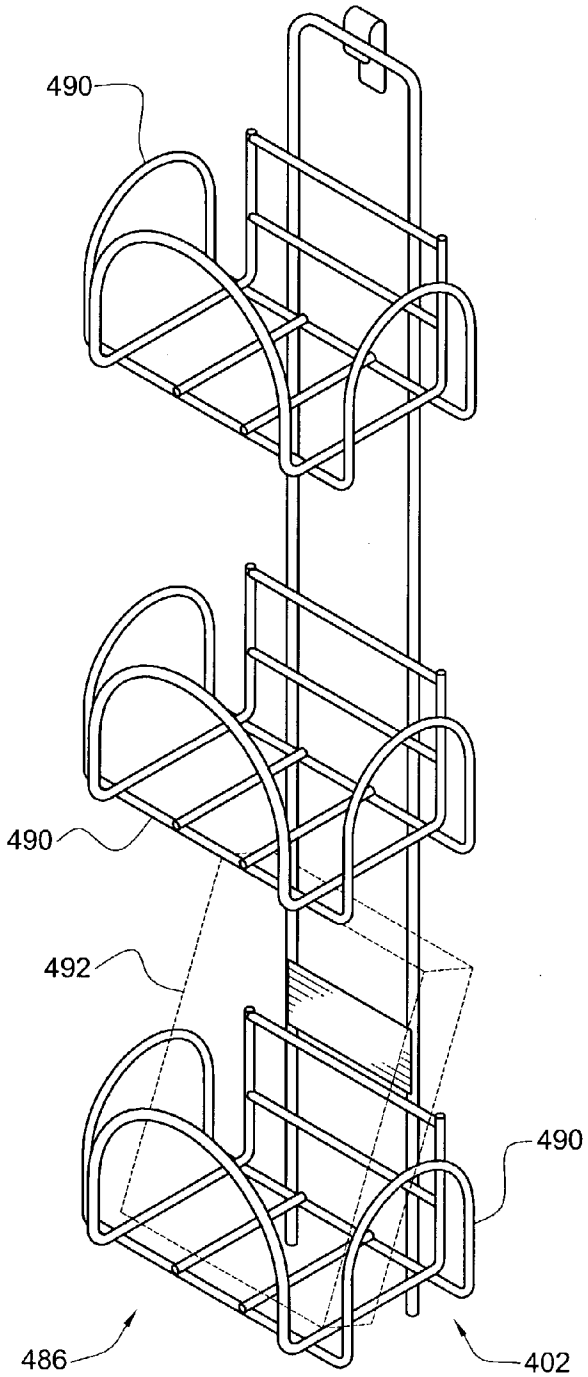

FIG. 51

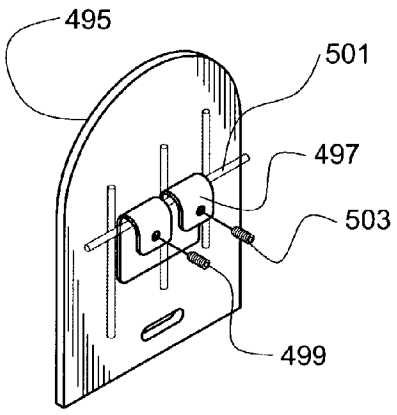

FIG. 52

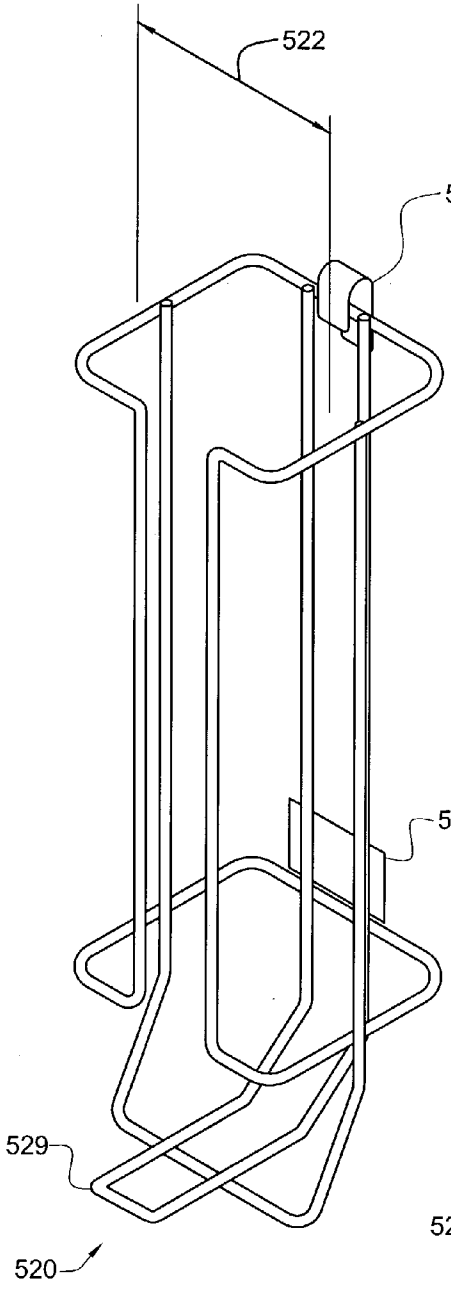

FIG. 53

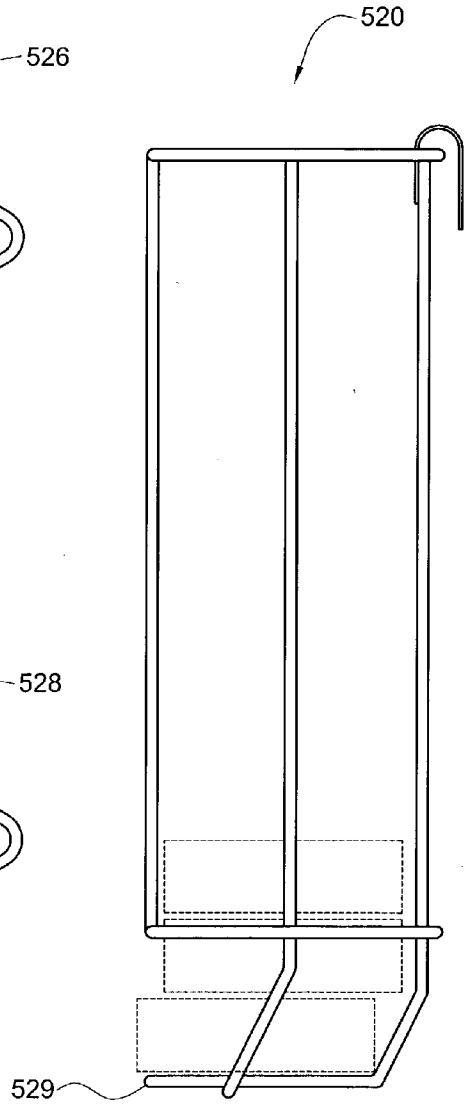

FIG. 54

RETAIL HANGER DISPLAY SYSTEM

REFERENCES TO RELATED APPLICATIONS

[0001] The present application is a continuation-in-part of my related U.S. utility patent application Ser. No. 09/641,001, filed Aug. 17, 2000, entitled "RETAIL DISPLAY SYSTEM", and is also a continuation-in-part of my related U.S. utility patent application Ser. No. 10/377,490, filed Feb. 27, 2003, entitled "RETAIL HANGER DISPLAY SYSTEM", which claimed priority to my related U.S. provisional patent application Serial No. 60/360,339, filed Feb. 27, 2002, entitled "RETAIL HANGER DISPLAY SYSTEM." These related applications are incorporated herein by this reference and are not admitted to be prior art with respect to the present invention by the mention in this cross-reference section.

BACKGROUND OF THE INVENTION

[0002] This invention relates to providing an improved system for displaying and marketing merchandise, including more efficient use of space and better inventory control. More particularly, this invention concerns a highly adaptable retail display system that efficiently uses normally unused space within a store to display and sell merchandise. The field of product display and marketing has increasingly become a more exact science involving extensive research into the shopping and purchasing behaviors of consumers. As a result, retailers have become increasingly sophisticated in their application of product-display systems.

[0003] Typically, a retail space will include a diverse range of product-display fixtures. Arrangement of such fixtures often follows a set of tactics for ensuring that a maximum number of shoppers will see and actively consider purchasing a displayed product. It is well-known that specific prime locations within a retail floor space are highly desirable for generation of sales. Similarly, prime locations within, and on, display-fixtures are known to produce higher sales volume. A principal need of many retailers is to maximize the quantity of products displayed within a given floor area, and more specifically, to maximize the display of products with the highest sales volumes, cash values and profit margins within the prime store locations. In addition, distributors often pay additional bonuses or rewards to stores that choose to assign a highly desired space to display their particular product line. For these and other reasons, it is economically important to most retailers to utilize the maximum amount of available product display space within a store.

[0004] Furthermore, many product vendors require flexibility in displaying their product and controlling their inventory within the product display system. Currently, a large number of retailers rely on cumbersome, industry standard, retail display systems that allow only limited flexibility in arrangement, ease of modification and product-specific display. Many retailers utilize the theory that the best solution for some product lines is to create relatively static, permanent displays; however, not all products merit such long-term placement. Many products aren't in large demand or are seasonal. For example, promotional products tied to a seasonal holiday or new movie release may have a relatively short (yet highly lucrative) promotional window. It is highly desirable that product placement systems that are easy to modify and provide a high degree of adaptability (to quickly changing marketing strategies and inventory management solutions) would be extremely desirable for use in the retail industry.

[0005] Currently, many retailers use a variety of add-on merchandising displays in conjunction with existing conventional shelving construction to increase product display densities. These methods include utilizing vertically hanging strip-displays that have a vertical row of hooks or clips for holding packages of merchandise. While this type of typical strip-type-merchandising-system is effective for the display of certain products, they suffer from distinct shortcomings. For example, strip-type merchandising systems are typically made of flimsy construction that may be easily dislodged or removed from its supports. Further, such strip-type merchandising systems are limited in their adaptability to a diverse range of packaging, product lines, display quantities and shelving types. Further, most strip-type merchandising systems provide limited opportunities for supplementary advertising and product □branding□ (the display of a specific or well-established brand name of merchandise). As previously mentioned, such strip-type merchandising systems are typically not securely affixed to store fixtures and may even be stolen or removed easily by unauthorized persons.

[0006] Merchandisers, marketers, and advertisers are increasingly seeking to attract buyers by rapidly revising product packaging, as well as marketing strategies. These revisions require the retailer to find flexibility and adaptability within their own product display systems.

OBJECTS OF THE INVENTION

[0007] A primary object and feature of the present invention is to fulfill the above-mentioned needs by the provision of a vertical strip display system that displays merchandise for sale using assorted non-shelf portions, space otherwise unused, of existing display fixtures.

[0008] In addition, it is a primary object and feature that the display system is installed in such a manner as to deter theft of such strip displays.

[0009] Additionally, it is a primary object and feature of this invention to provide a strip display system that is adaptable to a diverse range of product packaging and shelving fixture types.

[0010] It is a further primary object and feature of this invention to efficiently provide signage, pricing and scanning information.

[0011] It is a further object and feature of the present invention to provide such a display feature that is manufactured for a specific product and specific quantity of such product.

[0012] It is a further object and feature of the present invention to provide such a display feature that is designed to reduce the risk of injury due to contact with its parts.

[0013] A further object and feature of the present invention is to provide such a display system that is efficient, inexpensive and handy. Other objects of this invention will become apparent with reference to the following descriptions.

SUMMARY OF THE INVENTION

[0014] In accordance with a preferred embodiment hereof, this invention provides a retail display system for increasing density of merchandising of products held by vertical strip displays, comprising: unitary display means having at least one front face for displaying retail sales indicia and having at least one rear face; and wherein such at least one rear face unitary display means comprises on said rear face, clamping means for clamping such unitary display means on a portion of at least one store fixture which is not a horizontal shelf; and attachment means for removably attaching the vertical strip display.

[0015] Moreover, it provides such a retail display system wherein such clamping means comprises connection means for clamping such display means onto a vertical store fixture portion having a substantially fixed cross-section from a top of the portion to a bottom of the portion. Additionally, it provides such a retail display system further comprising: security means for preventing removal of the vertical strip display when such unitary display means is clamped such that such attachment means is closely adjacent the portion of the store fixture. Also, it provides such a retail display system wherein: such attachment means comprises slot means for receiving at least one flat hook.

[0016] In addition, it provides such a retail display system further comprising: a unitary vertical strip display having at least one upper end; wherein such at least one upper end comprises at least one flat hook. And, it provides such a retail display system wherein: such at least one flat hook comprises an approximately 180-degree bend having a radius of less than one-half inch. Further, it provides such a retail display system wherein: such at least one flat hook comprises an approximately 180-degree bend having a radius of about one-eighth inch.

[0017] In accordance with another preferred embodiment hereof, this invention provides a retail display system for increasing density of merchandising of products held by vertical displays, comprising: a unitary display holder having at least one front face suitable to display retail sales indicia and having at least one rear face; wherein such unitary display holder comprises on such at least one rear face, at least one clamp structured and arranged to clamp such unitary display holder onto a portion of a store fixture which is not a horizontal shelf, and at least one connector structured and arranged to assist removable attachment of at least one vertical display to such unitary display holder.

[0018] Even further, it provides such a retail display system wherein such at least one clamp is structured and arranged to clamp such unitary display holder onto at least one vertical store fixture portion having a substantially fixed cross-section from a top of the portion to a bottom of the portion. Moreover, it provides such a retail display system wherein: such at least one connector is structured and arranged to prevent removal of the vertical display when such unitary display holder is clamped such that such at least one connector is closely adjacent to the portion of the store fixture.

[0019] Additionally, it provides such a retail display system wherein: such at least one connector comprises at least one slot for receiving at least one flat hook. Also, it provides such a retail display system further comprising: a unitary vertical strip display having at least one upper end; wherein such at least one upper end comprises at least one flat hook. In addition, it provides such a retail display system wherein such at least one flat hook comprises an approximately 180-degree bend having a radius of less than one-half inch. And, it provides such a retail display system wherein such at least one flat hook comprises an approximately 180-degree bend having a radius of about one-eighth inch.

[0020] Further, it provides such a retail display system wherein: such the unitary vertical store fixture portion comprises a slab. Even further, it provides such a retail display system wherein such at least one clamp comprises Allen-wrench-operable set screws. Moreover, it provides such a retail display system wherein said unitary vertical store fixture portion comprises at least one bar. Additionally, it provides such a retail display system wherein such at least one the bar comprises at least one gondola stanchion. Also, it provides such a retail display system wherein the portion of said the unitary vertical store fixture comprises a portion of at least one vertical wire grid.

[0021] In addition, it provides such a retail display system wherein such at least one front face comprises an essentially flat surface. And, it provides such a retail display system wherein such at least one front face comprises at least one vertical groove structured and arranged to removably hold at least one display label. Further, it provides such a retail display system wherein such at least one front face further comprises at least one horizontal groove structured and arranged to removably hold at least one display label. Even further, it provides such a retail display system wherein such at least one front face further comprises at least one horizontal groove structured and arranged to removably hold at least one display label. Moreover, it provides such a retail display system wherein such at least one connector comprises at least one slot. Additionally, it provides such a retail display system wherein such at least one connector comprises at least one round hole. Also, it provides such a retail display system wherein such at least one connector comprises at least one round hole.

[0022] In accordance with another preferred embodiment hereof, this invention provides a retail display system for increasing density of merchandising of products held by vertical strip displays, comprising: a unitary vertical strip display having at least one upper end, wherein such at least one upper end comprises at least one flat hook constructed and arranged to hook into at last one flat slot; wherein such at least one flat hook comprises an approximately 180-degree bend having a radius of less than one-half inch.

[0023] In addition, it provides such a retail display system further comprising: a unitary display holder having at least one front face suitable to display retail sales indicia and having at least one rear face; wherein such unitary display holder comprises on such at least one rear face, at least one clamp structured and arranged to clamp such unitary display holder onto a portion of a store fixture, and at least one flat slot structured and arranged to assist removable attachment of such unitary vertical strip display to such unitary display holder; wherein such at least one flat hook is hooked into such at least one flat slot. And, it provides such a retail display system wherein: such retail display system is structured and arranged to prevent removal from such at least one flat slot of such unitary vertical strip display when such

unitary display holder is clamped so that such at least one flat slot is closely adjacent the portion of the store fixture. Further, it provides such a retail display system further comprising: a hanger display system, for removeable attachment with such display means, for use in conjunction with such retail display system, for combined control of inventory and merchandise displayed for sale, comprising a plurality of holding means for holding the merchandise; and at least one vertical support means for supporting such plurality of holding means; wherein such attachment means attaches such at least one vertical support means to such retail display system; wherein each such plurality of holding means is shaped and arranged for a holding a specified kind of product; and wherein each of such plurality of holding means is further shaped and arranged for holding a specified quantity of such specified kind of product. Even further, it provides such a retail display system further comprising: a hanger display system, adapted to removeably attach with such unitary display holder, adapted to use in conjunction with such retail display system, adapted to use in combined control of inventory and merchandise displayed for sale, comprising a plurality of holders adapted to hold the merchandise; and at least one vertical support adapted to support such plurality of holders; wherein such at least one connector connects such at least one vertical support to such retail display system; wherein each of such plurality of holders is shaped and arranged for a holding a specified kind of product; and wherein each of such plurality of holders is further shaped and arranged for holding a specified quantity of such specified kind of product. Moreover, it provides such a retail display system wherein such at least one clamp comprises at least one tightening screw structured and arranged to attach such at least one clamp onto such portion of such store fixture. In accordance with another preferred embodiment hereof, this invention provides a hanger display system, used in conjunction with a retail merchandising fixture, for combined control of inventory and merchandise displayed for sale, comprising: holding means for holding the merchandise; vertical support means for supporting such holding means; and attachment means for attaching such vertical support means to the merchandising fixture; wherein such holding means is structured and arranged to hold a specified kind of product; and wherein such holding means is further structured and arranged to hold a specified quantity of such specified kind of product.

[0024] Additionally, it provides such a hanger display system wherein such attachment means is selected from the following group consisting of: hook means for hooking such vertical support means to a wire grid of the retail merchandise fixture; clamp means for clamping such vertical support means to the retail merchandise fixture; and faceplate means, having an aperture and being removably attachable to such retail merchandise fixture, for attaching such vertical support means. Also, it provides such a hanger display system wherein such faceplate means is structured and arranged to remind a user of the nature and service of the merchandise displayed for sale. In addition, it provides such a hanger display system wherein such vertical support means further comprises indicia means for displaying indicia. And, it provides such a hanger display system wherein such holding means further comprises at least one safety ring.

[0025] In accordance with another preferred embodiment hereof, this invention provides a hanger display system for at least one particular retail business location having at least one set of available product-desired-spaces comprising the steps of: analyzing data of a plurality of products; allowing space to each such plurality of products; designing displays for displaying each such product to each such space; producing such displays; wherein each such display comprises, holding means for holding the merchandise; vertical support means for supporting such holding means; and attachment means for attaching such vertical support means to the merchandising fixture; wherein such holding means is structured and arranged to hold a specified kind of product; and wherein such holding means is further structured and arranged to hold a specified quantity of such specified kind of product.

[0026] In accordance with another preferred embodiment hereof, this invention provides a hanger display system, used in conjunction with a retail merchandising fixture, for combined control of inventory and merchandise displayed for sale, comprising: a plurality of holders to hold the merchandise; at least one vertical support to support such plurality of holders; and at least one attacher to attach such at least one vertical support to the merchandising fixture; wherein such plurality of holders are structured and arranged to hold a specified kind of product; and wherein such plurality of holders are structured and arranged to hold a specified quantity of such specified kind of product.

[0027] Further, it provides such a hanger display system wherein such at least one attacher is selected from the following group comprising: at least one hook structured and arranged to hook such at least one vertical support to a wire grid of the retail merchandise fixture; at least one clamp structured and arranged to clamp such at least one vertical support to the retail merchandise fixture; and at least one faceplate, having an aperture and being removably attachable to such retail merchandise fixture, structured and arranged to attach such at least one vertical support. Even further, it provides such a hanger display system wherein such at least one faceplate is structured and arranged to remind a user of the nature and service of the merchandise displayed.

[0028] Even further, it provides such a hanger display system, wherein such attachment means comprises: unitary display means having at least one front face for displaying retail sales indicia and having at least one rear face; and wherein such display means comprises on such at least one rear face, clamping means for clamping such display means on a portion of a store fixture which is not a horizontal shelf; and attachment means for removably attaching such vertical support means.

BRIEF DESCRIPTION OF THE DRAWINGS

[0029] **FIG. 1** is a perspective view of a preferred embodiment of the retail display system of the present invention.

[0030] **FIG. 2** is a front view of the faceplate of the embodiment of **FIG. 1**.

[0031] **FIG. 3** is a perspective view of the mounting bracket of the embodiment of **FIG. 1**.

[0032] **FIG. 4** is a plan view of the mounting bracket of **FIG. 1** showing the mounting bracket in an installed position on a typical wood end-cap display.

[0033] **FIG. 5** is a side view of the hook strip attachment of the retail display system of **FIG. 1**.

[0034] **FIG. 6** is a perspective view of the hook strip attachment shown in **FIG. 5**.

[0035] **FIG. 7** is a side view, partially in section, of the preferred embodiment of **FIG. 1** illustrating the installation of the hook strip attachment to the faceplate.

[0036] **FIG. 8** is a side view, partially in section, illustrating the secure position of the hook strip attachment.

[0037] **FIG. 9** is a perspective view of another preferred embodiment of the hook strip attachment of the retail display system.

[0038] **FIG. 10** is a side view, partially in section, of the hook strip attachment of **FIG. 9**.

[0039] **FIG. 11** is a perspective view of yet another preferred embodiment of a hook strip attachment of the retail display system.

[0040] **FIG. 12** is a perspective view of a preferred embodiment of the mounting bracket of **FIG. 1** with additional set screws.

[0041] **FIG. 13** is a perspective view of the faceplate of the retail display system of **FIG. 1**, showing another preferred embodiment of the mounting bracket.

[0042] **FIG. 14** is a perspective view of the faceplate of the retail display system of **FIG. 1**, showing a preferred embodiment of a label and label position.

[0043] **FIG. 15A** is a perspective view of the faceplate of the retail display system of **FIG. 1**, showing another preferred embodiment of a label and label position.

[0044] **FIG. 15B** is a close-up view of the label shown in **FIG. 15A** as it would appear folded over the rear of the faceplate shown in **FIG. 15A**.

[0045] **FIG. 16** is a perspective view of the faceplate of the retail display system of **FIG. 1**, showing yet another preferred embodiment of a label type and label position.

[0046] **FIG. 17** is a front view showing another preferred embodiment of the faceplate of the retail display system.

[0047] **FIG. 18** is a front view showing yet another preferred embodiment of the faceplate of the retail display system.

[0048] **FIG. 19** is a front view showing yet another preferred embodiment of the faceplate of the retail display system.

[0049] **FIG. 20** is a front view showing yet another preferred embodiment of the faceplate of the retail display system with yet another preferred embodiment of a label type and label position.

[0050] **FIG. 21** is a sectional view through the section **21-21** of **FIG. 20**.

[0051] **FIG. 22** is a perspective view of yet another preferred embodiment of the mounting bracket of the retail display system.

[0052] **FIG. 23** is a side view partially in section of the faceplate and hook strip attachment installation procedure of the embodiment shown in **FIG. 22**.

[0053] **FIG. 24** is a perspective view of yet another preferred embodiment of the mounting bracket of the retail display system.

[0054] **FIG. 25** is a side view, partially in section, of the embodiment of **FIG. 24**.

[0055] **FIG. 26** is a side view partially in section of the faceplate and hook strip display installation procedure of the embodiment shown in **FIG. 25**.

[0056] **FIG. 27** is a perspective view of yet another preferred embodiment of the mounting bracket of the retail display system.

[0057] **FIG. 28** is a side view, partially in section, through the embodiment of **FIG. 27**.

[0058] **FIG. 29** is a perspective view of yet another preferred embodiment of the mounting bracket of the retail display system.

[0059] **FIG. 30** is a perspective view of yet another preferred embodiment of the faceplate of the present invention.

[0060] **FIG. 31** is a side section view through the embodiment of **FIG. 30**.

[0061] **FIG. 32** is a perspective view showing another preferred embodiment of a label type and position.

[0062] **FIG. 33 a** perspective view of yet another preferred embodiment of the faceplate of the present invention.

[0063] **FIG. 34 a** perspective view of yet another preferred embodiment of the mounting bracket of the retail display system.

[0064] **FIG. 35** is a side view, partially in section, of the embodiment of **FIG. 34**.

[0065] **FIG. 36** is a perspective view of yet another preferred embodiment of the mounting bracket of the retail display system.

[0066] **FIG. 37** is a plan view, partially in section, through the section **37-37** of **FIG. 36**.

[0067] **FIG. 38** is a perspective view of yet another preferred embodiment of the faceplate of the present invention.

[0068] **FIG. 39** is a plan view, partially in section, through the section **39-39** of **FIG. 38**.

[0069] **FIG. 40** is a perspective view of yet another preferred embodiment of the faceplate of the present invention and another preferred embodiment of the mounting bracket of the retail display system.

[0070] **FIG. 41** is a plan view, partially in section, of the embodiment of **FIG. 40**.

[0071] **FIG. 42** is a perspective view of yet another preferred embodiment of the mounting bracket of the retail display system.

[0072] **FIG. 43** is a top view of the embodiment of **FIG. 42**.

[0073] **FIG. 44** is a perspective view of yet another preferred embodiment of the mounting bracket of the retail display system.

[0074] **FIG. 45** is a side view, partially in section, of the embodiment of **FIG. 44**.

[0075] **FIG. 46** is a perspective view of the hanger display system as used on a retail display system according to a preferred embodiment of the present invention.

[0076] **FIG. 47** is a photographic perspective view of a vertical safety peg display of the retail display system according to a preferred embodiment of the present invention.

[0077] **FIG. 48** is a photographic perspective view of a vertical strip display comprising a safety ring of the retail display system according to a preferred embodiment of the present invention.

[0078] **FIG. 49** is a photographic perspective view of yet another vertical strip display of the retail display system according to a preferred embodiment of the present invention.

[0079] **FIG. 50** is a photographic perspective view of a vertical safety peg display and specialty hanger of the retail display system according to a preferred embodiment of the present invention.

[0080] **FIG. 51** is a photographic perspective view of another vertical safety peg display of the retail display system according to a preferred embodiment of the present invention.

[0081] **FIG. 52** is a perspective rear view of a faceplate and installation method for use on the retail display system according to a preferred embodiment of the present invention.

[0082] **FIG. 53** is a perspective view of a dispensing rack, for dispensing hockey puck-sized objects, of the retail display system according to a preferred embodiment of the present invention.

[0083] **FIG. 54** is a side view of the **FIG. 23** dispensing rack, for dispensing hockey puck-sized objects of the retail display system according to a preferred embodiment of the present invention.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT OF THE INVENTION

[0084] **FIG. 1** is a perspective view of a preferred embodiment of the present invention, a retail display system **30** (embodying herein a store merchandising system for increasing density of merchandising of products). The basic parts of the retail display system **30** are a faceplate **20** (embodying herein a unitary display means having a front face for displaying retail sales indicia and having a rear face) with an integral faceplate rear mounting bracket **22**, a separate hook strip **26** with separate spaced hooks or clips **28** and an integral flat hook **24** for attaching the hook strip **26** to the faceplate **20**. The retail display system **30** is shown in **FIG. 1** attached to a vertical end-piece portion **18** of a typical retail store display fixture **16**.

[0085] Illustrated in **FIG. 2** is a preferred embodiment of a faceplate **20**. Preferably, faceplate **20** may be various sizes consisting of a single stamped steel plate (embodying herein an essentially flat surface). It is understood that other suitable material may be substituted for steel for suitable applications. Further illustrated in **FIG. 2**, at the bottom of the faceplate **20**, centered and approximately ⅜" above the bottom edge **27** of the faceplate, is a faceplate aperture **32**, embodying herein attachment means for removably attaching a vertical strip display. The faceplate aperture **32** is formed such that it comprises a slot **33** (preferably about ⅛" to about 3/16" in height by about ⅛" to about 2" in length with ⅛"-radiused corners at both ends) formed to fit the flat hook strip attachment **24** shown previously in **FIG. 1**. In the center bottom portion of the slot **33** as illustrated in **FIG. 2**, another aperture **34** is formed in the slot **33** preferably sized such that the aperture **34** will allow an about ¼" round hook strip attachment **25** as shown in **FIG. 9** and described later to fit into aperture **34**.

[0086] Illustrated in **FIG. 3** is a perspective view showing a preferred embodiment of the mounting bracket **22** of **FIG. 1**, embodying herein clamping means for clamping such display means on a portion of a store fixture, which is not a horizontal shelf. Preferably, the mounting bracket **22** consists of a "U" shaped bracket which is welded to faceplate **20**. In a preferred embodiment, the mounting bracket **22** has two set screws **38** which fit into set screw apertures **42** and are preferably the type that may be tightened by use of an "Allen" wrench. The set screws are tightened against the substrate upon which the mounting bracket **22** is installed. The opening of the mounting bracket **22**"U" is variable; however, an about ½" to about 4" opening is preferred in order to be mounted over the majority of preferred store fixture construction materials.

[0087] **FIG. 4** is a plan view of the embodiment of **FIG. 3** shown in an installed position on a typical wood end-cap display vertical end piece **18**, embodying herein that the vertical store fixture portion comprises a slab. **FIG. 4** illustrates the attachment means provided by the combination of the mounting bracket **22** (embodying herein connection means for clamping such display means onto a vertical store fixture portion having a substantially fixed cross-section from a top of the portion to a bottom of the portion) and a preferred embodiment of tightening the mounting bracket **22** to the wood end-cap display vertical end piece **18**, i.e., using two set screws **38** attached from a single side of the mounting bracket **22**. There are multiple embodiments of the set screw attachments as will be described further below.

[0088] **FIG. 5** is a side view of a preferred embodiment of a flat hook strip attachment **24** of the retail display system **30**. Preferably, the hook strip **36** comprises a stem **35**, unitary inconstruction with hook strip attachment **24**, which may be round or flat (but which is shown in **FIG. 5** to be round) and a flat hook strip attachment **24** to the present invention (embodying herein a unitary vertical strip display having an upper end wherein such upper end comprises a flat hook). The flat hook strip attachment **24** is preferably a flat metal bar **48** approximately ⅛" in thickness and about ⅜" to about 2" in width. The flat metal bar **48** extends approximately 2½" to about 4" in length and is bent in the middle with a 180-degree arc/radius **46** to produce a length (preferably about 1½" to about 3") that will insert into the faceplate aperture **32** and be secured from removal during installation of the flat hook strip attachment **24** to the faceplate aperture **32**. The flat hook strip attachment **24** is manufactured such that it fits into the faceplate aperture **32**, previously illustrated in **FIG. 2**.

[0089] In addition, the flat hook strip attachment **24** has hooks/clips **37** installed along its vertical length for the preferred purpose of clipping on merchandise to be displayed for sale. These hooks and clips **37** may be spaced at assorted intervals to accommodate a variety of packaging sizes. When the flat hook strip attachment **24** is inserted through the faceplate aperture **32**, and the mounting bracket **22** is tightened securely against the wood end-cap display vertical end piece **18**, the flat hook strip attachment **24** is secured from removal (this faceplate and aperture arrangement embodying herein security means for preventing removal of the vertical strip display when such unitary display means is clamped so that such attachment means is closely adjacent the portion of the store fixture). The securing of the flat hook strip attachment **24** is important as it assists in the prevention of theft of the entire hook strip **26**. The flat hook strip attachment **24** locks into place as it is pinched against the vertical end piece portion **18** and held firmly in place by the faceplate **20**. Preferably, for best security, the radius of the arc **46** should be under 2" for most applications, with a highly-preferred radius of about ⅛" (embodying herein that such flat hook comprises an approximately 180-degree bend having a radius of less than ½" and preferably about ⅛"). **FIG. 6** is a perspective view of the preferred embodiment of a flat hook strip attachment **24** shown in **FIG. 5**, further illustrating the component parts of a preferred embodiment of a flat hook strip attachment **24** as described above.

[0090] **FIG. 7** illustrates the installation method of the flat hook strip attachment **24** to the faceplate **20** of the mounting bracket **22** using the faceplate aperture **32** (embodying herein slot means for receiving a flat hook). The mounting bracket **22** is placed at about 45 degrees to the perpendicular flat hook strip attachment **24** which is then inserted through the faceplate aperture **32** until the flat hook strip attachment **24** is resting on the point of the 180 degree radius **46**. As further illustrated in **FIG. 8**, the preferable connection of the hook strip attachment **24** and the mounting bracket **22** is when both the mounting bracket **22** and hook strip attachment **24** are resting connected through the faceplate aperture **32** and are perpendicular to the ground. When connected in the above described manner, the mounting bracket **22** is then attached to a store display vertical end-piece **18**. The first described embodiment of such attachment is shown as two set screws tightly screwed-in to the store fixture vertical end-piece **18**. The configuration of the perpendicular parts provides an attachment of the mounting bracket **22**, faceplate **20**, and hook strip attachment **24** such that the hook strip attachment **24** cannot be removed without the entire mounting bracket **22** being removed. This is important as theft of the hook strips and the contents is an industry problem for this type of display.

[0091] **FIG. 9** is a perspective view of another preferred embodiment of the hook strip attachment **25** of the retail display system. In this preferred embodiment, the hook strip attachment **25** is preferably round consisting of approximately a 3" diameter round metal hook, about 2½" to about 4" in length. The hook strip attachment **25** is a hook strip widely available and utilized by those knowledgeable in the art. The preferable connection of the hook strip attachment **25** and the mounting bracket **22** is when both the mounting bracket **22** and hook strip attachment **25** are resting connected through the faceplate aperture **32** and are perpendicular to the ground. In this embodiment, the hook strip attachment **25** is installed using aperture **34**. As illustrated in **FIG. 9**, round aperture portion **34** is structured and arranged to allow a ¼" round hook strip attachment **25** to be installed in the faceplate aperture **32**. When connected in the above described manner, the mounting bracket **22** is then attached to a store display vertical endpiece **18**. The embodiment of such attachment is shown as two set screws tightly screwed-in to the store fixture vertical endpiece **18**. The configuration of the perpendicular parts provides an attachment of the mounting bracket **22**, faceplate **20**, and hook strip attachment **25** such that the hook strip attachment **25** cannot be removed without the entire mounting bracket **22** being removed. This is an improvement over the previous art in this area for this type of hook strip as the present invention deters theft of the hook strip.

[0092] **FIG. 10** is a side view, partially in section, of the hook strip attachment of **FIG. 9**. **FIG. 10** further illustrates the attachment of aperture **34**, an about ¼" round hook strip attachment **25** installed in the faceplate aperture **32** and through aperture **34**, an about 3" hole matching the thickness of the hook strip attachment **25**. Preferably, the installation in this manner provides a secure connection of the hook strip **25** to the faceplate **20**. **FIG. 10** also illustrates the preferred "Allen wrench" type set screw face **39** shown in side view and mounted in a preferable location on the mounting bracket **22**.

[0093] **FIG. 12** illustrates another preferred embodiment of the mounting bracket **23**. This preferred embodiment of the mounting bracket **23** consists of a "U" shaped bracket which is preferably welded to faceplate **20**. There are four set screws **38** used to tighten the bracket **23** to the vertical store fixture portion **18** (see **FIG. 10**). Preferably, two set screws **38** are positioned on each side of mounting bracket **23**. The four set screws **38** fit into set screw apertures **42** and are preferably the type that may be tightened by use of an "Allen" wrench, matching the set screw face **39** previously shown in **FIG. 10**. The four set screw **38** embodiment is preferable when the various hook strip embodiments are to display heavier types of merchandise.

[0094] **FIG. 11** illustrates yet another preferred embodiment of a hook strip attachment, an "S" hook **40**. Preferably, "S" hook **40** is made of about 3" of rounded wire and is inserted into aperture **34** of the faceplate **20**. The lower end of "S" hook **40** attaches to yet another embodiment of the hook strip, a plastic "card strip"**44**. "S" hook **40** has a top portion which hooks into the faceplate **20** and lower portion which has a hook end **41**. Hook end **41** is used to attach a plastic card strip **44** to the present invention. The card strip **44** is not new to the art and is another device commonly used to display merchandise, usually in pre-packaged plastic bags. In this embodiment, the attaching of the card strip **44** to a fixture for display, and the labeling of the items on the retail display system **30**, is an improvement on the current art.

[0095] The present invention provides other improvements in the display of the labeling, including display of common types of bar code labels, advertising labels, and pricing labels. These display improvements and their embodiments are described below as a part of the retail display system **30**.

[0096] **FIG. 13** is a perspective view of a preferred embodiment of the faceplate of the retail display system **30**

with yet another preferred embodiment of mounting bracket **22**. The faceplate portion **21** is preferably sized at about 2⅝" high by about 20" wide to accommodate a standard label. Mounting bracket **22** consists of two set screws **38**, one each on each side of the mounting bracket **22** approximately 1¾" to 3" inset from the end opposite the faceplate **21** of the mounting bracket **48**.

[**0097**] **FIG. 14** is a perspective view of a faceplate **21** of the retail display system **30** with an embodiment of a preferred label **50** and label position **54**. Preferably, this embodiment of label **50** is a rectangular label that contains all its information on the face **51** of the label **50**. Label **50** is positioned such that it covers about 2⅝" by 1½" of the faceplate **21**, leaving the hook strip mounting apertures, previously described as faceplate aperture **32** and aperture **34** in **FIG. 2**, uncovered. Preferably, label **50** is adhesively attached to faceplate **21**. Preferably, the adhesive is such that it adheres the label **50** but allows the label to be removed. This feature will allow for easier replacement of the label **50** as the merchandise attached to the retail system **30** is changed.

[**0098**] **FIG. 15A** is a perspective view of the faceplate of the retail display system **30** showing another embodiment of a label type and label position on the faceplate. As illustrated in **FIG. 15**A, label **52** consists of a rectangular shaped label preferably sized approximately 2⅝" by 2¼" with ¾" of the upper portion of label **52** consisting of a bar code label **53**. Label **52** is positioned to be adhesively attached to the faceplate **21** in position **56** such that bar code label **53** folds over the top of faceplate **21** and is adhesively attached to the rear of the faceplate **58**. The position of the adhesively attached bar code label **53** to the rear of the faceplate **58** is further illustrated by **FIG. 15B**.

[**0099**] Store retail displays often require changes in pricing information or changes in the stock numbers or a variety of other possible changes that need to be reflected on the labeling system. **FIG. 16** is a perspective view of a faceplate representing yet another preferred embodiment of a label type and position with another bar code label **60** and bar code position **62** illustrated. In this embodiment, the label **64** is shown as adhesively attached. In order to provide the ability to change label types and information, this embodiment provides that bar code label **60** may be adhesively attached to label **64**.

[**0100**] **FIG. 17**, **FIG. 18**, and **FIG. 19** represent yet further embodiments of label sizing. **FIG. 17** is a frontal view showing a preferred embodiment of the faceplate **70** of the retail display system. In this embodiment the faceplate **70** is preferably sized about 1¼" wide by 3½" high, the label **70** area being ⅜" less in height to allow for the faceplate aperture **32** to be left uncovered for connection to a hook strip. **FIG. 18** is a frontal view showing still another preferred embodiment of the faceplate **71** of the present invention. In this embodiment, the faceplate **71** is preferably sized about 1¼" wide by 2-0" high, the label area being ⅜" less in height to allow for the faceplate aperture to be uncovered. **FIG. 19** is a frontal view showing yet another preferred embodiment of the faceplate **72** of the retail display system. In this embodiment, the faceplate **72** is sized about 2⅝" wide by 3½" high, the label area being ⅜" less in height to allow for the faceplate aperture **32** to be uncovered.

[**0101**] **FIG. 20** is a frontal view showing yet another preferred embodiment of the faceplate of the retail display system with yet another preferred embodiment of a label type and position. In this embodiment, the faceplate **74** is preferably sized about 2⅝" wide by 3½" high. Preferably, a separate label holder **76** is weidably attached to the faceplate **74**. Label holder **76** is a label holder common in the grocery store retail business and holds a label **78** that is preferably sized about 1¼" high by 2½" wide. Label holder **76** holds a label **78** that is placed into the label holder **76** and is preferably not adhesively attached. Label holder **76** is further illustrated in **FIG. 21, a** side section view through **FIG. 20**. In addition, illustrated in **FIG. 21** is label **78** shown held in label holder **76** by two horizontal grooves **77**.

[**0102**] **FIG. 22** is a perspective view of yet another preferred embodiment of the mounting bracket **82** of the retail display system **30**. This embodiment is manufactured to accommodate another common retail store display, a wire grid system. Typically this wire grid system is made up of ¼" round metal wire **84** which is weldably manufactured in an about 2" to 4" square grid pattern. These wire grids (embodying herein that the portion of the store fixture comprises a portion of a vertical wire grid) are sized about 1' by 1' to about 4' by 8' square. Preferably, mounting bracket **82** is installed as part of the grid system when the grid system is manufactured. Further illustrated in **FIG. 23** is a side section view of the faceplate and hook strip display installation procedure of the embodiment shown in **FIG. 22**. As previously shown in **FIG. 7**, the installation procedure for the embodiment shown in **FIG. 23** is similar to that of **FIG. 7**. The mounting bracket **82** allows for the faceplate **80** to be swung out at about a 45-degree angle to the perpendicular hook strip attachment **24**, which is then inserted through the faceplate aperture **32** until the hook strip attachment **24** is resting on the 180 degree radius/arc **46** point.

[**0103**] Yet another embodiment of the rear mounting bracket of the retail display system **30** is illustrated in **FIG. 24**. This embodiment is also configured to fit the wire grid system described above. The embodiment illustrated in **FIG. 24** provides for the retail display system **30** to be attached at two points along the wire grid round metal wire **84**. This additional attachment over the previous embodiment provides for additional securing of the retail display system **30** on the wire grid display. **FIG. 24** represents this embodiment of the mounting bracket in an installed position. Preferably, an about ⅛" thick metal plate **89** has two tubular steel pieces **84** approximately 1" in length attached at the top, i.e., attachment **88** and bottom attachment **90** of the metal plate **89**. Preferably, attachment **90** has an about ¼" wire **92** inserted into it. Wire **92** extends approximately 2" past each end of attachment **90**. Preferably, wire **92** is welded to the rear of faceplate **94**. Wire **92** is welded in a position such that it places plate **89** in the center of the rear of faceplate **94**. Clip attachment **86** is placed on the rear of faceplate **94** such that attachment **88** will snap into it and lock into place. Clip attachment **86** is preferably comprised of an about 1" wide and about 1/16" thin steel plate of a length long enough to be bent in such a radius to allow attachment **88** to fit into it. When attachment **88** is installed on a wire grid system previously discussed above, these embodiments may be used as further illustrated in **FIG. 25**.

[**0104**] **FIG. 25** illustrates the retail display system **30** with a hook attachment **96** which may be any of the previously discussed embodiments of a hook attachment. Installation of the hook attachment **96** occurs similarly to the previous

embodiments. Referring to **FIG. 26**, plate **89** swings out from the faceplate **94** as it pivots on attachment **90** which allows for the faceplate **94** to be swung out at about a 45-degree angle to the perpendicular hook strip attachment **96**, which is then inserted through the faceplate aperture **32** until the hook strip attachment **96** is resting on the 180 degree radius **98** point.

[**0105**] **FIG. 27** is a perspective view of yet another preferred embodiment of the rear mounting bracket **102** of the retail display system **100**. This preferred embodiment provides a mounting bracket **102** for attaching to the long side **106** of vertical gondola stanchions **104** (embodying herein that the bar portion of the store fixture comprises a gondola stanchion) commonly used in supporting shelving in retail stores and well known by those knowledgeable in the art.

[**0106**] **FIG. 28** is a side section view through the embodiment of **FIG. 27** and illustrates the position of the mounting bracket **102** when installed in the vertical gondola stanchion **104**. Preferably, the mounting bracket **102** is weldably attached to the faceplate **114**. Mounting bracket **102** is inserted into the long side **106** of the top opening **101** of the vertical gondola stanchion **104** and pressed into place. Preferably, the mounting bracket **102** is manufactured such that it is made of steel, bent and sprung such that the mounting bracket **102** will compress as it is placed into the vertical gondola stanchion **104** and be tightly held in place once positioned. Preferably, the mounting bracket **102** is about ⅞" wide by about 1¼" in height.

[**0107**] **FIG. 29** is a perspective view of yet another preferred embodiment of the rear mounting bracket **110** of the retail display system **109**. Mounting bracket **110** is inserted into the short end **108** of the top opening **101** of the vertical gondola stanchion **104** and pressed into place. Preferably, the mounting bracket **110** is manufactured such that it is made of steel, bent and sprung such that the mounting bracket **110** will compress as it is placed into the vertical gondola stanchion **104** and be tightly held in place once positioned. Preferably, the mounting bracket **110** is about ⅜" wide by about 1¼" in height.

[**0108**] **FIG. 30** is a perspective view of yet another preferred embodiment of the faceplate of the present invention. In this embodiment, the faceplate **120** is such that it has an integral semi-circular base plate **122** perpendicular to the faceplate **120**. Base plate **122** is constructed to hold an existing hook strip attachment **128**. Preferably, base plate **122** has an aperture **124** located in the center of the base plate **122**. Aperture **124** is a round hole approximately ¼" in diameter to correspond to the diameter of the hook strip attachment **128** wire thickness. Further, base plate **122** has three semi-circular apertures, one each at spaced peripheral positions: position **125**, position **126** and position **127**. These apertures are also about ¼" in diameter to correspond to the diameter of the hook strip attachment **128** wire thickness. As illustrated in **FIG. 30** and further illustrated in **FIG. 31**, hook strip attachment **128** is inserted into any one of the three peripheral apertures (position **125**, position **126** or position **127**) in combination with the center aperture **124**. In this manner retail display system **140** may be used in combination with faceplate **120**, base plate **122** and one or more of the many embodiments of the mounting hardware and label embodiments described above.

[**0109**] **FIG. 32** is a perspective view showing still another preferred embodiment of a label and label position. **FIG. 32** illustrates an electronic label **142** attached to the faceplate **144**. Electronic label **142** is another type of label used in the retail display industry. The mounting bracket **148** may be any one of the many combinations described above. The aperture **146** may also be any one of the embodiments described above. The preferred aperture **146** is (best described by referring back to **FIG. 2**) formed such that it comprises a slot **33** about ⅛" to about 3⁄16" in height by about ⅛" to about 2" in length with about ⅛"-radiused corners at both ends. In the center bottom portion of the slot **33**, as illustrated in **FIG. 2**, another aperture **34** is formed in the slot **33** such that the aperture **34** will allow a (preferably about ¼") round hook strip attachment **25** (as shown in **FIG. 9**). The aperture **146** is formed to fit the hook strip attachment **24** (shown previously in **FIG. 1**).

[**0110**] Referring now to **FIG. 33**, illustrated is yet another preferred embodiment of a faceplate **147** and hook strip apertures **148** of the present invention. Preferably, there are multiple hook strip apertures **148**. Preferably, there are five hook strip apertures **148**, as shown. Preferably two or three apertures are used at any one time as illustrated, to allow for spacing requirements of the hook strips **150** and the merchandise which is attached to such hook strips. This embodiment may be combined with any of the illustrated faceplate configurations or hardware combinations described herein.

[**0111**] **FIG. 34 a** perspective view of yet another preferred embodiment of the mounting bracket of the retail display system. Preferably, in this embodiment the mounting bracket **152** is attached to the rear of the faceplate **154** such that the mounting bracket **152** may be attached vertically, as shown, to a portion of a merchandise display end piece **156**. There are two set screws (preferably "Allen"-type) **158** attached in a vertically linear fashion, as shown, and operating as previously described above. **FIG. 35** is a side section view of the embodiment of **FIG. 34** further illustrating the attachment of the mounting bracket **152** and the placement of the faceplate **154** relative to the mounting bracket **152**. The hook strip **155** attaches and operates as previously described above (see **FIGS. 7 and 8**).

[**0112**] **FIG. 36** is a perspective view of yet another preferred embodiment of the mounting bracket of the retail display system, and **FIG. 37** is a top cut-away plan view through **FIG. 36**. As illustrated in **FIGS. 36 and 37**, the mounting bracket **162** is attached to the faceplate **160** such that faceplate **160** mounts on the vertical face **165** of the merchandise display end piece **156**. The mounting bracket **162** attaches to the side **164** of the merchandise display end piece **156**, as shown. Preferably, the mounting bracket **162** is securely attached with at least two set screws **163** (preferably "Allen" type) which are firmly tightened against the merchandise display end piece **156**.

[**0113**] **FIGS. 38 and 39** illustrate yet another preferred embodiment of the faceplate of the present invention. In this embodiment the faceplate **168** is preferably manufactured such that the vertical ends **169** of the faceplate **168** are rolled, as illustrated, in a U-shape, to create a means for the insertion of indicia/label **175** and holding the sides of the indicia/label **175**. Ends **169** embody herein at least one vertical groove structured and arranged to removably hold a display label. In addition, a plate **170** is attached to the

faceplate **168**. Preferably, the plate **170** is manufactured such that the bottom portion **172** (embodying herein at least one horizontal groove structured and arranged to removably hold a display label) of plate **170** is rolled, as illustrated, in a U-shape, to create a means for holding the bottom of the indicia/label **175**. The aperture **173** for use with the hook strip **155** is as previously described above and may be substituted for every other above described aperture.

[**0114**] Shown in **FIGS. 40 and 41** are perspective and plan views, respectively, of yet another preferred embodiment of the faceplate of the present invention and another preferred embodiment of the mounting bracket of the retail display system. This embodiment consists of two of the above-described faceplates **168** (in **FIGS. 38 and 39**) attached to a preferably U-shaped mounting bracket **178** in a 90-degree corner configuration as illustrated in **FIGS. 40 and 41**. This embodiment is preferable when it is desired to use the present invention to display merchandise in two directions on the same fixture and horizontal plane. Preferably, in this embodiment, the mounting bracket **178** is weldably attached to the rear of both of the faceplates **168** such that the mounting bracket **178** may be attached horizontally, as shown, to a merchandise display end piece **156**. There are at least two set screws **163** attached in a horizontally linear fashion, as shown, and operating as previously described above.

[**0115**] Illustrated in **FIGS. 42 and 43** are views of yet another preferred embodiment of the mounting bracket of the retail display system. In this embodiment, the mounting bracket **180** is manufactured to fit a cylindrical portion of a store fixture, typically round (embodying her in that the vertical store fixture portion comprises a bar. Any suitable clamp for attaching to a round cylinder would work. However, the bracket **180** is illustrated in **FIG. 42** and preferably consists of two semi-circular halves **183** and **184**, mirrored to each other, with a first end **190** and a second end **192**. The first end **190** is preferably a perpendicular bend **186** away from the pipe portion and parallel to the faceplate **182**, attached to the rear **188** of the faceplate **182** all as shown. The second end **192** is a straight portion extending from the semi-circle in a plane perpendicular to the faceplate **182**. The second end has two apertures **194** parallel to each other and sized to allow a bolt **196** to pass through them. The bolt **196** is secured with a nut **198**. Preferably, the tightening of the nut **198** against the bolt **196** pulls the two semi-circular halves **183** and **184** together and the retail display **200** is firmly secured on the round cylinder.

[**0116**] **FIGS. 44 and 45** are similar views of still another preferred embodiment of the mounting bracket of the retail display system. In this embodiment, the mounting bracket **205** is preferably manufactured to be placed over the upturn vertical lip **202** of a shelve **203**. The shelve **203** is typically metal. The mounting bracket **205** is preferably U-shaped as illustrated in **FIGS. 44 and 45**. The distance of the opening of the "U" shape is variable, however an about ¼" to about ¾" opening is preferred in order to be mounted over the majority of preferred store fixture construction shelve materials. Preferably, two set screws **163** (again, preferably "Allen"-type) are used to secure the mounting bracket **205** to the lip **202** of the shelve **203**. The mounting bracket **205** is preferably welded to the back of the faceplate **206**. The mounting bracket **205** may be used on any of the above described faceplates.

[**0117**] **FIG. 46** is a perspective view of a preferred embodiment of the present invention, a hanger display system **400** for increasing density of merchandising of products held by vertical strip displays **402**. Preferably, the hanger display system **400** comprises vertical strip displays **402**, which are attached to a basic fixture unit **403**, such as the one shown. In a preferred embodiment, the vertical strip display **402** comprises a faceplate **404**, preferably a unitary plate, preferably metal, having a front face **406** for displaying retail sales indicia and having a rear face **408**, with an integral faceplate rear mounting bracket **410** (it is noted that the mounting bracket **410** may be any of the embodiments described in the above-referenced applications or as described herein), a separate peg strip **412**, with separate spaced pegs **414**, preferably safety pegs, as shown, and an integral flat hook **416**, for attaching the peg strip **412** to the faceplate **404**.

[**0118**] Preferably, faceplate **404** may be of various sizes consisting of a single stamped steel plate, preferably, comprising an essentially flat surface, however, under appropriate circumstances, other arrangements may suffice (for example, a raised or stamped logo may be added). It is understood that other suitable material may be substituted for steel for suitable applications. Preferably, the steel may be painted in any desired color. Most preferably, the steel is powder coated in any desired color. Preferably, front face **106** comprises indicia, most preferably, such indicia are added as a separate label or other print advertising attached with adhesive, or as directed by the end-user. Under appropriate circumstances, other indicia arrangements may suffice.

[**0119**] Preferably, at the bottom and centered, approximately ⅜" above the bottom edge of the faceplate, is a faceplate aperture **418**, as shown. Under appropriate circumstances, other arrangements may suffice. Preferably, the aperture **418** provides an attachment for removably attaching a retail hanger display **402** to a faceplate **404**. The faceplate aperture **418** is preferably formed as shown, such that it comprises a slot formed to fit the integral flat hook **416**. Under appropriate circumstances, other aperture arrangements may suffice. Preferably, the aperture is structured and arranged to prevent the flat hook **416** from being removed from the aperture **418** when the faceplate **404** is attached adjacent a fixture.

[**0120**] In another preferred embodiment, the vertical strip display **402** attaches directly to the grid **420**, as shown. Under appropriate circumstances, other attachment arrangements may suffice. Preferably, the integral flat hook **416** will fit over the grid wire **422**, as shown. Preferably, the integral flat hook **416** may be attached over the wire grid **420** such that the wire grid **420** supports the vertical strip display **402**, as shown. Preferably, the vertical strip display **402** also comprises a bottom hook-end **424**, which is used to secure the lower portion **426** to the wire grid **420**, thereby keeping the vertical strip display **402** firmly adjacent the basic fixture unit **403**, as shown. Preferably, the integral flat hook **416** and the bottom hook-end **424** are spaced apart such that they will both hook into the wire grid **420**. For example, with about 1½" spacing between the horizontal grid wires **421**, the integral flat hook **416** and the bottom hook-end **424** would be spaced in intervals of about 24" or about 36" (about every foot) in order to connect easily when inserted through the wire grid **420**, and then pushed downward to lock in over the

grid wire **422**. Under appropriate circumstances, other arrangements may suffice. For example, the bottom hook-end **424** may be more preferably a single bent-plate arrangement.

[**0121**] Preferably, the bottom hook-end **424** also comprises a flat plate **428**. Preferably, flat plate **428** comprises indicia. Preferably, indicia added as a label or other advertising media, or both, as directed by the end-user. Under appropriate circumstances, other indicia arrangements may suffice.

[**0122**] **FIG. 47** is a photograph perspective view of a vertical safety peg display **430** of the retail display system **30** according to a preferred embodiment of the present invention.

[**0123**] **FIG. 48** is a photographic perspective view of a vertical strip display **452** comprising a safety ring **454** of the retail display system **30** according to a preferred embodiment of the present invention. **FIG. 48** illustrates a preferred embodiment of a safety ring **454**. Preferably, safety ring **454** comprises a semi-circular shape, as shown. Preferably, safety ring **454** further comprises a standard peg **456**, as shown, or under appropriate circumstances, another safety peg, such as safety peg **414**, may suffice in lieu of standard peg **456**. Preferably, the safety ring **454** provides protection from customer injury with use of a standard peg **456**, allowing for merchandise packaging that is only orientated for a single standard peg (for example, having a round peg hole in the packaging rather than a slot for a safety peg **414**). Under appropriate circumstances, other arrangements may suffice.

[**0124**] **FIG. 49** is a photographic perspective view of yet another vertical strip display **460** of the retail display system **30** according to a preferred embodiment of the present invention. Preferably, vertical strip display **460** is an example of a vertical strip display that may be used to merchandise cylindrical containers **462**. Under appropriate circumstances, other container arrangements may suffice. It is noted that the merchandising of product in a limited space and with a specific target inventory is intended to be embodied herein by these examples of custom-designed and built vertical strip displays **402** (even if manufactured in quantity). This arrangement embodying herein a vertical strip display **402** shaped and arranged for holding a specified kind of product and further shaped and arranged for holding a specified quantity of specified kind of product.

[**0125**] **FIG. 50** is a photographic perspective view of a vertical safety peg display **466** and specialty hanger **472** of the retail display system **30** according to a preferred embodiment of the present invention. Preferably, the retail display system **30** comprises a specialty hanger **472**. Preferably, specialty hanger **472** may be used to adapt any of the vertical strip displays **402** to a side **474** of a horizontal shelf **476**. Preferably, as illustrated in **FIG. 50**, the faceplate aperture **418** is preferably formed as shown, such that it comprises a slot formed to fit the integral flat hook **416**, as shown. Under appropriate circumstances, other arrangements may suffice.

[**0126**] **FIG. 51** is a photographic perspective view of another vertical safety peg display **486** of the retail display system **30** according to a preferred embodiment of the present invention. **FIG. 51** illustrates an arrangement of small shelves **490** for use, for example, with books **492**. Most preferably, the versatility and plurality of such combinations with the retail display system **30** are many, as shown.

[**0127**] **FIG. 52** is a perspective rear view of a faceplate **495** and installation method for use on the retail display system **30**, according to another preferred embodiment of the present invention. Preferably, the faceplate **495** may be directly attached to grid **501** using bracket **497**. Under appropriate circumstances, other arrangements may suffice. Preferably, bracket **497** is tightened to the grid using tightening screws **499** and **503**, as shown. Under appropriate circumstances, other arrangements may suffice.

[**0128**] **FIG. 53** is a perspective view of a dispenser rack **520**, for dispensing hockey puck-sized objects, of the retail display system **30**, according to another preferred embodiment of the present invention. Preferably, dispenser rack **520** is mounted using brackets **526** and **528**. Preferably, width **522** is about the diameter of a hockey puck-sized product. Preferably, width **522** is about the diameter of a chewing tobacco container. Preferably, grid wire **422** is the same gauge as any other above mentioned grid wires.

[**0129**] **FIG. 54** is a side view of the **FIG. 53** dispenser rack **520**, for dispensing hockey puck-sized objects, of the retail display system **30**, according to another preferred embodiment of the present invention. Preferably, grid wire **422** is angled such that bottom **529** protrudes out to assist in the dispensing of hockey puck-sized objects.

[**0130**] Although applicant has described applicant's preferred embodiments of this invention, it will be understood that the broadest scope of this invention includes such modifications as diverse shapes and sizes and materials. Such scope is limited only by the below claims as read in connection with the above specification. Further, many other advantages of applicant's invention will be apparent to those skilled in the art from the above descriptions and the below claims.

What is claimed is:

1) A retail display system for increasing density of merchandising of products held by vertical strip displays, comprising:

a) unitary display means having at least one front face for displaying retail sales indicia and having at least one rear face; and

b) wherein said at least one rear face unitary display means comprises

i) on said rear face, clamping means for clamping said unitary display means on a portion of at least one store fixture which is not a horizontal shelf; and

ii) attachment means for removably attaching the vertical strip display.

2) The retail display system according to claim 1 wherein said clamping means comprises connection means for clamping said display means onto a vertical store fixture portion having a substantially fixed cross-section from a top of the portion to a bottom of the portion.

3) The retail display system according to claim 2 further comprising:

a) security means for preventing removal of the vertical strip display when said unitary display means is

clamped such that said attachment means is closely adjacent the portion of the store fixture.

4) The retail display system according to claim 3 wherein:

a) said attachment means comprises slot means for receiving at least one flat hook.

5) The retail display system according to claim 4 further comprising:

a) a unitary vertical strip display having at least one upper end;

b) wherein said at least one upper end comprises at least one flat hook.

6) The retail display system according to claim 5 wherein:

a) said at least one flat hook comprises an approximately 180-degree bend having a radius of less than one-half inch.

7) The retail display system according to claim 6 wherein:

a) said at least one flat hook comprises an approximately 180-degree bend having a radius of about one-eighth inch.

8) A retail display system for increasing density of merchandising of products held by vertical displays, comprising:

a) a unitary display holder having at least one front face suitable to display retail sales indicia and having at least one rear face;

b) wherein said unitary display holder comprises

i) on said at least one rear face, at least one clamp structured and arranged to clamp said unitary display holder onto a portion of a store fixture which is not a horizontal shelf, and

ii) at least one connector structured and arranged to assist removable attachment of at least one vertical display to said unitary display holder.

9) The retail display system according to claim 8 wherein said at least one clamp is structured and arranged to clamp said unitary display holder onto at least one vertical store fixture portion having a substantially fixed cross-section from a top of the portion to a bottom of the portion.

10) The retail display system according to claim 9 wherein:

a) said at least one connector is structured and arranged to prevent removal of the vertical display when said unitary display holder is clamped such that said at least one connector is closely adjacent to the portion of the store fixture.

11) The retail display system according to claim 10 wherein:

a) said at least one connector comprises at least one slot for receiving at least one flat hook.

12) The retail display system according to claim 11 further comprising:

a) a unitary vertical strip display having at least one upper end;

b) wherein said at least one upper end comprises at least one flat hook.

13) The retail display system according to claim 12 wherein said at least one flat hook comprises an approximately 180-degree bend having a radius of less than one-half inch.

14) The retail display system according to claim 13 wherein said at least one flat hook comprises an approximately 180-degree bend having a radius of about one-eighth inch.

15) The retail display system according to claim 9 wherein:

said the unitary vertical store fixture portion comprises a slab.

16) The retail display system according to claim 8 wherein said at least one clamp comprises Allen-wrench-operable set screws.

17) The retail display system according to claim 9 wherein the said unitary vertical store fixture portion comprises at least one bar.

18) The retail display system according to claim 17 wherein said at least one bar comprises at least one gondola stanchion.

19) The retail display system according to claim 8 wherein the portion of said unitary vertical store fixture comprises a portion of at least one vertical wire grid.

20) The retail display system according to claim 8 wherein said at least one front face comprises an essentially flat surface.

21) The retail display system according to claim 8 wherein said at least one front face comprises at least one vertical groove structured and arranged to removably hold at least one display label.

22) The retail display system according to claim 21 wherein said at least one front face further comprises at least one horizontal groove structured and arranged to removably hold at least one display label.

23) The retail display system according to claim 8 wherein said at least one front face further comprises at least one horizontal groove structured and arranged to removably hold at least one display label.

24) The retail display system according to claim 8 wherein said at least one connector comprises at least one slot.

25) The retail display system according to claim 8 wherein said at least one connector comprises at least one round hole. The retail display system according to claim 24 wherein said at least one connector comprises at least one round hole.

26) A retail display system for increasing density of merchandising of products held by vertical strip displays, comprising:

a) a unitary vertical strip display having at least one upper end, wherein said at least one upper end comprises at least one flat hook constructed and arranged to hook into at last one flat slot;

b) wherein said at least one flat hook comprises an approximately 180-degree bend having a radius of less than one-half inch.

27) The retail display system according to claim 27 further comprising:

a) a unitary display holder having at least one front face suitable to display retail sales indicia and having at least one rear face;

b) wherein said unitary display holder comprises

i) on said at least one rear face, at least one clamp structured and arranged to clamp said unitary display holder onto a portion of a store fixture, and

ii) at least one flat slot structured and arranged to assist removable attachment of said unitary vertical strip display to said unitary display holder;

c) wherein said at least one flat hook is hooked into said at least one flat slot.

28) The retail display system according to claim 28 wherein: said retail display system is structured and arranged to prevent removal from said at least one flat slot of said unitary vertical strip display when said unitary display holder is clamped so that said at least one flat slot is closely adjacent the portion of the store fixture.

29) The retail display system according to claim 1 further comprising:

a) a hanger display system, for removeable attachment with said display means, for use in conjunction with said retail display system, for combined control of inventory and merchandise displayed for sale, comprising

i) a plurality of holding means for holding the merchandise; and

ii) at least one vertical support means for supporting said plurality of holding means;

iii) wherein said attachment means attaches said at least one vertical support means to said retail display system;

iv) wherein each said plurality of holding means is shaped and arranged for a holding a specified kind of product; and

v) wherein each of said plurality of holding means is further shaped and arranged for holding a specified quantity of such specified kind of product.

30) The retail display system according to claim 8 further comprising:

a) a hanger display system, adapted to removeably attach with said unitary display holder, adapted to use in conjunction with said retail display system, adapted to use in combined control of inventory and merchandise displayed for sale, comprising

i) a plurality of holders adapted to hold the merchandise; and

ii) at least one vertical support adapted to support said plurality of holders;

iii) wherein said at least one connector connects said at least one vertical support to said retail display system;

iv) wherein each of said plurality of holders is shaped and arranged for a holding a specified kind of product; and

v) wherein each of said plurality of holders is further shaped and arranged for holding a specified quantity of such specified kind of product.

31) The retail display system according to claim 8 wherein said at least one clamp comprises at least one tightening screw structured and arranged to attach said at least one clamp onto said portion of said store fixture.

32) A hanger display system, used in conjunction with a retail merchandising fixture, for combined control of inventory and merchandise displayed for sale, comprising:

a) holding means for holding the merchandise;

b) vertical support means for supporting said holding means; and

c) attachment means for attaching said vertical support means to the merchandising fixture;

d) wherein said holding means is structured and arranged to hold a specified kind of product; and

e) wherein said holding means is further structured and arranged to hold a specified quantity of such specified kind of product.

33) The hanger display system according to claim 33 wherein said attachment means is selected from the following group consisting of:

a) hook means for hooking said vertical support means to a wire grid of the retail merchandise fixture;

b) clamp means for clamping said vertical support means to the retail merchandise fixture; and

c) faceplate means, having an aperture and being removably attachable to such retail merchandise fixture, for attaching said vertical support means.

34) The hanger display system according to claim 34 wherein said faceplate means is structured and arranged to remind a user of the nature and service of the merchandise displayed for sale.

35) The hanger display system according to claim 33 wherein said vertical support means further comprises indicia means for displaying indicia.

36) The hanger display system according to claim 33 wherein said holding means further comprises at least one safety ring.

37) A hanger display system for at least one particular retail business location having at least one set of available product-desired-spaces comprising the steps of:

a) analyzing data of a plurality of products;

b) allowing space to each such plurality of products;

c) designing displays for displaying each such product to each such space;

d) producing such displays;

e) wherein each such display comprises,

i) holding means for holding the merchandise;

ii) vertical support means for supporting said holding means; and

iii) attachment means for attaching said vertical support means to the merchandising fixture;

iv) wherein said holding means is structured and arranged to hold a specified kind of product; and

v) wherein said holding means is further structured and arranged to hold a specified quantity of such specified kind of product.

38) A hanger display system, used in conjunction with a retail merchandising fixture, for combined control of inventory and merchandise displayed for sale, comprising:

a) a plurality of holders to hold the merchandise;

b) at least one vertical support to support said plurality of holders; and

c) at least one attacher to attach said at least one vertical support to the merchandising fixture;

d) wherein said plurality of holders are structured and arranged to hold a specified kind of product; and

e) wherein said plurality of holders are structured and arranged to hold a specified quantity of such specified kind of product.

39) The hanger display system according to claim 39 wherein said at least one attacher is selected from the following group comprising:

a) at least one hook structured and arranged to hook said at least one vertical support to a wire grid of the retail merchandise fixture;

b) at least one clamp structured and arranged to clamp said at least one vertical support to the retail merchandise fixture; and

c) at least one faceplate, having an aperture and being removably attachable to such retail merchandise fixture, structured and arranged to attach said at least one vertical support.

40) The hanger display system according to claim 40 wherein said at least one faceplate is structured and arranged to remind a user of the nature and service of the merchandise displayed.

41) The hanger display system according to claim 33, wherein said attachment means comprises:

a) unitary display means having at least one front face for displaying retail sales indicia and having at least one rear face; and

b) wherein said display means comprises

i) on said at least one rear face, clamping means for clamping said display means on a portion of a store fixture which is not a horizontal shelf; and

ii) attachment means for removably attaching said vertical support means.

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