Aug. 5, 1958 H. P. BAUMGART 2,845,729

DISPLAY SIGN MOUNTING FOR TELESCOPING CART

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Fig. 1.

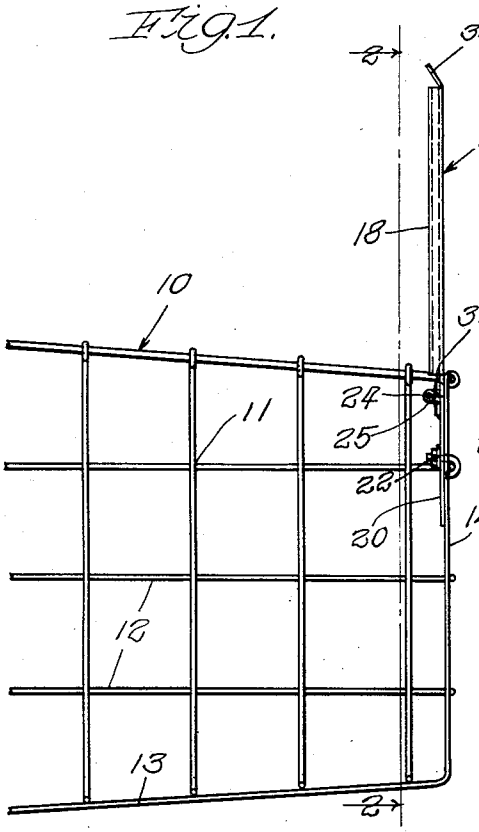


Fig. 2.

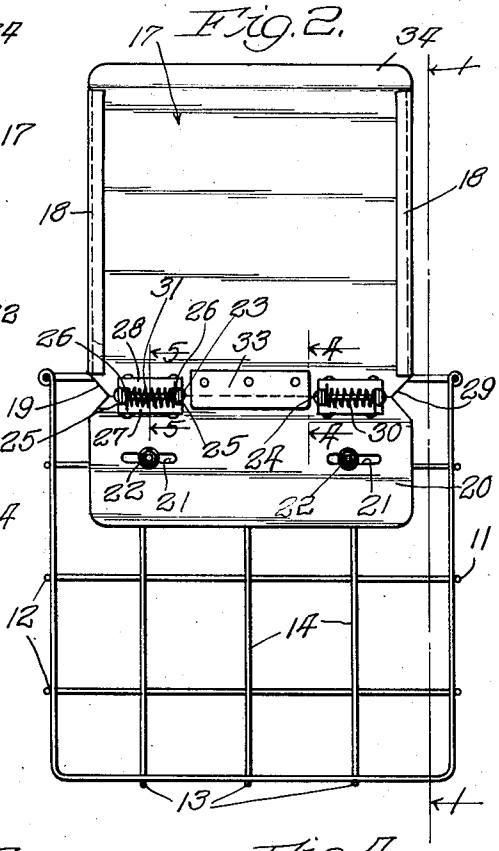


Fig. 3.

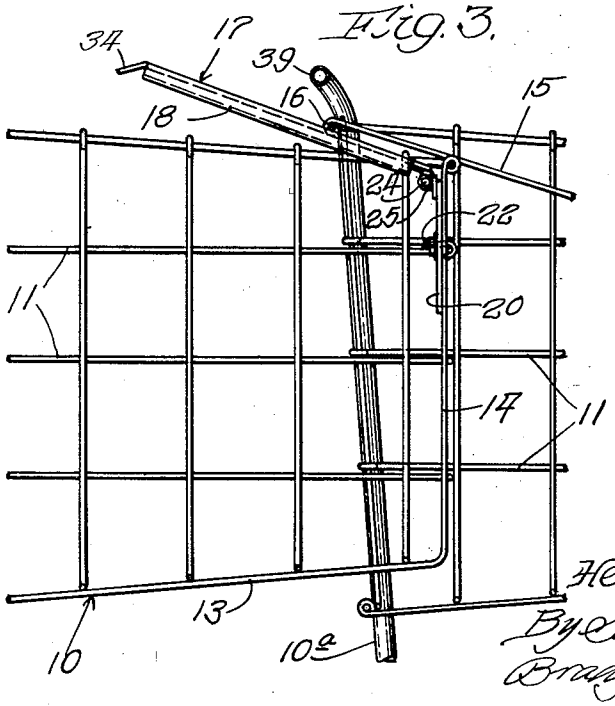
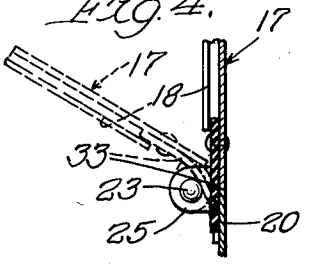


Fig. 4.



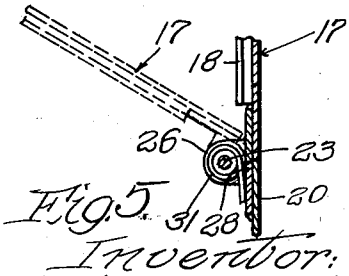


Fig. 5.

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Fig. 6.

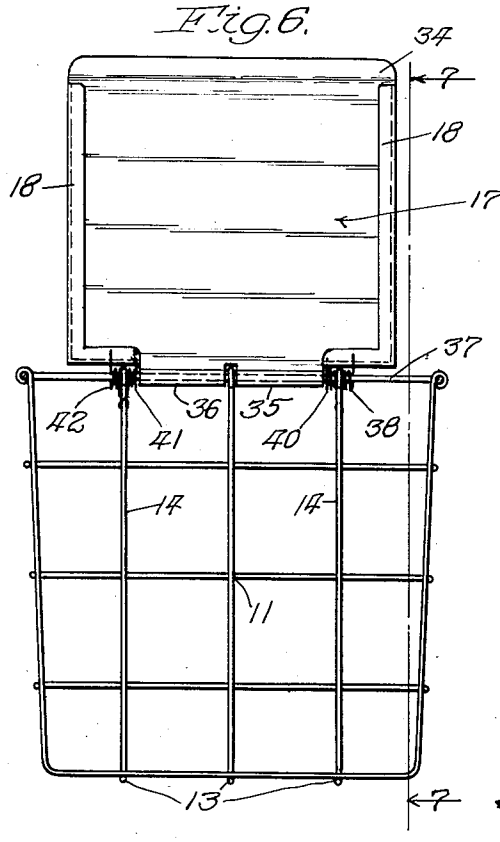


Fig. 7.

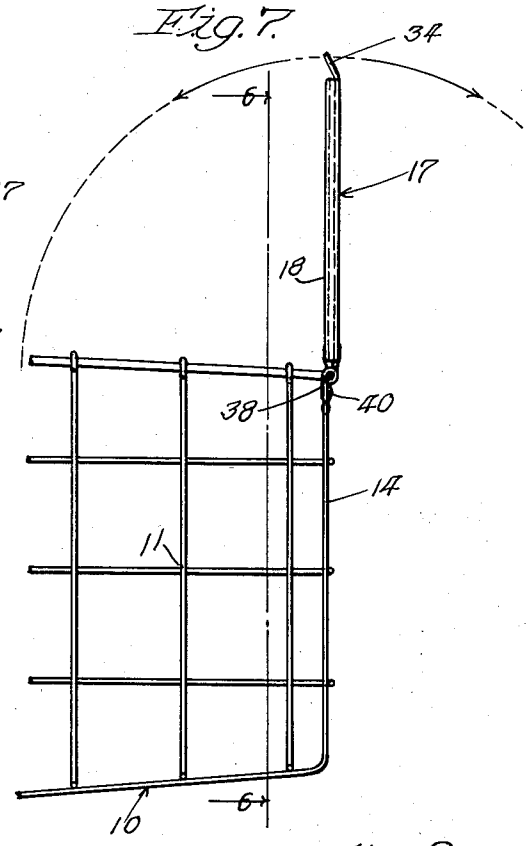


Fig. 8.

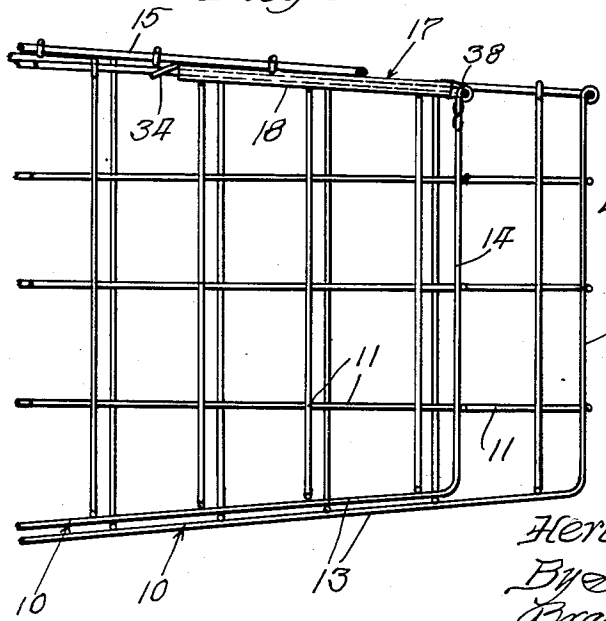
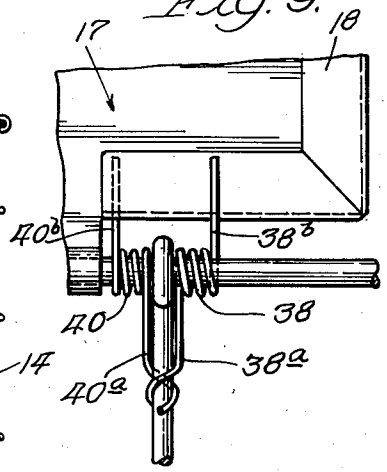


Fig. 9.



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DISPLAY SIGN MOUNTING FOR TELESCOPING CART

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Application July 11, 1956, Serial No. 597,120

2 Claims. (Cl. 40—10)

The present invention relates to grocery carts adapted to telescope one within the other, and more particularly to a display sign mounting for such a cart.

The device of the present invention is particularly well adapted for use with the conventional telescoping carts now in use, and it may be applied to such carts during their manufacture as original equipment, or it may later be added as auxiliary equipment to carts already in the field. The sign mounting is retractable to permit the carts to be nested in the conventional manner so that valuable floor space in a store can still be conserved. In addition, when a cart is removed from nested position, the sign mounting is arranged to automatically "pop-up" into exposed position.

The "pop-up" feature of the sign mounting has been found to be especially useful as an advertising medium. When advertising material is placed in the display sign mounting, it is immediately brought to the attention of the customer who withdraws the cart from its nested position. Furthermore, the material on the sign is constantly before the customer during an entire shopping operation. It has been found that the sales of items advertised in this manner have been materially increased, and even in the case of "hard-to-move" items, or items with a large price "markup," the sales have increased many fold.

The primary object of the present invention is to provide a display sign mounting for use in conjunction with a telescoping grocery cart of the conventional type now in use.

Another object is to provide a sign mounting for such a cart which automatically moves to retracted position when a pair of carts are mutually nested one within the other, and which automatically swings to an exposed position when a cart is removed from its nested position.

A further object is to provide a sign mounting having a pair of oppositely acting spring members which normally retain the sign mounting in an upwardly exposed position on a cart.

Still another object is to provide a sign mounting having a rearwardly angled upper edge portion which serves as a camming surface to facilitate the removal of a cart with a sign mounting from nested position.

The invention is illustrated in a preferred embodiment in the accompanying drawings, in which:

Fig. 1 is a sectional view taken as indicated on line 1—1 of Fig. 2 of a basket of the type mounted on a telescoping cart and showing the sign mounting in its upwardly exposed position;

Fig. 2, a sectional view taken as indicated on line 2—2 of Fig. 1;

Fig. 3, a fragmentary side elevational view with certain portions broken away to show the basket of Fig. 1 being nested through the rear end of a basket on a similar telescoping cart;

Fig. 4, an enlarged fragmentary sectional view taken as indicated on line 4—4 of Fig. 2, and showing in dotted

outline the manner in which the sign mounting is rearwardly swung;

Fig. 5, an enlarged fragmentary sectional view taken as indicated on line 5—5 of Fig. 2, and showing the coil spring of the hinge portion of the sign mounting;

Fig. 6, a sectional view of a second embodiment of the sign mounting taken as indicated on line 6—6 of Fig. 7;

Fig. 7, a sectional view taken as indicated on line 7—7 of Fig. 6;

Fig. 8, a fragmentary side elevational view with certain portions broken away to show the basket of Fig. 7 nested within a basket of a similar telescoping cart; and

Fig. 9, an enlarged fragmentary elevational view of a portion of Fig. 6 showing one pair of the spring members which normally hold the sign mounting in upright exposed position.

In the embodiment illustrated, a basket generally designated **10** is provided which is of the type now conventionally used on telescoping carts in most supermarkets and grocery stores. The wheeled frame or carriage has not been shown because it also is conventional and now in widespread use. It is sufficient for the purposes of the present invention to note that the wheeled supporting frame and basket of the telescoping cart are arranged so as to be mutually nestable with the frame and basket of a similar cart.

As herein shown, each basket may be mounted upon laterally spaced, upright supporting frame members **10***a* of the carriage (not shown). The baskets are preferably formed from rather heavy interwoven wire so as to provide a pair of inwardly and forwardly tapering side walls **11** and **12** and an upwardly and forwardly tapering bottom **13** which terminate at, and are secured to, a generally upstanding forward end wall **14**. At the rear end of each of the nestable baskets **10** an upwardly swingable end gate **15** may be provided which is conveniently hinged to an upper rear edge **16** of the basket **10**.

Thus it can be seen that to nest one basket **10** within another, the end wall **14** and forwardly projecting nose of one basket is pushed against the rear end gate **15**, which normally closes the rear end of a second basket, causing the end gate **15** to be swung upwardly to open position and ride upon the upper edge of the first basket so as to permit the first basket to become fully nested longitudinally into the second basket, as best shown in Figs. 3 and 8.

In the embodiment disclosed in Figs. 1–5, a display sign mounting, generally designated **17**, is mounted on the inside of the end wall **14** at the forward end of the basket **10**. The sign mounting is preferably provided with a pair of side flanges or grooves **18**, closed at their lower end, into which removable advertising display cards may be inserted. It is, of course, contemplated that such flanges or other well known holding means may be provided on either or both sides of the sign mounting **17**. In addition, the sign mounting **17** may be formed of a transparent material, such as clear plastic, and be shaped with a hollow interior so that the advertising display card may be positioned within the interior of the mounting.

The sign mounting **17** is preferably hinged to the basket **10** so that it may be swung from upwardly exposed position, as shown in Figs. 1 and 2, rearwardly to a retracted position within the basket **10**. To this end, a flat mounting plate **20** may be provided having elongated slots **21** through each of which a securing means, such as nut and bolt **22**, may be provided to secure the mounting plate **20** to the end wall **14** of the basket **10**. The sign mounting **17** is preferably swingably mounted on the upper end of the mounting plate **20** by a pair of journal rods **23** and **24** which extend transversely of the basket **10** through cooperating apertured

ears **25** and **26** of the mounting plate **20** and sign mounting **17**, respectively.

The ears **25** and **26** may be formed in separate bracket members **27** and **28**, respectively, which are preferably spot welded to the sign mounting **17** and to the mounting plate **20**.

The sign mounting **17** is preferably normally urged toward upright exposed position, as shown in Figs. 1 and 2, and to this end it may be provided with a pair of spring members **30** and **31** which embrace the journal rods **23** and **24** and are torsioned so as normally to urge the sign mounting clockwise, as shown in Fig. 1.

In the embodiment of Fig. 1, the journal rods **23** and **24** are shown disposed beneath the top edge of the end wall **14** so that the sign mounting in moving to exposed position is arrested by striking the top edge of the end wall **14** as at **32**. Any other convenient form of stop member may be utilized for this purpose. If desired, a strip of rubber **33**, or other flexible material, may be arranged to cover the joint between the sign mounting **17** and the mounting plate **20** to protect against a child's finger being caught between the two members. Notched portions **19** and **29** may also be provided in this embodiment to remove unprotected, open hinged portions.

In operation, when it is desired to nest a first cart within a second cart, as shown in Fig. 3, the nose of the first cart is brought to bear against the end gate **15** of the second basket **10**, and as the first basket is slid longitudinally into the second basket the end gate **15** is pivoted upwardly to permit nesting of the baskets. As the first basket is advanced into the second basket, the forward side of the sign mounting **17** is brought to bear against rear portions of the second basket causing the sign mounting to pivot downwardly to retracted position substantially in the plane of the upper edge of the first basket. As herein shown in Fig. 3, the sign mounting bears against the rear upper edge of the second basket, but it is understood that a handle **39** may project rearwardly in certain constructions and initially contact the sign mounting **17**.

Preferably, as the first basket is further nested into the second basket (Fig. 8), the sign mounting **17** passes beyond the rear upward edge of the second basket and is held in retracted position by the upwardly swung end gate **15** which is being urged downwardly by gravity. Judicious choice as to the length of sign mounting **17**, the weight of end gate **15** and the strength of spring members **30** and **31** assure that the sign mounting will be maintained in retracted position. The upward swinging of end gate **15** may also be limited by a stop member (not shown), if desired, which in turn will assure that the sign mounting **17** will be maintained in retracted position when the baskets **10** are nested.

When it is desired to use the first cart again, the first basket is slid rearwardly out of nested position and, as the free end of the sign mounting **17** clears the rear portions of the second basket, the spring members **30** and **31** move the sign mounting **17** clockwise, as shown in Fig. 3. Thus the sign mounting **17** is quickly swung to its exposed position extending upwardly from the basket **10** so that the customer's attention is immediately directed to the material displayed thereon.

It should be noted that the free end of the sign mounting preferably has a rearwardly angled portion **34** so that, when the basket is being withdrawn from nested position, the top face of the angled portion functions as a camming surface and prevents the sign mounting from being caught either on the end gate **15** or on the rear upper portions of the basket **10**.

A second embodiment of the invention is disclosed in Figs. 6–9, and this embodiment operates generally in the same manner as the first embodiment when the carts are moved into nested relationship. However, in this form of the invention, the sign mounting **17** is provided with a pair of bearing surfaces **35** and **36**, preferably tubular, which embrace the top rod **37** of the end wall **14**. Again, the sign mounting **17** is normally urged to upright exposed position, as shown in Fig. 7, but the sign mounting is permitted to freely swing forwardly and rearwardly of the plane of the end wall **14**. The sign mounting **17** is preferably retained in equilibrium in its exposed position by two pairs of opposed springs **38** and **40** and **41** and **42** which preferably embrace the top rod **37** of the end wall **14** and act in opposed relation, as shown in Fig. 9, to balance the sign mounting **17** in its exposed position.

Although other types and arrangements of springs may be used, as herein best shown in Fig. 9 springs **38** and **40** are oppositely torsioned and have spring ends **38*a*** and **40*a*** anchored to the basket while the free ends **38*b*** and **40*b*** of the springs are disposed on opposite sides of the sign mounting **17** and exert substantially equal forces in opposed directions to hold the sign in equilibrium in its upright position. Although not shown in detail, springs **41** and **42** may be similarly arranged.

It is, of course, apparent that the sign mounting may be used for other purposes than the display of advertising material. For example, it may be used to mount an index of items for sale in the particular store, or part of its surface may be used to display a pictorial plan view showing the locations of general types of items in that store.

The foregoing detailed description is given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, for some modifications will be obvious to those skilled in the art.

I claim:

1. In a telescoping grocery cart of the type having a forwardly projecting basket adapted to nest through the rear end of a second basket mounted on a similar grocery cart, said second basket having an end gate normally closing said rear end and being swingable from closed position upwardly to open position by the basket being nested, a display sign mounting hingedly secured to the forward end portion of the basket for swinging movement between an upright exposed position and a retracted position, said sign mounting being normally urged toward said upright exposed position and being swung toward retracted position beneath said end gate on the second basket by relative movement of said baskets toward nesting relation so that the sign mounting is in retracted position and the end gate is in open position when the baskets are fully nested, said sign mounting being of such length relative to the end gate that the end gate overlaps the sign mounting to retain said sign mounting in retracted position when the baskets are nested.

2. A device as specified in claim 1 in which the sign mounting has an outer free end which is angled downwardly when in retracted position to provide a camming surface bearing against the end gate of the second basket to facilitate movement of the baskets out of nested relation.

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