

Sept. 15, 1964

M. UMANOFF

3,148,469

CHANGEABLE PRICE INDICATOR

Filed July 19, 1961

FIG. 1

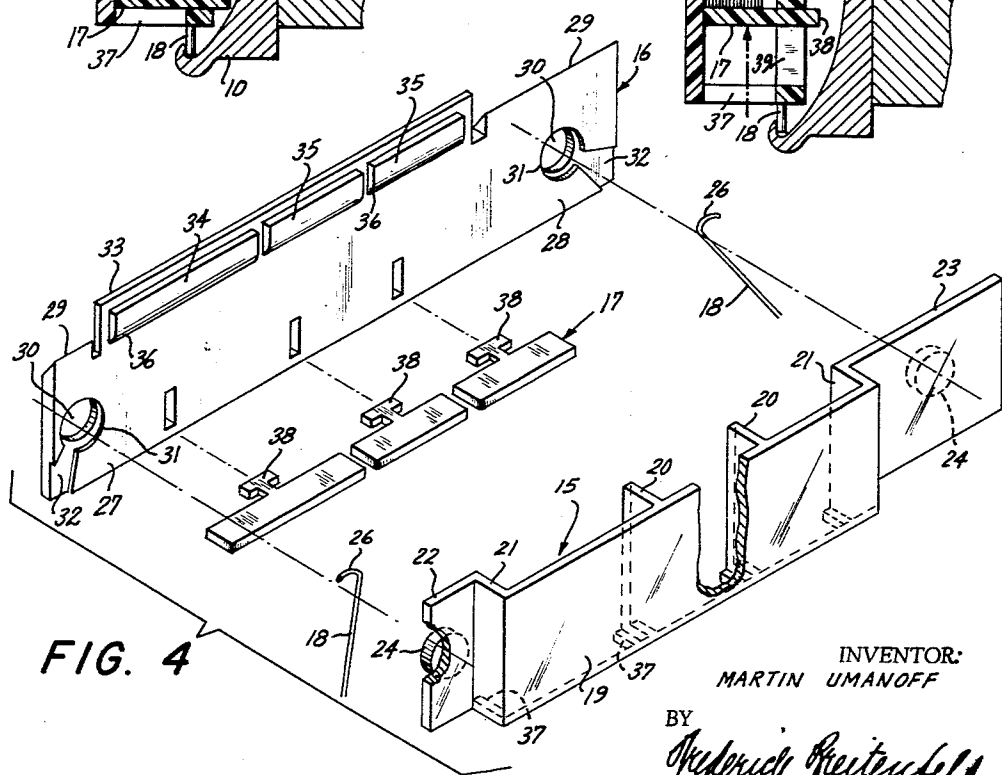
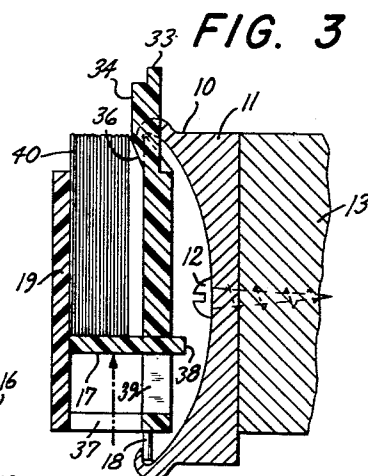
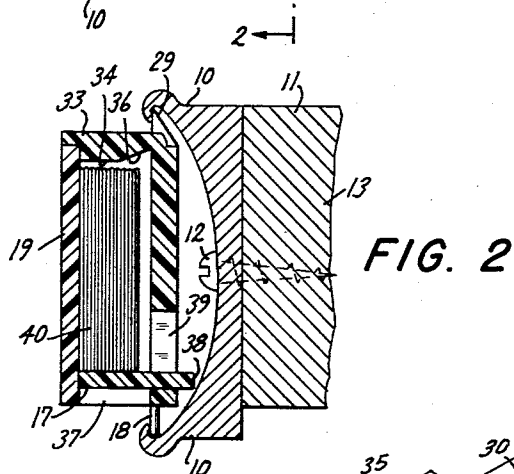
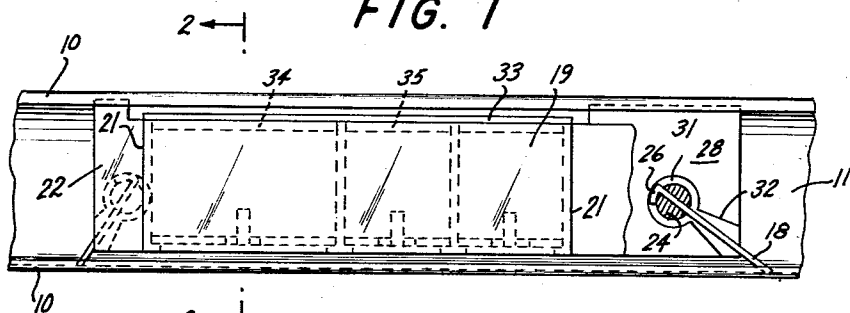


FIG. 4

INVENTOR:  
MARTIN UMANOFF

BY

*Fredrick Reitenfeld*  
ATTORNEY

1

3,148,469

## CHANGEABLE PRICE INDICATOR

Martin Umanoff, Huntington, N.Y., assignor to R. A. MacPlum Industries, Inc., Clifton, N.J., a corporation of New Jersey

Filed July 19, 1961, Ser. No. 125,157

2 Claims. (Cl. 40—5)

This invention relates generally to sign exhibitors, and has particular reference to a changeable price indicator for use in retail establishments.

It is a general object of the invention to provide simplifications and improvements in the type of price indicator which is adapted for securement to a vertical support, especially to the kind of metallic supporting channel of C-shaped cross-section which is commonly provided along the edges of shelves in self-service markets. A more specific object is to provide an inexpensive device by means of which the prices of commodities displayed on the shelves of stores may be designated in an effective and attractive manner, the price indicator including readily adjustable price indicia whereby any of a variety of price indications may be selectively displayed.

Another object is to provide a device of such structural design that it may be fabricated of relatively few elements most of which can be made of molded plastic whereby the cost of production is unusually low.

A further object is to afford a simplified means for allowing authorized personnel to make necessary adjustments in price indications while at the same time guarding the display against mischievous tampering.

Another object is to allow adjustments to be made without disturbing the securement of the device to the store shelf or other support.

A further object is to provide a simplified means for attaching the indicator to a supporting channel of C-shaped cross-section.

A feature of the present improvement resides in the accommodation of adjustable price indicia within a rectangular chamber in such a way that, although the means for doing so is hidden, it is possible for the indicia to be readily engaged from beneath and temporarily pushed upward out of the chamber into a disposition accessible for adjustment. The mode of operation described is particularly adapted, and lends itself well, to a relatively simple arrangement of elements wherein a pack of price indicating cards is accommodated within the chamber, the outermost card being exhibited through the transparent front wall of the chamber.

Other features of the invention relate to the manner in which the structural elements are shaped and fitted together, to constitute an article which is staunch and wear-resistant, effective and reliable in use, easy to put into operation and to adjust, tamper-proof to a practical degree, and low in cost.

The preferred way of achieving these objectives, and such other objects and advantages as may be pointed out hereinafter, is depicted in the accompanying drawings, in which—

FIGURE 1 is a front elevational view of a changeable price indicator of the present improved type shown in operative position upon a typical supporting channel on the front edge of a shelf;

FIGURE 2 is an enlarged cross-sectional view along the line 2—2 of FIGURE 1;

FIGURE 3 is a view similar to FIGURE 2, showing the parts in the relationship they assume when an adjustment of price indication is to be made; and

FIGURE 4 is an exploded view of the parts entering into the construction, other than the price indicating cards or other price indicia.

2

The device is intended to be removably secured to a vertical support so that the front transparent wall of the chamber assumes a vertical disposition. The article is particularly intended for securement in clamped relation between the opposed grooves 10 of a metal molding strip 11 of C-shaped cross-section. This channel is itself secured by screws 12 or other fasteners to the front edge of a shelf 13. The C-shaped channel 11 is of a conventional kind within which, according to common practice, separate cards or tickets bearing price indications are mounted.

The indicator chosen for illustration consists of a substantially rectangular chamber provided with partition walls so as to form three compartments side by side. It will be understood, however, that the broader phases of the invention do not require the use of any such partitions.

The structure depicted in the drawings consists of the molded plastic parts 15, 16 and 17, best shown in FIGURE 4, and the springy wire elements 18. The element 15 defines a front wall 19 which may be transparent in its entirety, as shown, or may be formed with transparent window-like areas. Projecting rearwardly are the integral partitions 20, and at the opposite ends are the side or end walls 21. Each of the latter joins at its rear edge with a lateral panel parallel to the front wall 19. The illustrated panel 22 is shorter in length than the panel 23, but this is a matter of choice and is not essential.

On the rear face of each of the panels 22, 23 there is an integral boss or protuberance 24, preferably circular in shape. Each of these is provided with a diametric bore arranged at the angularity best indicated in FIGURE 1. The wire elements 18 extend through these bores, with each short transverse end 25 resting against the periphery of the boss through which the wire passes. This brings the opposite ends of the wires 18 into dispositions projecting somewhat beyond the lower edges of the panels 22, 23.

The molded element 16 defines a rear wall against which the element 15 abuts when the parts are assembled. In the regions directly behind the panels 22, 23 the rear wall is provided with lateral extensions 27, 28. Each of these is slightly higher than the corresponding front panel and the projecting edges are attenuated as shown at 29 for engagement within one of the grooves 10 (in the device shown, it is the upper groove) of the support channel 11. In alignment with the bosses 24 the extensions 27, 28 have bores 30 into which the bosses 24 are snugly fitted. On the front face of each extension 27, 28 a recess is cut to accommodate the wire 18. This recess may include the circular part 31 concentric with and slightly larger than the bore 30, and obliquely extending part 32 having side walls diverging from the part 31.

In that part of the rear wall which lies directly behind the front wall 19, its upper edge carries a hinged top wall 33. This wall may be integrally formed with the rear wall if a plastic is used which is flexible along the hinge line. By thinning the thickness along the hinge the desired degree of flexibility can be enhanced. The inner face of the top wall 33 is contoured to fit snugly within the upper end of the chamber, and where partitions 20 are employed the face of top wall 33 carries the thickened regions 34 and 35. The part 34 is adapted to fit snugly into the space between the side wall 21 and the first partition 20; the parts 35 fit correspondingly into the second and third compartments shown.

For a purpose to be explained, the lower edges of the parts 34, 35 (as viewed in FIGURE 4) are beveled or tapered as shown at 36.

The elements 17 define floors for the several compartments of the chamber. Each floor is free of connection

3

to the other walls. It rests upon inturned ledges, best shown in FIGURE 4. For example the floor 17 which fits between the side wall 21 and the adjacent partition 20 rests upon ledges 37 formed at the lower ends of wall 21 and partition 20. The other floors are similarly supported.

At the rear edge of each floor element 17 it is provided with a T-shaped projection 38 adapted to extend through a correspondingly located vertical slot 39 in the rear wall 16. The lower end of this slot serves as an added support for the floor, and the upper end limits the extent to which the floor is independently movable in an upward direction.

In assembling the device, the floors 17 are first interengaged with the rear wall 16, calling for a temporary turn through 90° to pass each T-shaped projection 38 rearwardly through its slot 39. Then the pins or wires 18 are inserted into the bores in the bosses 24, and then the front element 15 is brought rearwardly against the element 16 to fit the bosses 24 snugly into their respective holes 30, whereby the panels 22, 23 abut in face to face relation against the extensions 27, 28 and the rear edges of the partitions 20 abut against the rear wall 16. In this relationship of the parts the long ends of the wires 18 are accommodated within the recesses 32 and are resiliently movable within a limited angular range. The parts are secured together in any suitable manner. A heat sealing of the bosses 24 within the holes 30, welding the front and rear elements 15, 16 together, has been found satisfactory.

When the device is to be used, a pack of price-indicating cards 40, or equivalent variable price indicia, is placed into each compartment, one end of the pack resting upon the floor 17 and the outermost card being exhibited through the transparent front wall 19. The top wall 33 is then swung down, bringing the parts into the operative relationship shown in FIGURE 2. (The cards 40 have been omitted from FIGURE 1 but are shown in each of FIGURES 2 and 3.)

To secure the device to the channel 11, the edges 29 of the rear wall are inserted into the upper groove 10, and the wires 18 are pried up sufficiently to allow the device to be brought into proper vertical disposition whereupon the wires 18 are released and spring into the lower groove 10 as shown in FIGURES 2 and 3. To remove the device, the procedure is reversed: a temporary stressing of the wires 18 allows them to clear the lower lip of the channel whereby the device can be readily drawn forwardly and downwardly to release the upper edges 29 from the upper groove.

To alter the price indication the top wall 33 is removed temporarily by swinging it into the position shown in FIGURE 3. Then upward pressure upon the floor 17, as indicated by the arrow in FIGURE 3, lifts the pack of cards upwardly out of the chamber. The tapering 36 on the top wall 33 facilitates this movement. The cards or other price indicia 40 are thus brought into a disposition accessible for adjustment. After the desired adjustment has been made the cards are restored to the position of FIGURE 2 and the top wall 33 is closed.

It will be observed that the adjustability described

4

is one which can be accomplished quickly and simply, without disturbing the securement of the device to its support. At the same time, the fact that the floor 17 of the chamber is vertically liftable, and that the top wall 33 can be swung back, are features which are not readily detectable, hence they constitute a hidden means for elevating the indicia by engagement from underneath. This effectively prevents unauthorized tampering by the uninitiated.

While the chamber illustrated has three separate compartments, with separate adjustable price indicia in each, it will be understood that in a sense each compartment is itself a chamber embodying the features of the invention. Obviously the invention is applicable to devices in which there is only one compartment and one set of price indicia, or to devices having any desired number of compartments, greater than one. In general, it will be understood that many of the details herein described and illustrated may be modified by those skilled in the art without necessarily departing from the spirit and scope of the invention as expressed in the appended claims.

What is claimed is:

1. In a changeable price indicator, a chamber containing a pack of superposed price-indicating cards and provided with a transparent front vertical wall through which the outer card of the pack is exhibited, said chamber being also provided with vertical rear and side walls, a top wall, and a floor upon which said pack of cards stands, said top wall being hinged to the rear wall so that it may be swung back to allow the pack of cards to project upwardly out of the chamber, said floor being free of connection to any of the other walls so that upward pressure upon it will elevate it and thereby move said pack upwardly.

2. In a changeable price indicator, a chamber and a series of price-indicating cards arranged in a pack accommodated therein, said chamber being provided with: a front vertical wall through which the front card of said pack is exhibited, vertical rear and side walls, means associated with the rear wall for securing the indicator to a support, a horizontal top wall for closing the chamber, and a horizontal floor upon which said cards rest, said floor being independent of all said other walls including said top wall and slidable vertically with respect to all said walls in order to push said pack of cards upwardly above the top edges of said front, rear, and side walls a distance sufficient to make the cards accessible for adjustment without necessarily pushing them completely out of said chamber, said top wall being secured in hinged relation to the top edge of one of said vertical walls, said top wall carrying on its inner face a part adapted to fit snugly within the upper end of said chamber, the edge of said part adjacent to the hinge being beveled to guide said card out of said chamber when said floor is moved upwardly.

#### References Cited in the file of this patent

#### UNITED STATES PATENTS

|           |                |               |
|-----------|----------------|---------------|
| 1,987,778 | Keene          | Jan. 15, 1933 |
| 2,770,898 | Lutz et al.    | Nov. 20, 1956 |
| 2,934,844 | Bergier et al. | May 3, 1960   |