April 14, 1942. J. P. McMULLIN 2,279,836

CHANGEABLE INDICATOR

Filed May 6, 1941

Fig. 1.

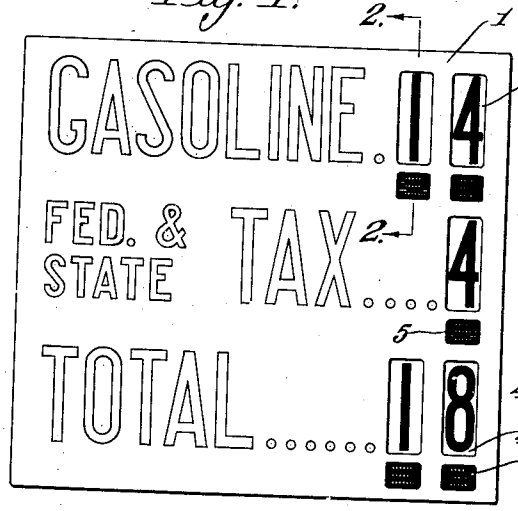


Fig. 3.

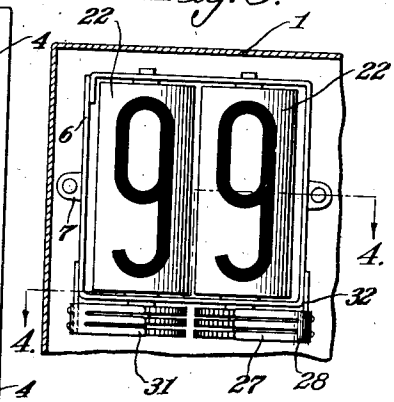


Fig. 2.

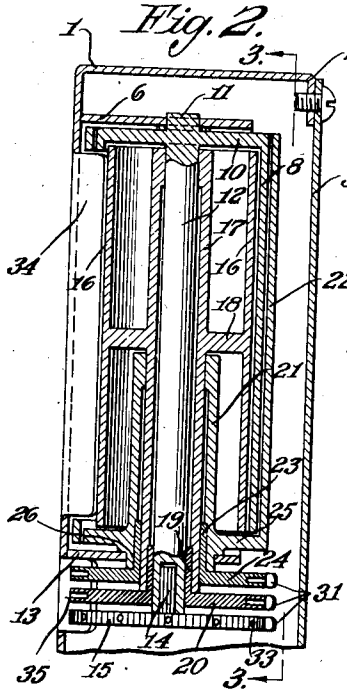


Fig. 4.

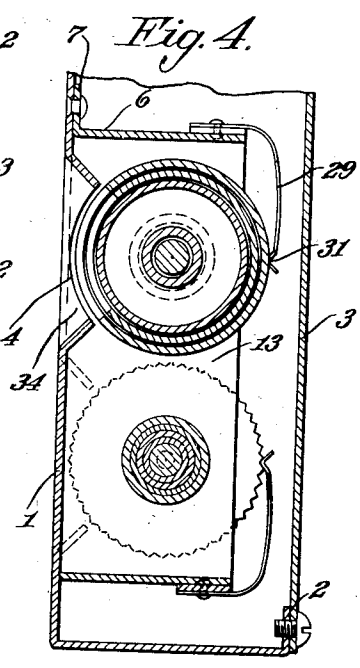


Fig. 5.

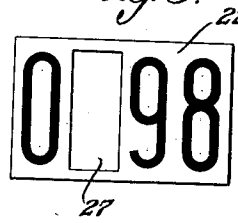


Fig. 6.



Fig. 7.



Joseph P. McMullin
INVENTOR

BY Victor J. Evans & Co.
ATTORNEYS

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UNITED STATES PATENT OFFICE

2,279,836

CHANGEABLE INDICATOR

Joseph P. McMullin, Concordville, Pa.

Application May 6, 1941, Serial No. 392,147

2 Claims. (Cl. 40—68)

This invention relates to changeable indicators, and its general object is to provide an indicator that is primarily designed for use with commodities that frequently change in price, in that my device includes cylinders having numerals thereon indicative of the price of commodities, articles and the like, the cylinders being rotatably mounted within a housing for the numerals thereof to show through the window openings, and while the cylinders can be rotated in an easy and expeditious manner to change the numerals with respect to the window openings the said cylinders are held against any possibility of casual rotation.

A further object is to provide a changeable price indicator that includes numeral bearing cylinders arranged one within the other, so as to take up minimum space, thus making it possible to provide an indicator of the character set forth, that is neat and attractive, as well as one that can be read at a glance.

Another object is to provide a changeable price indicator that is simple in construction, inexpensive to manufacture and extremely efficient in operation, use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a front view of the device which forms the subject matter of the present invention made up for use to indicate the price of gasoline.

Figure 2 is a sectional view taken approximately on line 2—2 of Figure 1, looking in the direction of the arrows.

Figure 3 is a sectional view taken approximately on line 3—3 of Figure 2, looking in the direction of the arrows.

Figure 4 is a sectional view taken approximately on line 4—4 of Figure 3, looking in the direction of the arrows.

Figure 5 is a diagrammatic view illustrating the outer face of the cylindrical portion of the outer cylinder.

Figure 6 is a similar view of the intermediate cylinder.

Figure 7 is also a similar view of the face of the inner cylinder.

While I have illustrated my device as being made up for use with the sale of gasoline to indicate the retail price thereof per gallon, it will be understood that it can be made up for use with any commodity, article or the like. In any event, the device includes a housing 1 that is relatively shallow and provided with front, top, bottom and side walls, the top, bottom and side walls being preferably inturned at the rear thereof to provide a marginal flange 2 having secured thereto by screw bolts, a closure 3 providing the rear wall of the housing, as clearly shown in Figure 2.

The front wall has any suitable indicia thereon to identify the commodity, such as "Gasoline" in the form shown, information regarding the tax and the word "Total" and the form shown also includes five large window openings 4 in the front wall to expose the numerals on the cylinders and five smaller openings 5 for a purpose which will be later described.

The cylinder units are mounted in frames 6, there being one or more units in each frame and each frame is provided with ears 7 riveted to the inner face of the front wall of the housing for securing the frames thereto, as will be apparent upon inspection of Figure 4. Each cylinder unit is identical and consists of hollow outer, intermediate and inner cylinders. The intermediate cylinder which is indicated by the reference numeral 8 has the numerals "5," "6" and "7" arranged along the length thereof, with a slot 9 also along its length. A top wall 10 is provided for the cylinder 8 and formed on and rising from the top wall is a trunnion 11 mounted for rotation in an opening provided in the upper wall of the frame 6, while also formed on the top wall 10 and depending therefrom is a solid shaft 12 of a length greater than that of the cylinder 8 to extend a considerable distance below the bottom wall 13 of the frame 6. The shaft has a bore extending in the lower end thereof, and fixed within the bore is a stem 14 formed on a disk 15 having a notched or serrated periphery to facilitate rotating the cylinder 8, as will be apparent.

The bottom of the intermediate cylinder is open, and mounted within the latter is the inner cylinder 16 that has the numerals "1," "2," "3" and "4" arranged thereon to show through the slot 9. A hollow shaft 17 rotatably mounted on the shaft 12 is provided for the inner cylinder 16 and the latter is fixed to the shaft 17 by an annular web 18 midway the ends of the inner

cylinder, as clearly shown in Figure 2. The lower end of the shaft 17 is recessed to fittingly receive a collar 19 fixed to the lower end of the shaft 17 and formed on the collar 19 is a disk 20 similar to the disk 15, and of course for the purpose of rotating the inner cylinder 16.

The upper and lower ends of the inner cylinder are open, and mounted within the lower portion of the inner cylinder is a hollow stub shaft 21 for the outer cylinder 22, the stub shaft 21 being rotatably mounted on the shaft 17 and has mounted in a recess in the lower end thereof a collar 23 that is formed on a disk 24 that is similar to the disks 15 and 20. A bottom wall 25 closes the lower end of the outer cylinder 22, and formed on and depending from the bottom wall 25 is a trunnion 26 mounted for rotation in the bottom wall 13 of the frame 6. The outer cylinder has the numerals "8," "9" and "0" arranged thereon in the same manner as the numerals of the other cylinders and a slot 27 is likewise provided in the outer cylinder for any one of the numerals of the intermediate and inner cylinders to show therethrough, as will be apparent.

In order to hold the cylinders against casual rotation, I provide a spring member 28 for each unit, and each spring member includes a spring finger 29 in the form of a dog for each cylinder, the spring fingers having substantially V-shaped free ends 31 to be received in the notches of the serrated peripheries of the disks, as clearly shown in Figure 4, and the spring members 28 are connected to the side walls of the frames 6 by strips 32, as best shown in Figure 3.

The disks are arranged with respect to the openings 5 so that ready access may be had thereto for individually rotating the cylinders, and to facilitate the rotation thereof, it will be noted as best shown in Figure 2 that the disks have holes 33 extending therein from their outer peripheries for the insertion of a pin or the like.

It will be further noted that the window openings 4 as well as the openings 5 have shield flanges 34 and 35 respectively extending inwardly therefrom.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

1. A changeable indicator comprising a housing including a front wall having window openings therein, a cylinder unit for each opening and arranged within the housing, each unit including inner, intermediate and outer cylinders, the cylinders being hollow and mounted one within the other for independent rotation, indicia on each cylinder, the intermediate and outer cylinders having slots therein for the indicia of each cylinder of a unit to show through its window opening, a frame for each cylinder unit and secured within the housing, trunnions on the intermediate and outer cylinders of each unit and mounted for rotation in the frame thereof, a disk connected to each cylinder for rotating the same, the disks having notched peripheries, spring members for the disks and including spring fingers having substantially V-shaped free ends engaged in the notches to hold the cylinders against casual rotation, and said disks having holes therein for receiving a pin or the like to facilitate rotating the cylinders.

2. A changeable indicator comprising a housing including a front wall having window openings therein, a cylinder unit for each opening and arranged within the housing, each unit including inner, intermediate and outer hollow cylinders, a solid shaft for the intermediate cylinder and the latter having a top wall and an open lower end, a hollow shaft for the inner cylinder and the latter having open ends, a hollow stub shaft for the outer cylinder and the latter having an open upper end and a bottom wall, the shaft of the outer cylinder being mounted on the shaft of the inner cylinder and the shaft of the latter cylinder being mounted on the shaft of the intermediate cylinder for disposal of the cylinders of each unit one within the other for independent rotation thereof, indicia on each cylinder, the intermediate and outer cylinders having slots therein for the indicia of each cylinder of the unit to show through its window opening, a frame for each cylinder unit and secured wtihin the casing, trunnions on the intermediate and outer cylinders of each unit and mounted for rotation in the frame thereof, a disk for each shaft and connected thereto for rotating the cylinders, said front wall having additional openings therein with the disks registering therewith for access thereto through the front wall, and means for holding the cylinders against casual rotation and associated with the disks.

JOSEPH P. McMULLIN.