

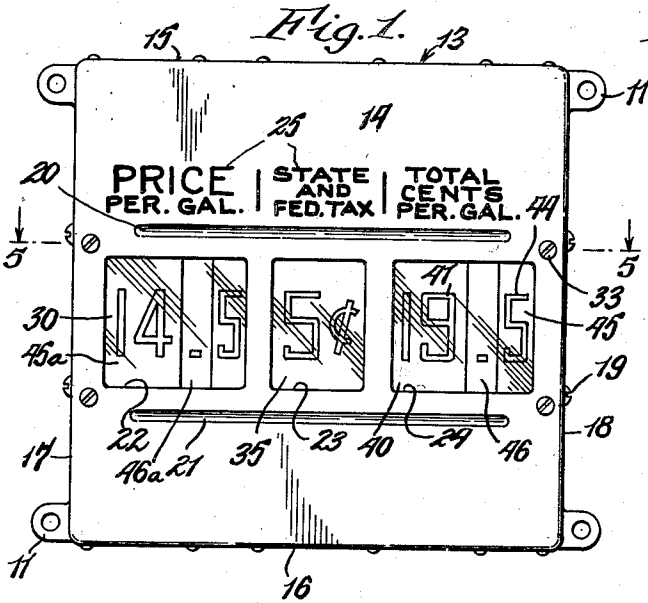
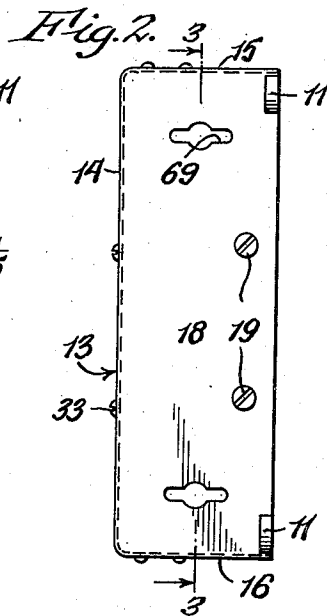
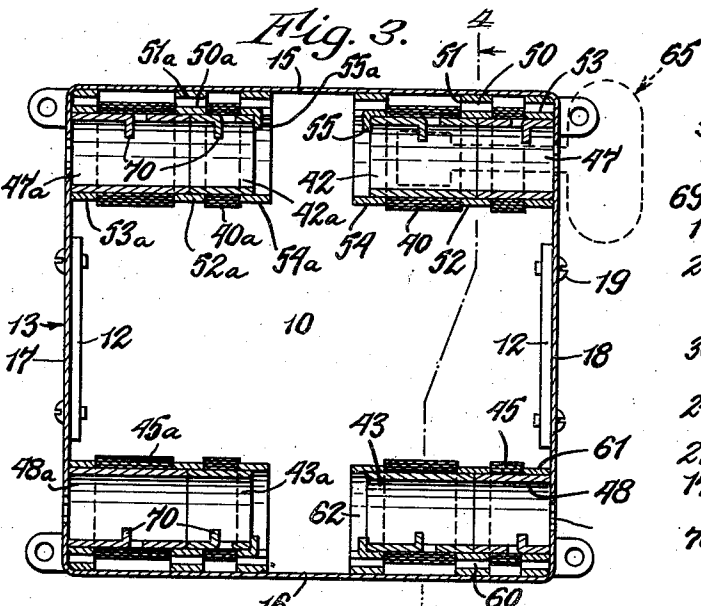
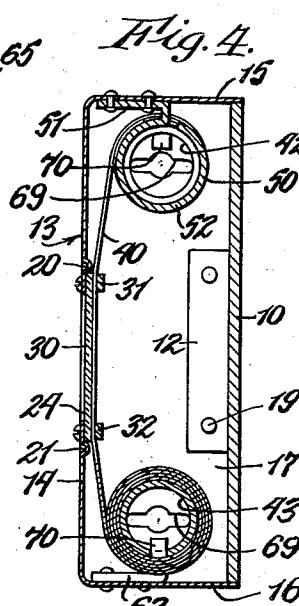
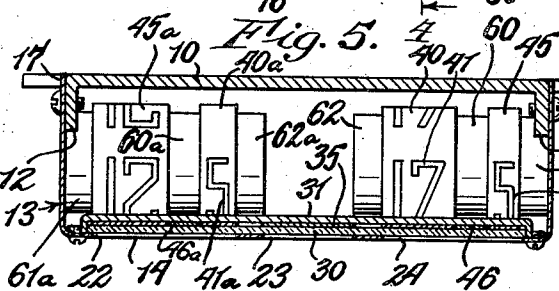
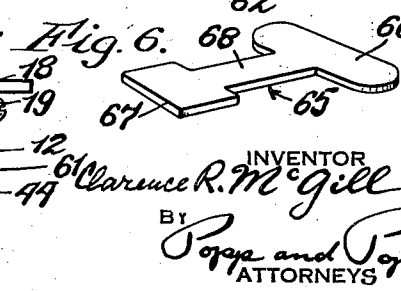
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CHANGEABLE SIGN

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CHANGEABLE SIGN

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6 Claims. (Cl. 40—86)

This invention relates to a changeable sign and is shown as embodied in a gasoline price sign adapted to be mounted on the gasoline dispensing pump and which indicates the price per gallon of the gasoline; the State and Federal tax imposed and the total amount per gallon which the customer is required to pay, such signs being required in many States.

One of the objects of this invention is to provide such an indicating sign in which the indicated base price of the gasoline and also the total price can be readily changed thereby to permit of correcting the sign in accordance with changes in the price of the gasoline or changes in the taxes imposed.

Another object of the invention is to provide such a sign which is in the form of a self-contained unit, the various digits for indicating the various prices being contained on strips which are at all times movably housed within the casing and capable of being brought in succession before windows. By this means the strips are kept in a clean condition and the sign is at all times legible.

Another object of the invention is to provide such a changeable sign in which the figures are changed by means of a key which is inserted into the casing thereby avoiding the objectionable appearance of cranks or other hand pieces permanently attached to the sign and at the same time insuring that the sign will not be changed except by the manager of the gasoline station.

Another object of the invention is to provide such a key-operated changeable sign which is simple and inexpensive in construction thereby permitting the sign to be produced and sold at low cost.

Another aim of the invention is to provide such a changeable sign which is compact and which is attractive in appearance and provides a bold display of the prices so that the prices are readily discernible at a substantial distance from the pump.

In the accompanying drawing:

Fig. 1 is a front elevation of a changeable gasoline price sign embodying my invention.

Fig. 2 is a side elevation thereof.

Fig. 3 is a vertical central section taken on line 3—3, Fig. 2.

Fig. 4 is a vertical section taken on line 4—4, Fig. 3.

Fig. 5 is a horizontal section taken on line 5—5, Fig. 1.

Fig. 6 is a perspective view of the key for changing the sign.

While any suitable form of enclosing casing

can be employed I have shown the sign as including a rectangular backing plate 10 having apertured ears 11 at its four corners, these ears being adapted to be secured to the gasoline pump (not shown) in any suitable manner. The backing plate 10 is also formed to provide a pair of forwardly projecting ears or flanges 12 to which the cover or front of the casing, indicated generally at 13, is secured. This front or cover is preferably stamped of sheet metal and includes a front wall 14, upper and lower walls 15 and 16 which extend over the edges of the supporting plate 10, as best shown in Fig. 4, and side walls 17 and 18 which also extend over the edges of the backing plate 10 and are secured to the forwardly projecting ears or flanges 12 of this backing plate by screws 19 or in any other suitable manner.

The front wall 14 of the casing is provided with a pair of horizontally extending inwardly indented beads 20 and 21 arranged one above the other on opposite sides of the horizontal center of the casing and between these two beads the front wall 14 is formed to provide a window 22 through which the base price per gallon of the gasoline is displayed, a central window 23 through which the total of the State and Federal tax per gallon is displayed, and a third window 24 through which the total price per gallon, including the tax, is displayed. Above the windows 22, 23 and 24 suitable indicia 25 is provided for indicating the base price, the taxes, and the total prices displayed in these windows. The windows 22, 23 and 24 are glazed and for this purpose an elongated strip of glass 30 is arranged behind these windows and is held between the rearwardly indented beads 20 and 21 by a pair of metal straps 31 and 32, these metal straps extending horizontally along the upper and lower edges of the glass panel 30 and being secured in any suitable manner at their ends to the wall 14 as by screws 33. Sufficient clearance is left between these straps and between the glass panel to permit the flexible strips bearing digits to pass therebetween as hereinafter described.

Since the taxes are changed only at infrequent intervals the amount of this tax is displayed upon a card 35 which is inserted behind the window 23 between the glass panel 30 and the metal strips 31. The base price per gallon is indicated in the window 22 and the total price is indicated through the window 24. Inasmuch as the mechanisms for displaying and changing these prices are identical in construction the same reference numerals are applied to both, the parts of the mechanism at

the left hand side for indicating the base price being distinguished by the suffix "a".

A ribbon 40 is displayed in rear of the window 24 and is threaded between the glass panel 30 and the metal strips 31 and 32, as best illustrated in Fig. 4. This ribbon can be made of paper or cloth and bears a series of numerals 41, any of which can be brought to register with the window 24. The upper end of the ribbon 40 is secured to a sleeve 42 upon which the ribbon 40 is wound and the lower end of this ribbon is suitably secured to and wound upon a lower sleeve 43. The fractions of a cent are indicated by numerals 44 contained upon a flexible ribbon 45 which is also displayed through the window 24, the ribbons 40 and 45 being separated by a card 46 which is inserted between the metal straps 31, 32 and the glass 30. The upper end of the narrow strip 45 is secured to and winds upon a sleeve 47 and the lower end of this strip is secured to and winds upon a sleeve 48. One end of the sleeve 47 bears against the end wall 18 of the casing and both ends of the sleeve are held by holding springs which permit the sleeve to turn but yieldingly resist such turning movement. One of these holding springs, indicated at 50, is formed to provide an upper part 51 which is secured to the top wall of the casing by rivets and a lower part 52 which is of circular form and embraces the adjacent ends of the sleeves 42 and 47, as best illustrated in Fig. 3. The other end of the sleeve 47 is held by a similar spring holder 53 and the other end of the sleeve 42 is held by a spring holder 54 which is identical with the spring holder 50 except that it is additionally provided with an inwardly extending lip 55 which engages the end of the sleeve 42 and prevents axial displacement of the two sleeves.

The lower sleeves 43 and 48 are carried by spring holders 60, 61 and 62 which are respectively identical with the spring holders 50, 53 and 54 which support the upper sleeves 42 and 47. It will be seen that these spring holders securely hold the sleeves and at the same time permit the sleeves to be rotated so that the ribbons 40 and 45 can be wound and unwound as may be required. It will further be seen that these holders serve as guides to insure the proper winding of the ribbons on the sleeves for the proper registry of these ribbons with the window openings.

As previously stated the mechanism at the left hand side of the changeable sign for changeably indicating the base price per gallon is identical with the mechanism just described at the right hand side for changeably indicating the total price per gallon and the same reference numerals have therefore been employed and distinguished from the mechanism just described by the addition of the suffix "a".

The several sleeves are turned by means of a key 65 which has a finger piece 66 at one end and a square enlarged portion 67 at its opposite end, the intermediate portion 68 forming a shank which is substantially narrower than the end portion 67. The portion 67 of this key is of such width as to closely fit within any of the sleeves and can be inserted into any of the sleeves by reason of the provision of keyholes 69 in the end walls 17 and 18 in axial alignment with the several groups of sleeves. To permit the sleeves to be turned, each of the sleeves 42, 43, 47, 48, 42a, 43a, 47a and 48a are stamped to provide an inwardly projected lug 70, this lug forming an obstruction to prevent the free turning of the end 67 of the key within each sleeve and thereby

compelling the sleeve to turn with the key. While the enlarged portion 67 of the key is of sufficient width to engage the lug 70 in each of the sleeves, the shank portion 68 of the key is narrower so that it cannot engage any of the lugs 70 when inserted into the cylinders. Thus, as illustrated by dotted lines in Fig. 3, when the key is fully inserted in, for example, the sleeves 42 and 47, the enlarged portion 67 of the key can be engaged with the lug 70 of the sleeve 42 whereas the corresponding lug 70 of the sleeve 47 is not engaged because of the reduced size of the shank 68 of the key. It will therefore be seen that the key can be inserted to selectively engage the lug 70 of any of the cylinders without turning the companion cylinder.

In use the sign is mounted on a gas pump and when the base price per gallon of the gasoline is changed the operator takes the key 65 and places it through the keyholes 69 in the proper sleeves 42, 43, 47, 48, 42a, 43a, 47a and 48a and turns the key so as to rotate each of the sleeves and shift the ribbon carried thereby to effect the desired alteration in the reading of the digits through the windows 22 and 24 of the casing. After this has been done the operator withdraws the key and thereby avoids any further changes in the sign without his knowledge.

From the foregoing it will be seen that the present invention provides a very attractive, compact and simple changeable sign which is particularly adaptable for use in connection with the retail sale of gasoline. It will also be seen that the sign can be very easily changed but requires a key which is directly used to effect the change. It will further be seen that the ribbons containing the various numbers are kept in a clean and legible condition and that the sign in any adjusted condition is easily read from a substantial distance.

I claim as my invention:

1. A changeable sign, comprising a casing, a pair of sleeves rotatably mounted in said casing in spaced relation and having their axes arranged parallel to one another, a window in said casing intermediate said sleeves, a tape secured to each of said sleeves and adapted to be wound from one to the other and bearing indicia visible through said window, said casing being provided with keyholes in axial alignment with each of said sleeves, and an inward extension provided in each of said sleeves and engageable with a key inserted through said keyholes and into said sleeves for rotating said sleeves.

2. A changeable sign, comprising a casing, a series of sleeves arranged in axial alignment along one wall of said casing, a corresponding series of sleeves arranged along the opposite wall of said casing, a plurality of windows in said casing intermediate said series of sleeves, a tape secured to each corresponding pair of sleeves of both series and adapted to be wound from one to the other and bearing indicia visible through one of said windows, said casing being provided with a keyhole in line with each of said series of sleeves and an inward extension provided in each of said sleeves and engageable with a key inserted through the corresponding keyhole and sleeves for selectively rotating said sleeves.

3. A changeable sign, comprising a casing, a series of sleeves arranged in end to end relation long one wall of said casing, a bracket embracing the inner end of the innermost sleeve of said series and carrying an inward extension holding said series of sleeves against another wall of said

casing, a bracket embracing the opposing ends of the several sleeves of said series, a corresponding series of sleeves arranged along the wall of said casing opposite said first wall, a bracket embracing the inner end of the innermost sleeve of said second series and carrying an inward extension holding said second series of sleeves against a wall of said casing, a bracket embracing the opposing ends of the several sleeves of said second series, a plurality of windows in said casing intermediate said series of sleeves, a tape secured to each corresponding pair of sleeves of both series and adapted to be wound from one to the other and bearing indicia visible through one of said windows, said casing being provided with a keyhole in line with each of said series of sleeves and an inward extension provided in each of said sleeves and engageable with a key inserted through the corresponding keyhole and sleeves for selectively rotating said sleeves.

4. A changeable sign, comprising a casing, a series of sleeves arranged in end to end relation along one wall of said casing, a spring bracket embracing the inner end of the innermost sleeve of said series and carrying an inward extension holding said series of sleeves against another wall of said casing, a spring bracket embracing the opposing ends of the several sleeves of said series, a corresponding series of sleeves arranged along the wall of said casing opposite said first wall, a spring bracket embracing the inner end of the innermost sleeve of said second series and carrying an inward extension holding said second series of sleeves against a wall of said casing, a spring bracket embracing the opposing ends of the several sleeves of said second series, a plurality of windows in said casing intermediate said series of sleeves, a tape secured to each corresponding pair of sleeves of both series and adapted to be wound from one to the other and bearing indicia visible through one of said windows, said casing being provided with a keyhole in line with each of said series of sleeves and an inward extension provided in each of said sleeves and engageable with a key inserted through the corresponding keyhole and sleeves for selectively rotating said sleeves.

5. A changeable sign, comprising a casing, a series of sleeves arranged in end to end relation along one wall of said casing, a bracket embracing the inner end of the innermost sleeve of said series and carrying an inward extension holding said series of sleeves against another wall of said casing, a bracket embracing the opposing ends

of the several sleeves of said series, a corresponding series of sleeves arranged along the wall of said casing opposite said first wall, a bracket embracing the inner end of the innermost sleeve of said second series and carrying an inward extension holding said second series of sleeves against a wall of said casing, a bracket embracing the opposing ends of the several sleeves of said second series, a plurality of windows in said casing intermediate said series of sleeves, a tape secured to each corresponding pair of sleeves of both series and adapted to be wound from one to the other and bearing indicia visible through one of said windows, said casing being provided with a keyhole in line with each of said series of sleeves and an inward extension provided in each of said sleeves and engageable with a key inserted through the corresponding keyhole and sleeves for selectively rotating said sleeves each of said brackets comprising a strip of spring metal bent to provide a base secured to said casing and a round spring finger yieldingly embracing the end of the corresponding sleeve.

6. A changeable sign, comprising a casing, a series of sleeves arranged in end to end relation along one wall of said casing, a bracket embracing the inner end of the innermost sleeve of said series and carrying an inward extension holding said series of sleeves against another wall of said casing, a bracket embracing the opposing ends of the several sleeves of said series, a corresponding series of sleeves arranged along the wall of said casing opposite said first wall, a bracket embracing the inner end of the innermost sleeve of said second series and carrying an inward extension holding said second series of sleeves against a wall of said casing, a bracket embracing the opposing ends of the several sleeves of said second series, a plurality of windows in said casing intermediate said series of sleeves, a tape secured to each corresponding pair of sleeves of both series and adapted to be wound from one to the other and bearing indicia visible through one of said windows, said casing being provided with a keyhole in line with each of said series of sleeves and an inward extension provided in each of said sleeves and engageable with a key inserted through the corresponding keyhole and sleeves for selectively rotating said sleeves, said bracket engaging the opposite edges of said tapes as they are wound from sleeve to sleeve and serving to insure their proper winding and proper registry with the windows.

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