

May 5, 1936.

W. R. DUDLEY

2,039,684

SERVICING DEVICE

Original Filed July 8, 1932 4 Sheets-Sheet 1

FIG. 1.

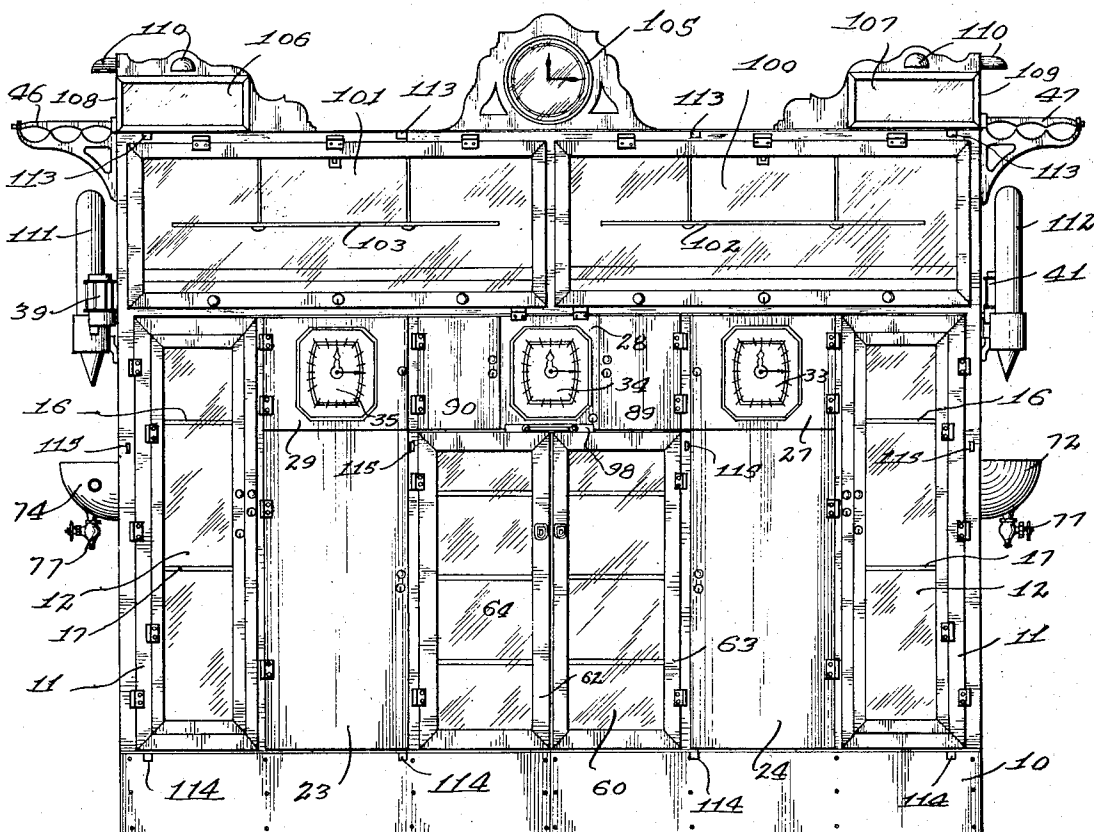
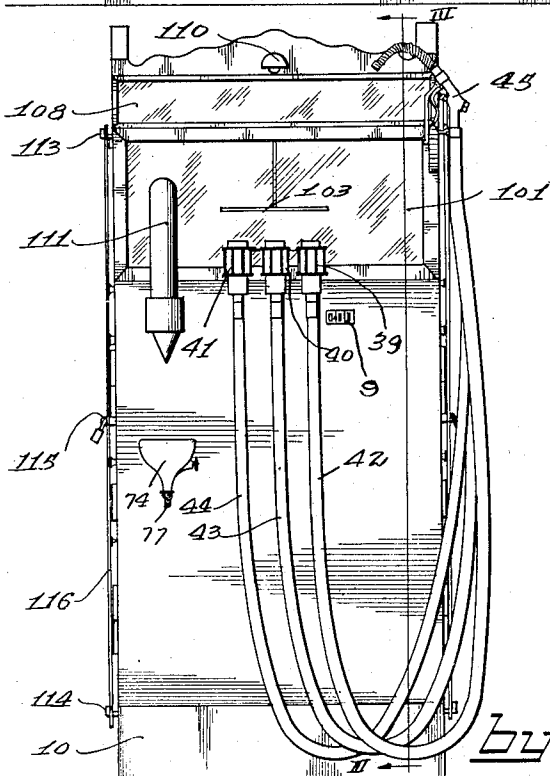


FIG. 2.



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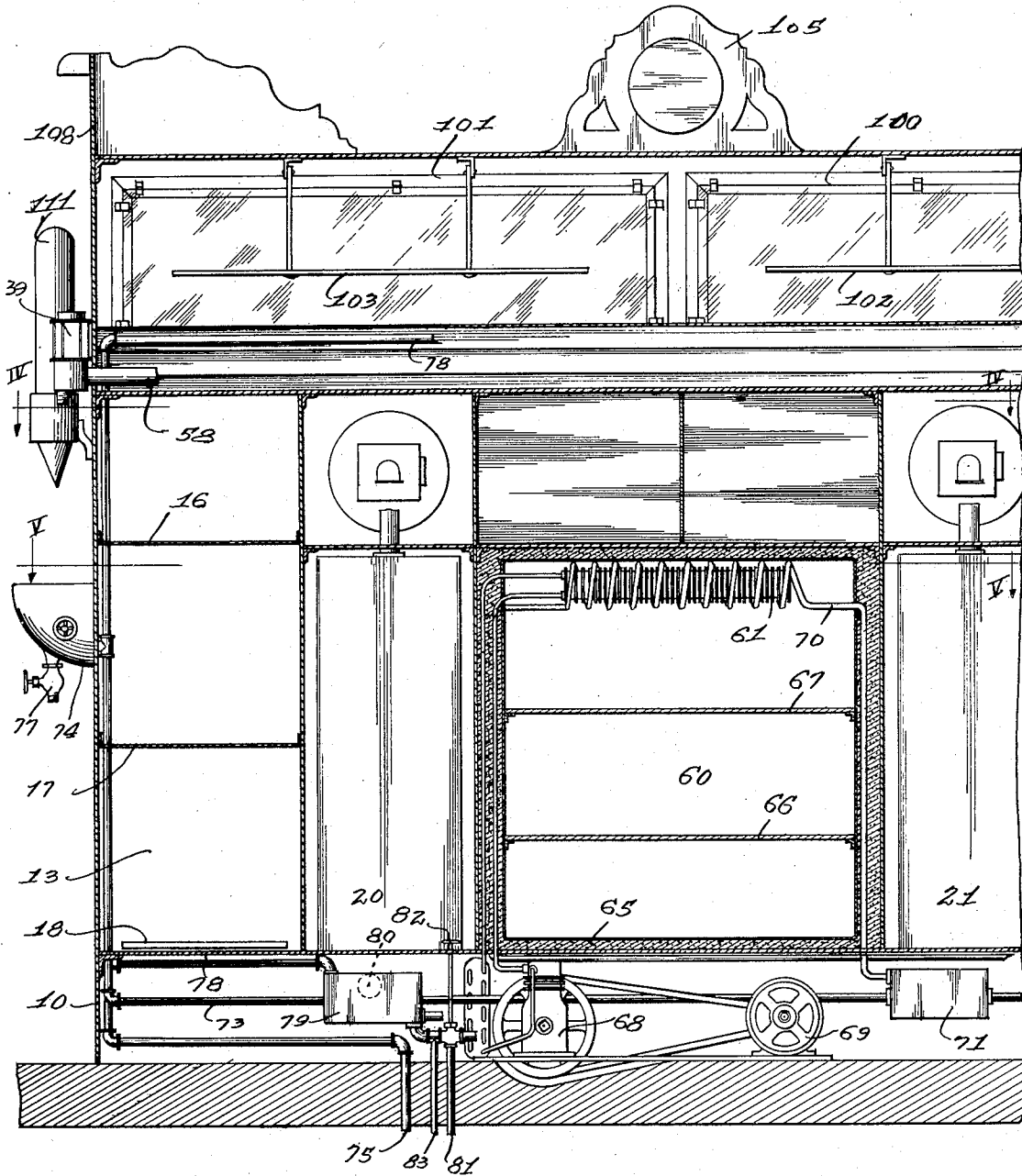
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SERVICING DEVICE

Original Filed July 8, 1932 4 Sheets-Sheet 2

FIG. 3.



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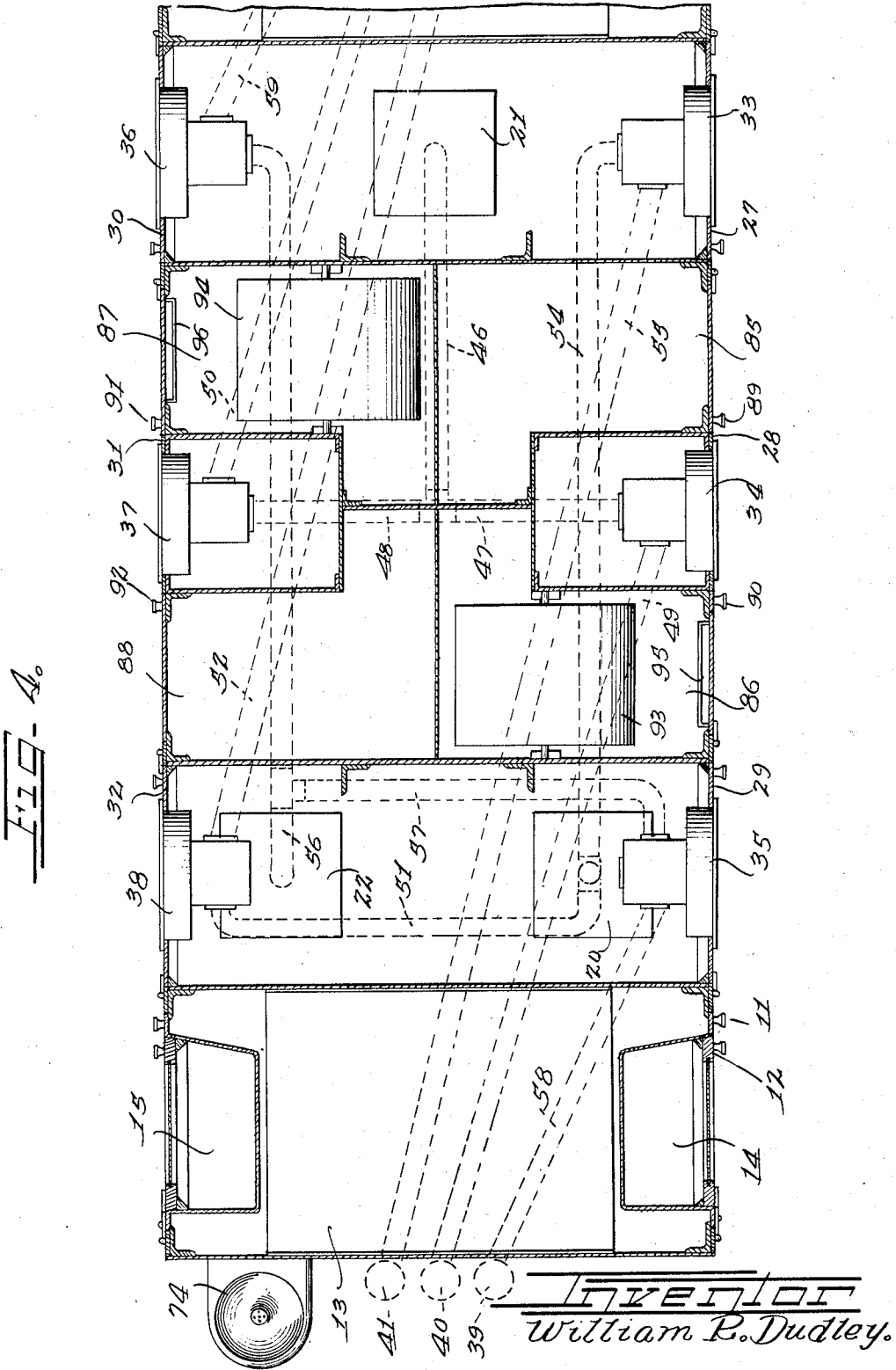
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SERVICING DEVICE

Original Filed July 8, 1932 4 Sheets-Sheet 3



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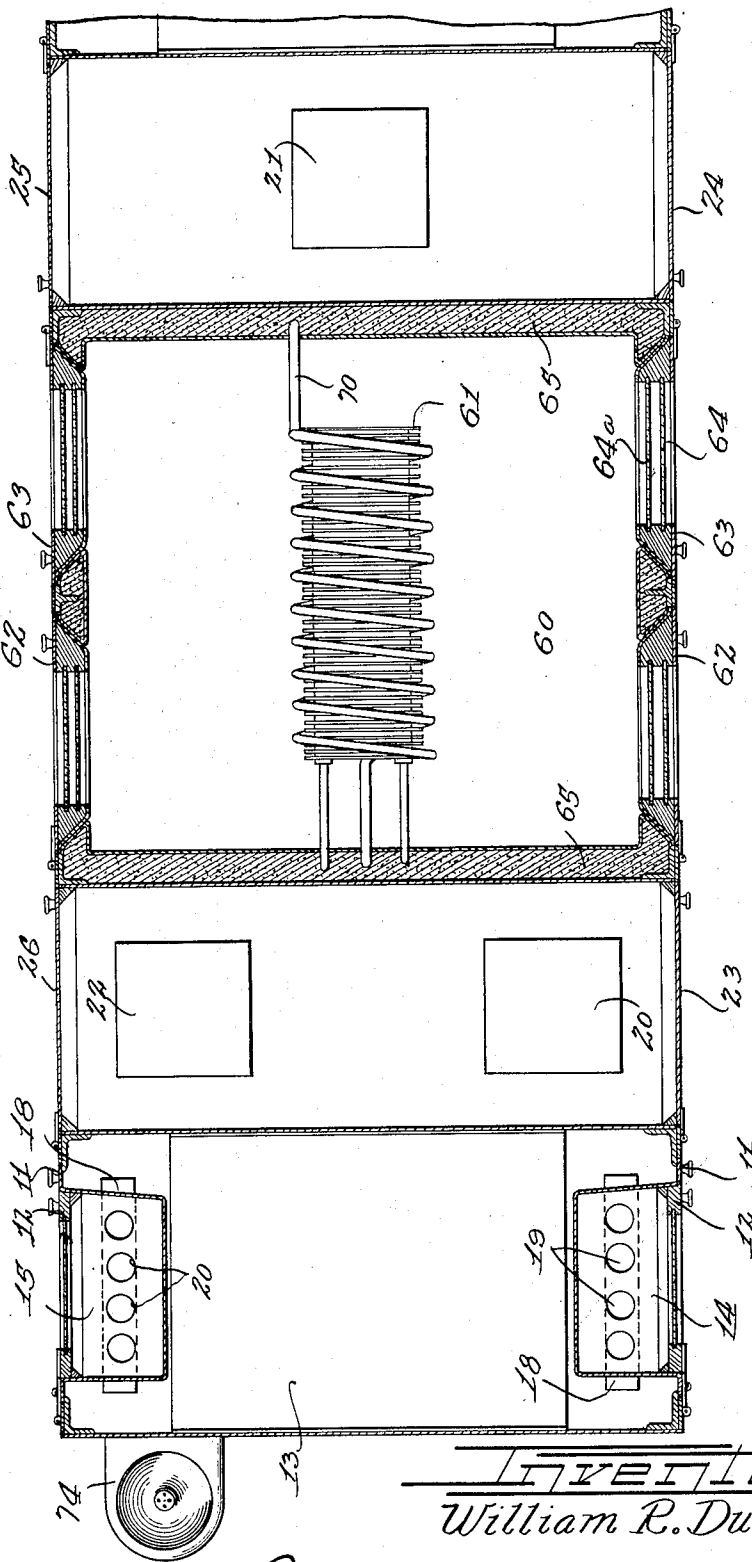
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SERVICING DEVICE

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Fig. 5.



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UNITED STATES PATENT OFFICE

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SERVICING DEVICE

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Application July 8, 1932, Serial No. 621,341
Renewed April 8, 1936

6 Claims. (Cl. 62—1)

This invention relates to a servicing device for gasoline stations and the like.

More specifically, this invention relates to a compact cabinet for servicing and display purposes which may be installed on pump islands commonly located between the driveways of gasoline stations.

The automobile servicing station proprietor frequently finds it desirable to carry in stock a line of motor vehicle accessories and parts in addition to the regulation stock of gasoline and oils. In some instances, a line of foodstuffs, refreshments, and the like, is also carried. However, since the average motor vehicle driver seldom gets out of his car when purchasing gasoline or oil and since these side lines of goods are displayed only within the station house, it follows that the average customer fails entirely to see such goods. As a result their sales are lowered and the profits of the proprietor are decreased.

I have now devised a compact servicing cabinet in which the entire line of the gasoline station dealer is visibly displayed to the prospective customer from the interior of his motor vehicle. My novel cabinet is especially adapted to be positioned on the pump islands in the driveways of the average gasoline station. The cabinet is so designed that it may dispense the several grades of gasoline normally sold by the dealer while utilizing only a minimum number of pumps. In addition, the cabinet is provided with refrigerating means for perishable goods, such as foodstuffs, pop, and the like, and also contains heated compartments for storing some types of goods during cold weather seasons.

The preferred arrangement of my dispensing cabinet is readily rendered burglar-proof by locking means covering the sides of the cabinet.

It is therefore an object of this invention to provide a servicing device or dispensing cabinet for installation in gasoline station driveways and the like in which all of the lines of merchandise being sold are visible to the occupants of the motor vehicle being serviced in the driveway of the station.

Another object of this invention is to provide a compact dispensing cabinet for installation on the pump islands of a gasoline station which dispenses the several grades and varieties of gasoline carried by the dealer with a minimum number of pumps.

Another object of this invention is to provide a novel display and dispensing cabinet for installation on the pump islands of gasoline stations

to render this portion of the station the entire store for the dealer.

Another important object of this invention is to provide a dispensing and servicing cabinet for perishable goods and refreshments requiring refrigeration, staple materials and gasoline from thoroughly insulated and uniquely arranged compartments.

A specific object of this invention is to provide a device for displaying and dispensing the several lines of goods carried by a gasoline station dealer from a part of the station which is the most valuable from a sales standpoint.

Other and further important objects of this invention will be apparent from the disclosures in the specification and the accompanying drawings.

This invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

On the drawings

Figure 1 is a front elevational view of a dispensing cabinet and servicing device according to this invention, showing the various compartments and gasoline dispensing indicators of a preferred form of this invention.

Figure 2 is a side elevational view of a dispensing cabinet according to this invention showing three individual gasoline dispensing nozzles for serving three grades of gasoline and also showing the metal covers hooked in place for locking the cabinet.

Figure 3 is an enlarged fragmentary cross sectional view taken substantially along the line III—III of Figure 2, showing parts in elevation.

Figure 4 is an enlarged, fragmentary, horizontal sectional view taken substantially along the line IV—IV of Figure 3 and showing the piping hook-up in dotted lines. It should be noted that the pipes are actually located in the compartment above the section line IV—IV of Figure 3.

Figure 5 is an enlarged fragmentary sectional view taken along the line V—V of Figure 3.

As shown on the drawings

The reference numeral 10 indicates a false bottom base of the servicing cabinet in which pipe connections with gasoline storage tanks, water, electric lines and the like may be positioned. As shown in Fig. 3, a refrigerator compressor unit may be located in the base also. In Fig. 1, the entire front of the dispensing cabinet is equipped with doors for the various compartments. The reference numerals 11 and 12 in-

dicating double doors for heated compartments 13 located at each end of the cabinet.

As best shown in Figs. 3 to 5, the heated cabinets comprise electrically heated compartments 13 equipped with smaller compartments 14 and 15 for displaying oils and the like. Said compartments 14 and 15 are equipped with oil racks or shelves 16 and 17. The compartments 13 are heated by means of an electrically heated plate 18 (Figs. 3 and 5) located at the bottom of the compartment. The smaller compartments 14 and 15 within the compartments 13 are supported by the doors 11 and are provided with holes 19 and 20, respectively (Fig. 5), to permit the heat from the main compartments 13 to circulate therein.

It is thus seen that by opening a glass paned door 12, access is gained into the oil rack compartments 14 and 15. By opening a door 11, the smaller compartments 14 and 15 are swung open with the door and the main compartment 13 is exposed. This main compartment may be used for storage purposes and the like.

Since only the smaller compartments are visible from the outside because of the pane of glass in the doors 12, materials stored in the main compartment 13 while maintained in a heated condition are not visible to the customer. It is apparent, of course, that two cabinets 14 are located on each side of the dispensing device while two cabinets 15 are located on the opposite side. Only two main compartments 13, however, are furnished.

Obviously, the double door feature of this invention may be replaced by other systems for gaining entrance into the main compartments 13. For example, the back wall of smaller compartments 14 and 15 may be hinged. This arrangement would then only require a single outer door.

If three grades of gasoline are to be dispensed, three pumps, 20, 21 and 22, are provided. Access to these pumps and to the storage places surrounding the pumps may be had by means of doors 23, 24, 25 and 26.

Each pump 20, 21 and 22 is connected with two meters, one located on each side of the cabinet, so that its face is clearly visible. The indicating mechanisms are set in compartments within the dispensing cabinet and are readily replaced or adjusted by disconnecting the driving mechanism and opening compartment doors 27, 28 and 29 in which the faces of the meters are set. Similar indicator faces are set in doors 30, 31 and 32 in the opposite side of the dispensing cabinet. In this manner, indicating meters 33, 34, 35, 36, 37 and 38 of the highest degree of accuracy are mounted on hinged doors 27, 28, 29, 30, 31 and 32, respectively, of the dispensing cabinet. The pumps are energized by switches 9 in the ends of the service (Fig. 2).

Gasoline is dispensed from both ends of the cabinet through visible flow indicator devices 39, 40 and 41 into the usual flexible hoses 42, 43 and 44.

Each hose 42, 43 and 44 is provided with a trigger nozzle 45 of the type commonly used in gasoline stations.

The nozzles 45 are retained in holders 46 and 47. Each holder 46 and 47 is provided with three notches or compartments for receiving a nozzle. The nozzles may be locked into position by a simple locking arrangement of the holding device.

As shown in Fig. 4, gasoline from a single pump

may be dispensed to a flow indicator and dispensing nozzle on either end of the cabinet. Thus gasoline from pump 21 is dispensed through flow indicator 40 after going through the meter 34. Likewise, gasoline from pump 21 may be dispensed through a corresponding dispensing nozzle on the other end of the cabinet after passing through the meter 37. The flow of gasoline from pump 21 is through pipe 46 into pipe 47, through meter 34 into pipe 49 and to the flow indicator 40 and dispensing hose 43. At the same time, or at different times, the gasoline may pass through pipes 46 and 48 through the meter 37 and into pipe 50 to the corresponding dispensing hose on the other end of the cabinet.

Gasoline from pump 20 flows through pipe line 51 through meter 38 and into pipe 52 to the dispensing hose on one end of the cabinet. The gasoline from tank 20 may also flow through pipe line 54, through meter 33 and then through pipe line 55 to the corresponding dispensing hose on the other end of the cabinet.

Gasoline from pump 22 may flow through pipe line 56 into the branch pipe 57, through meter 35, into pipe 58 to the dispensing hose 42. Likewise, gasoline from pump 22 may flow through the pipe 56 into the meter 36 and through pipe 59 into the corresponding dispensing hose on the other side of the cabinet.

In this manner, three pumps are sufficient to operate six dispensing hoses and the gasoline flows through meters having clock faces visible to the occupant of the car. Thus, if a motor vehicle is parked to the right of the dispensing cabinet, its gasoline tank will be at the end of the cabinet equipped with dispensing hoses receiving their supply through meters located on the car side of the cabinet. Likewise, a car parked on the other side of the cabinet will be serviced from the dispensing hoses on the other end of the cabinet and thus the meters are always visible to the occupants of the car being serviced.

In the center of the cabinet is a well insulated space 60 provided with a refrigerating coil 61. Access into this space may be had through doors 62 and 63 located on each side of the cabinet. Each of these doors is provided with two panes of glass 64 and 64a spaced from each other as shown in Fig. 5 to effect thorough insulation. The walls of compartment 60 are lined with an insulating material 65, such as cork or the like. The compartment 60 is preferably provided with shelves, such as 66 and 67 as shown in Fig. 3.

The refrigerated compartment 60 is separated from the heated compartments 13, 14 and 15 by means of dead air spaces in the cabinet in which spaces are mounted the gasoline pumps 20, 21 and 22. These dead air spaces serving as pump compartments isolate the refrigerated compartment from the heated compartments and prevent any substantial heat transfer between these compartments.

As best shown in Fig. 3, the refrigeration in compartment 60 is maintained by means of a compressor unit 68 driven by means of a suitable electric motor 69. The compressor unit is similar to the type normally used in electric refrigerator boxes.

The refrigerating coils 61 have a pipe line 70 wound around their exterior. Said pipe line 70 is connected with a water storage tank 71 (Fig. 3) which furnishes water to drinking fountains 72 and 74 located on the ends of the cabinet. In Fig. 3, the cold water tank 71 is connected through a pipe line 73 to the drinking fountain 74. A

drain line 75 is provided to drain the drinking fountain 74. Similar pipe lines (not shown) are provided to supply the drinking fountain 72 on the other end of the cabinet with cold water from tank 71 and to drain the same.

Beneath each drinking fountain 72 and 74 is provided a valve operated connection 77 for a hose line or for filling a container to supply water to automobile radiators and the like. This connection 77 is supplied with water through a pipe line 78 (Fig. 3) which may receive a supply of hot water from a tank 79 equipped with an electrical heater 80 of the bayonet type (Fig. 3). Water at ordinary main temperature is supplied to the tank 79 through a pipe line 81. A valve handle 82 extending into the pump compartment 20 is provided to control the flow of water into the heating tank 79.

The valve connection 77 on the drinking fountain 72 on the other side of the cabinet is supplied with hot water through the pipe line 78 extending into the compartment above the gasoline meters. It should be understood that the gasoline pipes from the meters to the hoses are also located in this compartment. By the water heating arrangement it is possible to supply automobile radiators with hot water during the cold season. A drain pipe 83 containing a valve (not shown) is provided to drain the water system when not in use.

Surrounding the meter compartments 26 and 31 are provided compartments 85, 86, 87 and 88 (Fig. 4) which are closed from the exterior by means of hinged doors 89, 90, 91 and 92, respectively. Compartments 86 and 87 are each provided with a roll of wrapping paper 93 and 94, respectively. The inside of doors 90 and 91 are provided with holders 95 and 96 for paper bags. Compartments 85 and 88 may be used for storing staple goods, such as canned goods and the like.

Beneath the center meters 34 and 37 is provided a board 98 (Fig. 1) which may be pulled out to serve as a counter for wrapping articles.

A top tier of compartments 100 and 101 provided with glass doors serve as display counters for automobile accessories and other lines of staple goods. These display counters are provided with shelves 102 and 103 and preferably contain bottoms which are raised at the center so that goods displayed therein will be visible from both sides of the servicer.

A clock 105 may be positioned on the top of the servicer as shown. Sign boards 106 and 107 (Fig. 1) may likewise be provided on top of the servicer. The ends of the servicer are provided with sign boards 108 and 109. Each of these sign boards may be illuminated by electric lights 110. Display cards or signs showing the prices of the various commodities may be readily inserted in these sign boards.

If desired, paper cup dispensers 111 and 112 may be positioned on the ends of the cabinet. These dispensers are readily removable when the station is closed.

My servicing device is readily made burglar-proof by means of several steel plates which are hooked over the sides of the device on hooks 113 and 114 located near the top and bottom of the cabinet. The steel plates are locked to the servicer by inserting locks into hasps 115 integral with the servicer. Preferably, three steel plates are used to cover each side of the dispensing cabinet. The ends of the cabinet need not be covered since the only detachable device, namely the cup dispensers, are readily removable. Thus, the entire

device is rendered burglar-proof by the setting in position of six steel plates 116 (Fig. 2) on the sides of the cabinet and by locking the nozzles in holders 46 and 47.

From the above description, it is apparent that I have produced a novel and compact dispensing cabinet and servicing device whereby an entire store is produced right on the pump island in the ordinary gasoline station or along the roadside. The articles sold are entirely protected from atmospheric conditions, dust and the like, and the entire store is readily rendered burglar-proof without the necessity of moving any of the articles from the cabinet. The provision of twice the number of gasoline dispensing devices requiring only the normal number of pumps is an added feature of my invention. Supplying cold water for drinking purposes in the summer time and hot water for radiators in the winter time has great sales appeal and will attract many customers. Likewise, the provision of heated compartments for oils, greases, and the like, makes it possible to thoroughly drain the oil containers during the winter months and give the customer his full measured quantity. As is readily known in the dispensing of oils during the cold season from bottled containers, a great deal of the oil is retained in the bottle because of its highly congealed condition. The positioning of the gasoline pumps along side of the heated compartment prevents the contraction of gasoline during the cold weather and thereby insures a uniform rate of delivery through the accurate indicating devices at all seasons of the year.

I am aware that many changes may be made and numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I, therefore, do not purpose limiting the patent granted hereon otherwise than necessitated by the prior art.

I claim as my invention:

1. In a dispensing cabinet and servicing device for installation in gasoline stations and the like, a plurality of compartments for storing and displaying oils and greases, heating means in said compartments to maintain said oils and greases at the proper degree of viscosity, gasoline pump compartments adjacent said heated compartment and gasoline flow meters above said pumps whereby gasoline being dispensed therethrough can be maintained at a constant temperature to insure accurate delivery.

2. An elongated structure for the dispensing and display of motor servicing materials at motor vehicle supply stations, said structure comprising a pair of spaced pump casings, casings defining display cabinets extending longitudinally on both sides of said pump casings, and a hollow cover member surmounting and connecting said casings for common support.

3. In combination, a pair of spaced dispensing pump casings, a dispensing cabinet embraced therebetween, and cover means overlapping the top of said cabinet and overlapping the tops of the pump casings and forming a common connection for said cabinet and said casings.

4. In combination, a pair of spaced dispensing pump casings, a cabinet embraced therebetween, a cover therefor overlapping the top of said cabinet to close it and overlapping the tops of the pump casings, and a means including said casings embracing and supporting the ends of said cover.

5. In combination, a pair of spaced dispensing

ing pump casings, means defining a dispensing cabinet embraced therebetween, and a cover overlying the top of said cabinet and overlying the top of said pump casings and connected to said cabinet and to said casings.

6. An inverted U-shaped structure comprising

a pair of spaced vertically extending pump casings connected at their tops by a hollow cover member, and a cabinet positioned between said casings and in said structure, and supported thereby.

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