A. W. HARRIS.

OIL DISPLAY RACK.

APPLICATION FILED APR. 25, 1910.

1,017,540.

Patented Feb. 13, 1912.

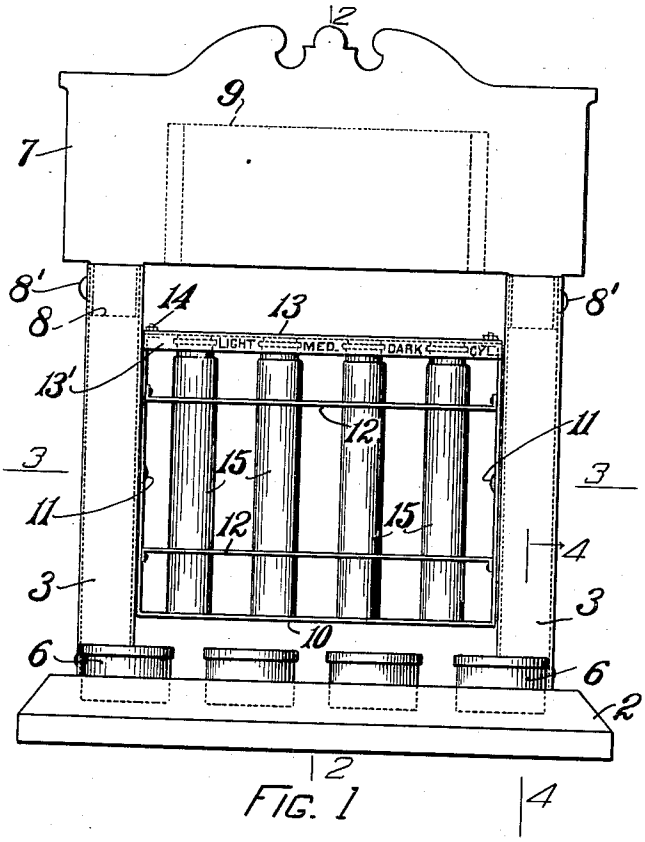

FIG. 1

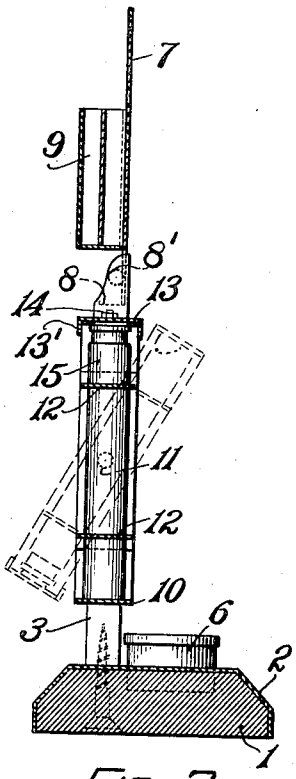

FIG. 2

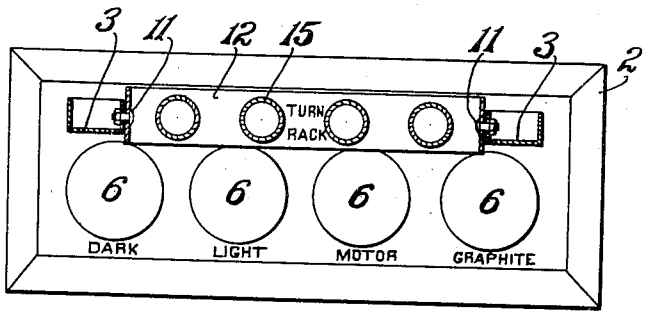

FIG. 3

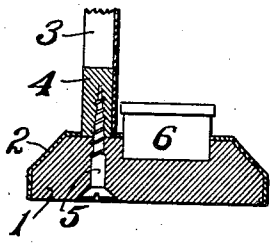

FIG. 4

WITNESSES

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UNITED STATES PATENT OFFICE.

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OIL-DISPLAY RACK.

1,017,540. Specification of Letters Patent. Patented Feb. 13, 1912.

Application filed April 25, 1910. Serial No. 557,385.

To all whom it may concern:

Be it known that I, ABRAHAM WALTER HARRIS, a citizen of the United States, residing at "Cowesett," town of Warwick, county of Kent, State of Rhode Island, have invented certain new and useful Improvements in Oil-Display Racks, of which the following is a specification.

This invention relates to display racks and particularly to a rack for the display of lubricants, oils or other liquids. The proper presentation of such articles as oils involves considerable difficulty and especially where the inspection is made by a purchaser without the supervision of an attendant.

My present invention, therefore, relates to a display rack intended for use in the exposing of oils or other liquids in such a way that the prospective purchaser is enabled to form an opinion by himself of the nature, grade, quality and characteristics suited to his purpose.

My invention is capable of various adaptations but in my present invention I will disclose and discuss an adaptation particularly calculated for use in connection with such a substance as oil.

In order to pass intelligent judgment upon oils and in the selecting of one from samples, it is necessary that the sample be observed in such a manner as to recognize its color, clarity, body, and general physical condition. It is therefore, desirable that the oil be presented in a transparent container and with a plurality of samples representing the different grades, qualities of conditions ranged up so as to afford means of convenient comparison. An important feature in the selection of an oil is its apparent body and in this connection a method of display whereby the apparent body of the different oils may be distinguished is important. The observation of the body of an oil may be conveniently made by noting air bubbles as they rise through the body of the liquid.

Where a series of oils varies and it is desired to observe their varying weight I have found it possible to make satisfactory observations by assembling in a series, preferably a progressive series, a plurality of transparent sealed containers partly filled with oil. If now these containers are inverted so as to trap the air in the unfilled portion of the container the rate of progress of the air bubbles through the different liquids of the series may be observed and the relation of the members of the series may, therefore, be ascertained. The disclosure of the present application, therefore, shows the employment of means for presenting in transparent containers a plurality of oils of varying sorts and for otherwise displaying lubricant products for the observations and consideration of the customer. Various other matters of structure will also be disclosed and described in the specification which follows and an illustrative embodiment of these features is shown in the drawings which form a part of the specification.

Throughout specification and drawings like reference numerals are employed to indicate corresponding parts and in the drawings:—Figure 1 is a front elevation of my display rack, Fig. 2 is a central sectional view on the indicated line 2—2, Fig. 1, Fig. 3 is a transverse section on the line 3—3, Fig. 1, and Fig. 4 is a sectional detail on the lines 4—4, Fig. 1.

1 is a base of wood or any other suitable material covered by a sheet metal casing 2 which is fitted about the same.

3—3 are flanged sheet metal columns, substantially U-shaped in cross section. In the base of each of the columns 3 and fitted within the flanges, is a short post or plug 4 suitably secured to the post 3 and removably fastened to the base 1 by screws 5—5. On the upper side of the base a plurality of sockets are provided for the reception of cups 6. There may be any number of these cups provided. In the drawings I have shown four.

7 is an ornamental display board for the display of suitable advertising matter and to the back of this is attached a rack box for holding advertising circulars and similar printed matter. On its lower side the metal display board 7 is provided with projections 8 the edges of which are bent back and riveted at 8^1 in the tops of the columns 3.

Between the columns 3 is pivoted an open top frame 10 which consists of a single strip bent up at each end to form the bottom and

two sides and the sides are pivoted at substantially their middle point on a short bolt 11 which passes through them and through the inside flanges of the posts 3.

12 are a pair of perforated shells whose flanged ends are riveted to the end walls of the frame 10.

13 is a top plate having down turned lateral flanges 13^1 and this top plate is removably and adjustably fastened to unturned flanges at the end of the side walls of the frame 10 by bolts and nuts 14. The adjustability of the top plate 13 while slight is sufficient to take care of any slight variation in the stoppers of the tubes so that the stoppers may be tightly clamped. It is, of course, important that the tubes be tightly sealed as any leakage would be disastrous.

15 are a plurality of containers of substantially the length of the end walls of the frame 10 and adapted to receive samples of oil of different weights.

In putting out these display racks to show and advertise a grade of oils and lubricants, or similar materials, the tubes 15 are filled nearly to their tops, leaving only a small amount of air space. The tops are then sealed and the top plate 13 brought down by the bolts and nuts 14 so as to press firmly upon the stoppered ends of the tubes 15. The cups 6 are filled with grease, graphite or other materials of various grades and quality which are to be displayed in connection with the oils or other materials. These display racks thus filled may be placed in any convenient place where they will be conspicuous, as on a counter, and thus afford an attractive and convenient presentation of the goods desired.

When a customer desires to ascertain which of the oil samples is best adapted to his needs he has first a satisfactory opportunity to observe the color, clarity, etc., of the oils through the glass containers, without the danger of breaking or spilling the same.

In the display of such samples as oils the rack would be properly labeled adjacent to each container with a proper description of the respective contents. For example, in the case of lubricating oils as indicated, the rack would be labeled in the flange 13^1 "Light", "Medium", "Heavy" and "Cylinder". At the bottom of the rack may also be placed directions for the operation of the rack to observe the weights, as for instance, such instructions as "Don't remove bottles to show different consistencies", "Turn rack". To observe the comparative weight of the oils the purchaser would, therefore, simply turn the rack 10 on its pivot 11 until the containers were inverted. This inversion of the containers would trap a small amount of the air which would bubble up through the oil at a speed depending upon the weight of the oil. As the different samples are arranged side by side the rate of travel of these bubbles may be readily compared and the adaptability of the oil for the purpose intended by the purchaser may be judged. In connection with this comparison of the oils the grease samples are also presented. These would be also properly labeled as for example "Dark" "Light" "Medium" and "Graphite." The descriptive matter, circulars, etc., in the rack 9 are also conveniently at hand for any further information desired by the customer.

In packing for shipment the posts 3 are disconnected by taking out the screws 5 and the device may, therefore, be shipped flat. The metal sheathing of the base and the sheet metal construction of the columns and display top not only permit of a light, strong and graceful device, but permit the printing of the entire external surface of the apparatus with full advertising matter and instructions necessary for each line of goods displayed.

Various modifications may, of course, be made in the structure, arrangement and operation of the parts, all within the spirit of my invention if within the limits of the appended claims.

What I therefore claim and desire to secure by Letters Patent is:—

1. A display rack comprising a rotatable member, means for supporting said member, a plurality of transparent containers held in a parallel plane in said member and each having an open end, said containers being each partly filled with liquids of different density, said member comprising means for longitudinally clamping said containers so as to close the open ends thereof.

2. In a device for displaying and testing oils a base, a pair of vertical supports on said base, a rack pivotally mounted between said uprights for rotation therebetween, a plurality of transparent containers held in said rack in the same plane and means for longitudinally clamping said containers.

3. In a device for displaying and testing oils in combination of a base, a pair of vertical uprights on said base, a rack pivotally mounted between said uprights for rotation therebetween, a plurality of transparent containers in said rack and held in the same plane with each other, said containers being each partly filled with an oil of different density and means for longitudinally clamping said containers.

4. A device for displaying and testing oils comprising a base, a pair of vertical uprights on said base and supporting a display top, a rack pivotally mounted between said uprights for rotation therebetween and comprising an open top frame, a pair of

perforated shelves supported in said frame, a plurality of transparent containers partly filled with oils of different densities set in said openings and arranged in the order of their densities and a top movably clamped to said frame and normally pressing upon the ends of said containers, substantially as and for the purpose specified.

In testimony whereof, I affix my signature in presence of two witnesses.

ABRAHAM WALTER HARRIS.

Witnesses:
SEEBER EDWARDS,
EDWARD P. JASTRAM.