S. D. BLACK & A. G. DECKER.

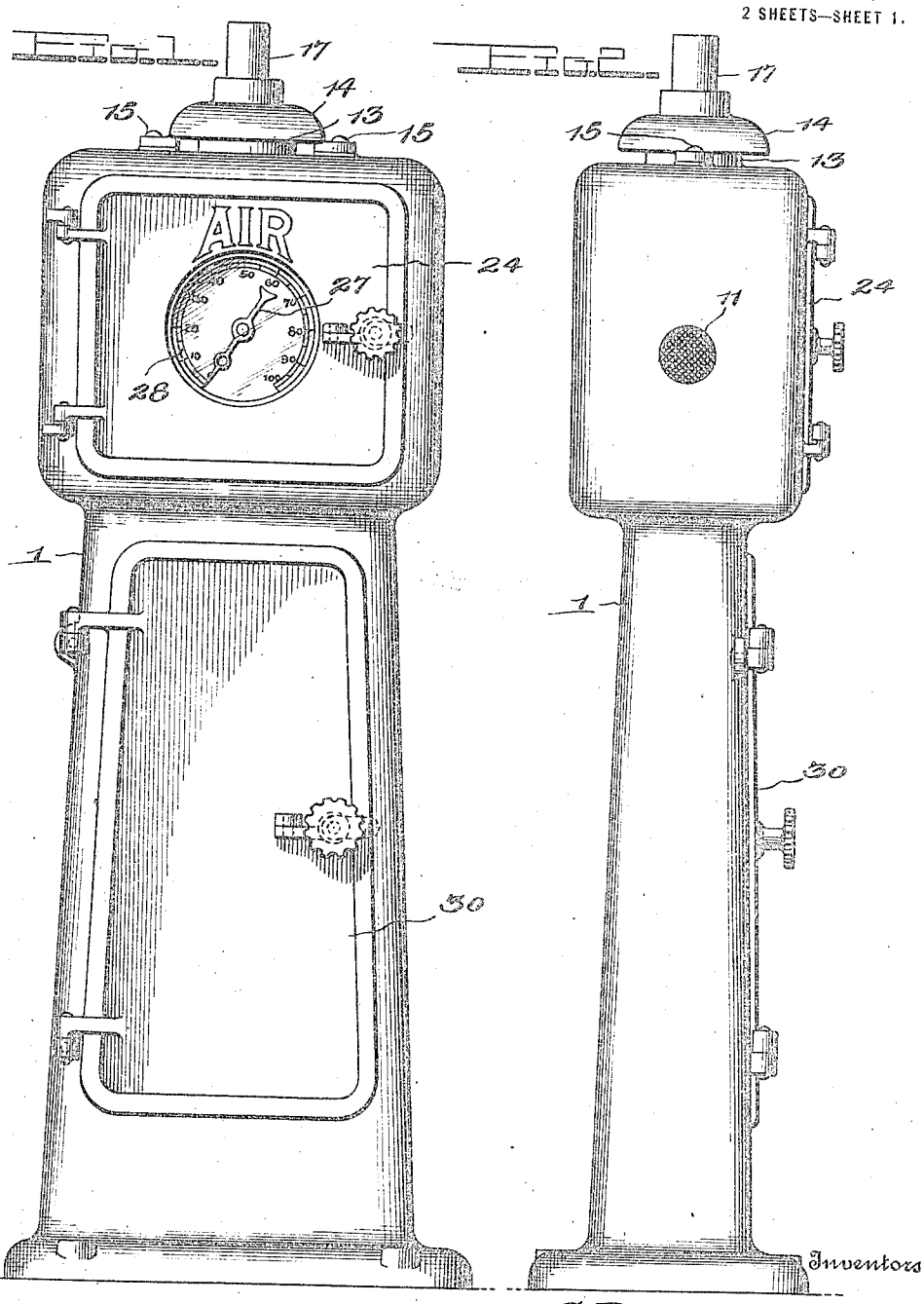
AIR DISPENSING MEANS,

APPLICATION FILED MAR. 23, 1916.

1,247,623.

Patented Nov. 27, 1917.

2 SHEETS—SHEET 1.



Inventors

S. D. Black and

A. G. Decker,

By John A. Holcombe

their Attorney

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2 SHEETS—SHEET 2.

Fig. 3.

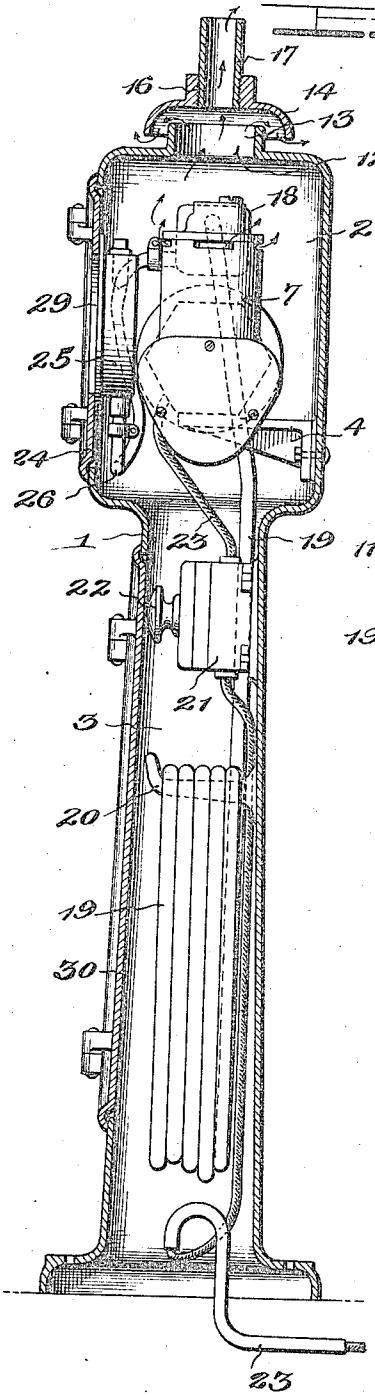
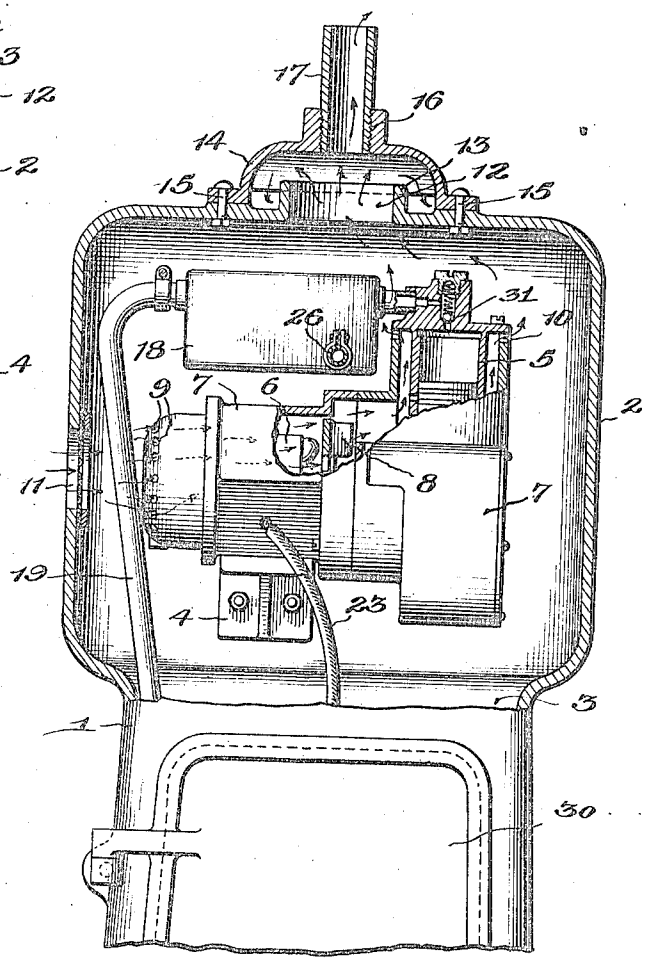


Fig. 4.



Inventors

S. D. Black and

A. G. Decker;

By John H. Holly

their Attorney

UNITED STATES PATENT OFFICE.

SAMUEL D. BLACK, OF BALTIMORE, AND ALONZO G. DECKER, OF ORANGEVILLE, MARYLAND, ASSIGNORS TO THE BLACK & DECKER MANUFACTURING COMPANY, OF BALTIMORE, MARYLAND, A CORPORATION OF MARYLAND.

AIR-DISPENSING MEANS.

1,247,623. Specification of Letters Patent. Patented Nov. 27, 1917.

Application filed March 23, 1916. Serial No. 86,238.

To all whom it may concern:

Be it known that we, SAMUEL D. BLACK and ALONZO G. DECKER, citizens of the United States, residing at Baltimore city and Orangeville, in the county of Baltimore, respectively, and State of Maryland, have invented certain new and useful Improvements in Air-Dispensing Means, of which the following is a specification.

This invention has for its primary object the provision of means for dispensing air for the inflation of pneumatic tires, though it may be used for other purposes.

The present invention is designed to provide an "air post" to be mounted adjacent a street curb or within a garage and which embodies a complete air compressing plant from which the motorist may readily secure a desired supply of air.

In order to more fully described this invention, reference will be had to the accompanying drawings, wherein—

Figure 1, is a front elevation of one form of our invention, showing the exterior of the "post" only;

Fig. 2, a side elevation thereof;

Fig. 3, a vertical central section through the casing of the "post," and

Fig. 4, a fragmentary sectional elevation on a larger scale than the other views, of the upper portion of the post, the section being taken on a plane at right angles to that of Fig. 3.

Referring now to the accompanying drawings, our invention comprises in the case shown, among other parts, a casing or hollow post 1, having upper and lower compartments 2 and 3 respectively, the upper compartment constituting a relatively expanded head, and the lower compartment the interior of a pedestal. Mounted upon a fixed bracket 4 in the upper compartment or head is an electrically driven air compressor, comprising a pump 5, driven by an electric motor 6, and provided with a housing or casing 7 which forms an air jacket for the motor and pump. Located within this casing between the motor and pump is a fan 8 which is driven by the motor. The purpose of this fan is to cool the motor and pump, and this is done by drawing air into the casing 7 through intake passages 9 and expelling it through outlets 10. For the purpose of supplying fresh air to these intake passages and allowing the air from outlets 10 to be expelled from compartment 2, the latter is provided with an air intake opening or passage 11, and an air outlet 12, the former being in one side of compartment 2 and preferably adjacent intake passages 9, and the latter (outlet 12) in the top of compartment 2, and provided with an upwardly extending annular flange 13 over which extends a cap or hood 14 bolted as at 15 to the head of the post, and provided with an opening 16 in its top into which is screwed a short tube 17.

The air compressing plant comprising the pump 5, motor 6, casing 7, and fan 8, is substantially the same as fully shown and described in United States Letters-Patent No. 1,187,031, granted to us June 13, 1916, and as we do not here claim this mechanism *per se*, it is not thought that a more detailed description thereof is here necessary. It will be seen, however, that not only is cooling air drawn through casing 7, but a constant supply of fresh air is delivered to the exterior of this casing, passing in through inlet 11, and out through opening 12, which affords additional means for cooling the air compressing plant.

The pump 5 delivers air, in the case shown, to an oil separator 18 which may or may or may not be employed as desired, and which may be of any desired kind. From this separator leads a tube or hose 19 for conducting the air from pump 5 to the pneumatic tire, for example, or other place where it is needed.

Within the lower compartment 3 of the post is a bracket 20 forming a support for the hose 19, and upon which the latter may be coiled as shown in Fig. 3.

Also located in lower compartment 3, is an electric switch 21 having a handle 22, and located in the power circuit 23 of the motor 6 and whereby said motor may be started and stopped.

The upper compartment 2, is provided with a hinged door 24, to the inner face of which is made fast an air pressure gage 25 connected through a flexible duct 26 to the air supply within separator 18. This gage is provided with an index or pointer 27 and dial 28, which are displayed through an

opening 29 in door 24. Ready access therefore may be had to the air compressing plant through door 24.

The pipe and pressure gage connections of the system are so arranged that, when the tube or hose 19 is connected to the body to be charged, such, for example, as a pneumatic tire, the pressure gage 25 will immediately indicate the air pressure within said tire, the connection to the pump including between the gage and the pump a check valve 31 which normally closes the pipe connection between the pressure gage and the pump to atmosphere from the pump end of said connection.

The lower compartment 3, is provided with a hinged door 30 by means of which access may be had to electric switch 21 and the hose 19. Switch 21 is operated by pulling knob 22 outward to close the circuit, and pushing the knob in to open the circuit, and this knob is so situated with respect to door 30, that should the switch be accidentally left closed, that is, the knob in the pulled out position, the act of closing door 30 will push knob 22 inward, thus opening the circuit and stopping the motor.

Having more fully described a specific embodiment of our invention, which may be modified without departing from the spirit thereof, what we claim is:—

1. The combination with a post or pedestal having an upper compartment constituting a hollow head and having air intake and outlet passages located in different walls of said head, an air cooled air compressor mounted in said hollow head and arranged to draw air into said head through said intake passage and expel it through said outlet passage.

2. The combination with a post having a hollow head provided with air intake and outlet passages located in different walls of said head, a cap or hood over the outlet passage and itself provided with air outlet passages, and an air cooled air compressor mounted in said head and having means to draw air into said head through said intake passage and expel it through said outlet passage, substantially as described.

3. The combination with a post or pedestal having a hollow compartment or chamber, an air compressor mounted therein, a door for said compartment, an air pressure gage mounted on said door and having a pressure indicating dial, the said door having a window or opening through which said dial may be viewed from the exterior of said post, and an air conductor connected from said gage to said compressor.

4. The combination with a casing comprising a hollow post having upper and lower compartments, an electrically driven air compressor mounted in the upper compartment, and a switch for controlling said compressor located in the lower of said compartments, and individual doors for said compartments to afford access to said compressor and switch respectively.

5. The combination with a casing comprising a hollow post having upper and lower compartments, an electrically driven air compressor mounted in the upper compartment, a switch for controlling said compressor located in the lower of said compartments and provided with a knob or handle for operating the same, and individual doors for said compartments to afford access to said compressor and switch respectively, said switch knob or handle being so located relative to the lower door as to be operated thereby to open said switch.

6. The combination with a post having a hollow compartment, an air compressor mounted in said compartment, a door for said compartment, a pressure gage mounted on said door and having a dial visible from outside of said door, a conduit one end of which is connected to the compressor and the other end free to be applied to a body to be charged with air from the compressor, and a connection between the compressor and the gage whereby the air pressure in the body to be charged will be indicated by the gage when the conduit is applied to the body to be charged.

In testimony whereof they affix their signatures in the presence of two witnesses.

SAMUEL D. BLACK.
ALONZO G. DECKER.

Witnesses:
JERE J. SANTRY,
O. W. DIEFFENBACH.