L. E. BAKER.

APPARATUS FOR HOUSING HOSE.

APPLICATION FILED DEC. 20, 1920.

1,417,484.

Patented May 30, 1922.

3 SHEETS—SHEET 1.

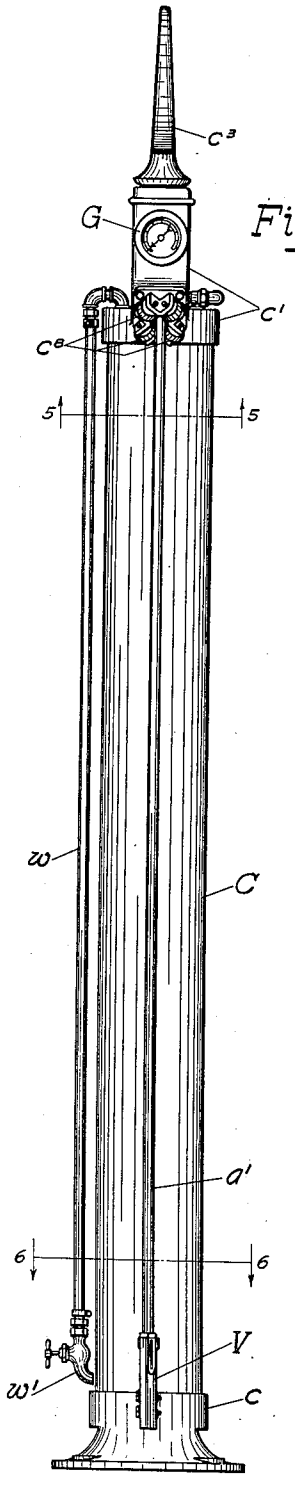


Fig. 1

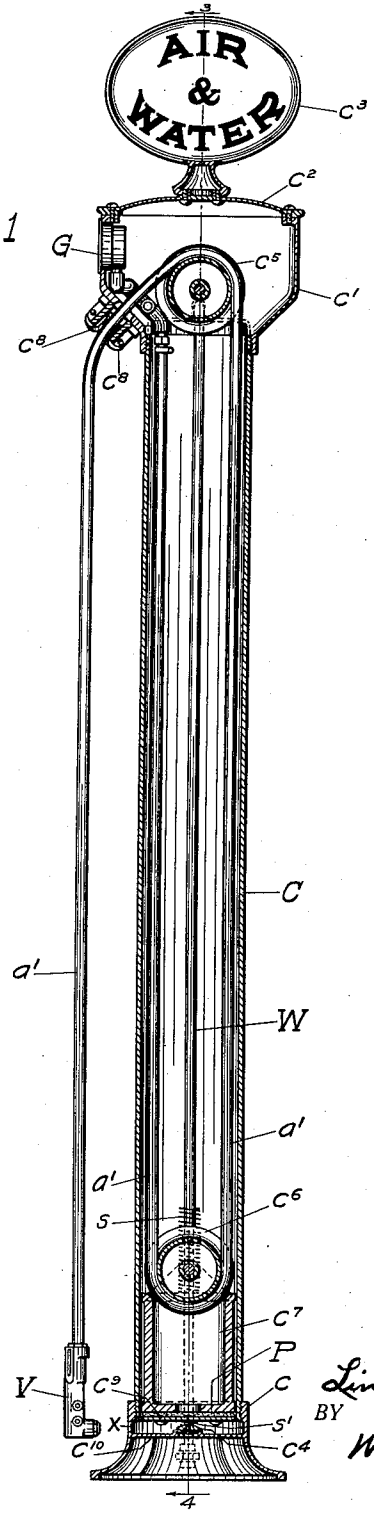


Fig. 2.

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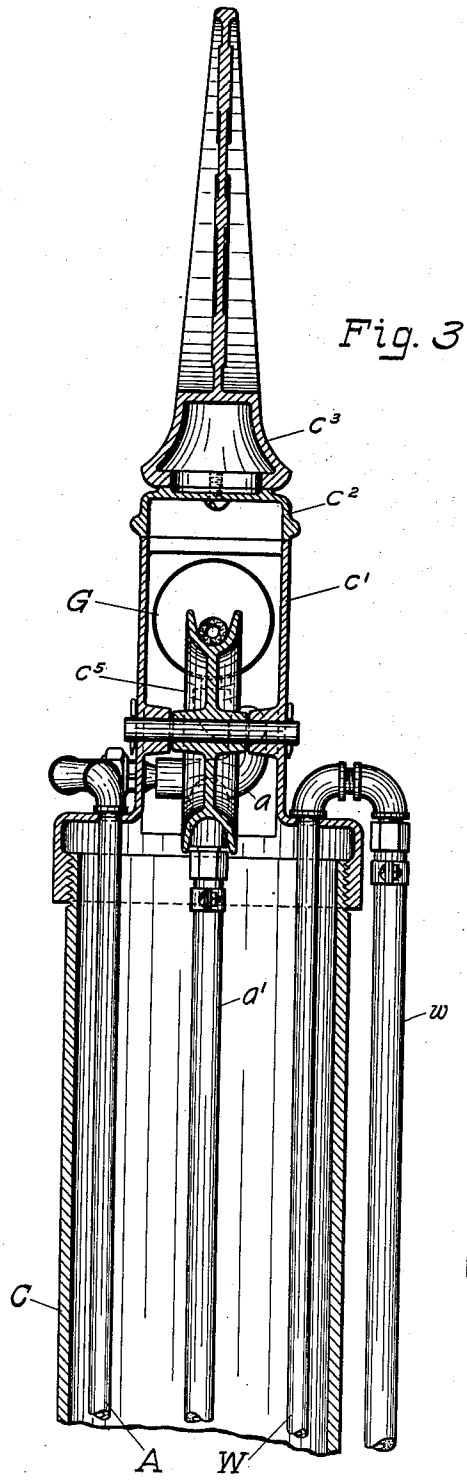


Fig. 3

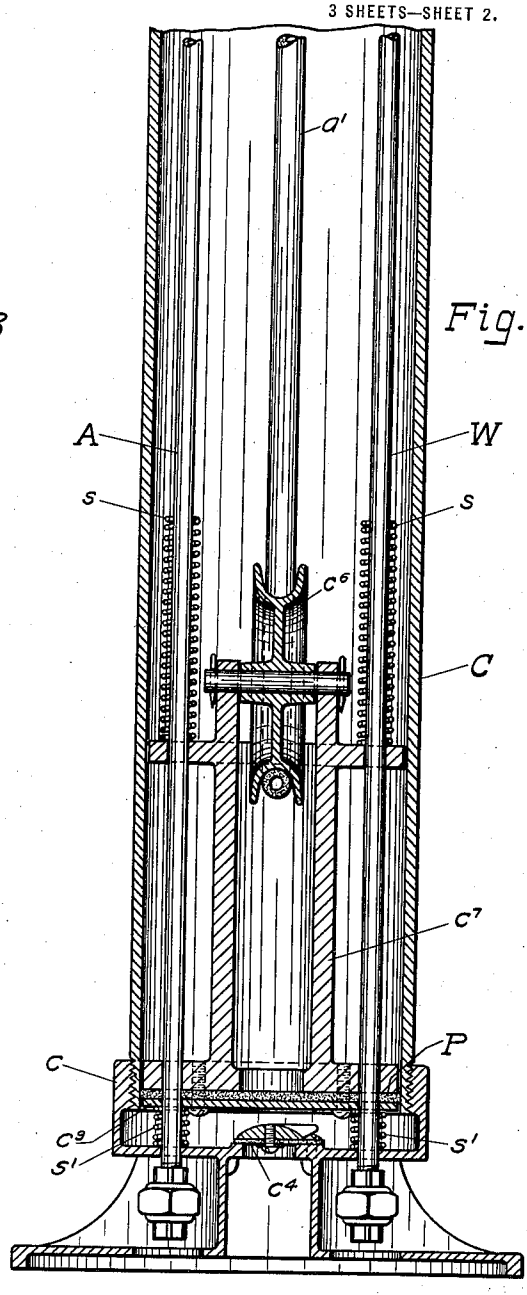


Fig. 4

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3 SHEETS—SHEET 3.

Fig. 5

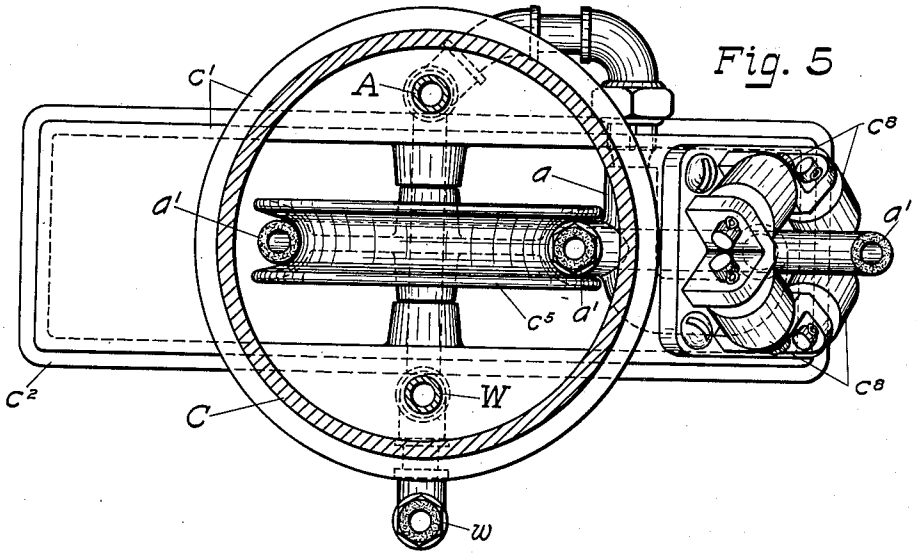
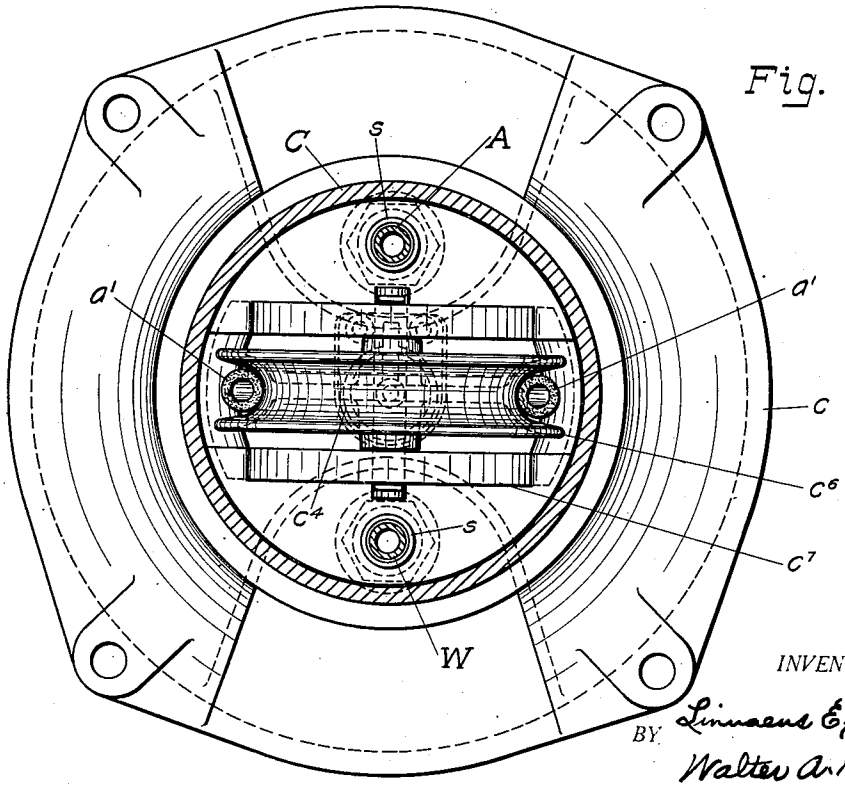


Fig. 6



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UNITED STATES PATENT OFFICE.

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APPARATUS FOR HOUSING HOSE.

1,417,484. Specification of Letters Patent. Patented May 30, 1922.

Application filed December 20, 1920. Serial No. 432,009.

To all whom it may concern:

Be it known that I, LINNAEUS E. BAKER, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented new and useful Improvements in Apparatus for Housing Hose, of which the following is a specification.

My invention relates to apparatus for ensuring convenient use of hose such as that provided to supply air to automobile tires, and for proper protection of the hose used especially at garages and filling stations.

The air hose emerges from the casing near the top of the apparatus to give maximum efficiency; and guide rolls are so set as to lead the hose out at an angle instead of vertically or horizontally, ensuring the least strain and wear on the hose.

A weight tends to retract the hose within the casing and prevent its being damaged or causing damage. The hose is of such length as to cause the inflating valve to hang clear of the ground when the hose is normally retracted. The weight, freely movable vertically within the column, is of such cross section as to have a slight clearance between its sides and the wall of the column. The air confined under the weight forms a cushion, which gradually yields as the air rushes out around the sides of the weight and limits and regulates the speed with which the weight falls and consequently the speed with which the hose is retracted, thus avoiding injury to the apparatus or to persons near the inflating valve.

The apparatus is durable, simple in construction and may be easily assembled or taken apart in making replacements or repairs.

My invention is illustrated in the accompanying drawings of combined air and water supplying apparatus:—

Figure 1, is an elevation of the apparatus on the side of the air gauge and hose guide rolls.

Fig. 2, is a vertical axial section at right angles to the view shown in Fig. 1.

Fig. 3, is a vertical axial section of the top part and Fig. 4 of the bottom part of the apparatus on the line 3—4 of Fig. 2 as though there shown in full.

Fig. 5, is a cross section on the line 5—5 of Fig. 1, turned at 90°, and

Fig. 6 is a cross section on the line 6—6 of Fig. 1, similarly turned at 90°.

Referring now to the drawings, the casing is composed of column C, made of pipe, secured to a pedestal, c, at the bottom, and a cap, c^1, at the top, with a cover, c^2, surmounted by a sign, c^3. A check valve, c^4, in the horizontal partition c^{10}, of the pedestal admits air from below to within the column when the weight c^7, hereinafter described, is raised so rapidly as to create a vacuum below the weight.

A water supply pipe, W, and an air supply pipe, A, pass upwardly from their sources of supply (not shown) through the pedestal, c, and column, C, into the cap, c^1. The water pipe passes out through the cap and terminates in a hose, w, and faucet, w^1. The air pipe, A, terminates in the cap in a special fitting, a, with one air line leading to the pressure gauge, G, and another leading to the air hose, a^1 which passes downwardly over the sheeve, c^6, journalled to the top of the weight, c^7, and then upwardly and over the sheeve, c^5, journalled in the cap, c^1, and then out between the guide rolls, c^8, journalled in the cap, c^1, and so set as to lead the air hose, a^1, out at a convenient angle for use. The air hose terminates at the outer end in a tire inflating valve, V. The hose is made of such a length that when all parts are in place and the weight, c^7, is in its lowest position, the inflating valve will be clear of the ground.

Springs, s, s, on the pipes, W, A, above the weight, c^7; and springs, s^1, s^1, on these pipes below the weight, prevent the sheeve c^6 striking the sheeve c^5 when the air hose is suddenly drawn to its extreme limit or the weight, c^7, striking the pedestal, c^1, when the air hose is suddenly retracted to the position shown in Fig. 1, respectively.

The weight, c^7, is pierced by the pipes, W, and, A and conforms to the shape of the interior of the column, C, but not too nearly to its size to be readily raised and lowered therein, but close enough to confine on the downward movement of the weight, enough air thereunder to form an air cushion, to limit and regulate the speed with which the weight falls when the air hose is released. The compressed air gradually passes upward around the air and water pipes and between the sides of the weight and the interior wall

of the column and the weight decends retracting the hose. A packing, P, of felt or other suitable material may be secured to the bottom of the weight by a plate, c^9, or in other suitable manner, if a closer fit is desired than that of the weight alone against the column and water and air pipes.

If the water and air pipes are placed outside the column, then the only space through which the air, compressed below the weight, escapes, is that between the weight and the column wall.

If necessary to increase the speed of the descent of the weight, a hole of suitable size may be drilled in the pedestal at, X, or at any other convenient place, or vertically through the weight.

If greater running length of hose is required than would be secured by increasing the height of the column above ground, or carrying it below ground, a plurality of sheeves above and below may be used.

I claim as my invention and desire to secure by Letters Patent of the United States:

1. In an apparatus for housing hose, the combination of an elongated upright housing, a sheeve for the hose pivoted near the top of the housing, a weight longitudinally movable within the housing and close enough fitting therein so that the air beneath it will be compressed and may gradually escape, a sheeve for the hose pivoted to said weight, and an opening for the hose in the housing near its top; said apparatus adapted to have the hose secured to the source of fluid supply pass over the sheeves and out to the exterior of the apparatus.

2. In an apparatus for housing hose, the combination of an elongated upright housing, a sheeve for the hose pivoted near the top of the housing, a weight longitudinally movable within the housing and close enough fitting therein so that the air beneath it will be compressed and may gradually escape, means for admitting air under the weight when the weight is raised, a sheeve for the hose pivoted to said weight, and an opening for the hose in the housing near its top; said apparatus adapted to have the hose secured to the source of fluid supply pass over the sheeves and out to the exterior of the apparatus.

3. In an apparatus for housing hose, the combination of an elongated upright housing, a sheeve for the hose pivoted near the top of the housing, a weight longitudinally movable within the housing and close enough fitting therein so that the air beneath it will be compressed and may gradually escape, a sheeve for the hose pivoted to said weight, an opening for the hose in the housing near its top and guide rolls for the hose so set as to lead the hose out of the housing at a convenient angle for use; said apparatus adapted to have the hose secured to the source of fluid supply, pass over the sheeves and out to the exterior of the apparatus.

4. In an apparatus for housing hose, the combination of an elongated upright housing, a sheeve for the hose pivoted in a fixed position near the top of the housing, a weight longitudinally movable within the housing and close enough fitting therein so that the air beneath it will be compressed and may gradually escape, means for admitting air under the weight when the weight is raised, a sheeve for the hose pivoted to said weight, an opening for the hose in the housing near its top spaced outwardly beyond the wall of the housing and guide rolls for the hose so set as to lead the hose out of the housing at a convenient angle for use; said apparatus adapted to have the hose secured to the source of fluid supply near its top, pass downward over the lower sheeve, upward over the sheeve in fixed position and its free end out to the exterior of the apparatus.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LINNAEUS E. BAKER.

Witnesses:
FRANK C. CRANDALL,
A. L. CALLAHAN.