

Feb. 7, 1928.

1,658,044

C. D. FAGAN

COVERED DRAIN PIT AND GREASE RACK

Filed Nov. 18, 1926

2 Sheets-Sheet 1

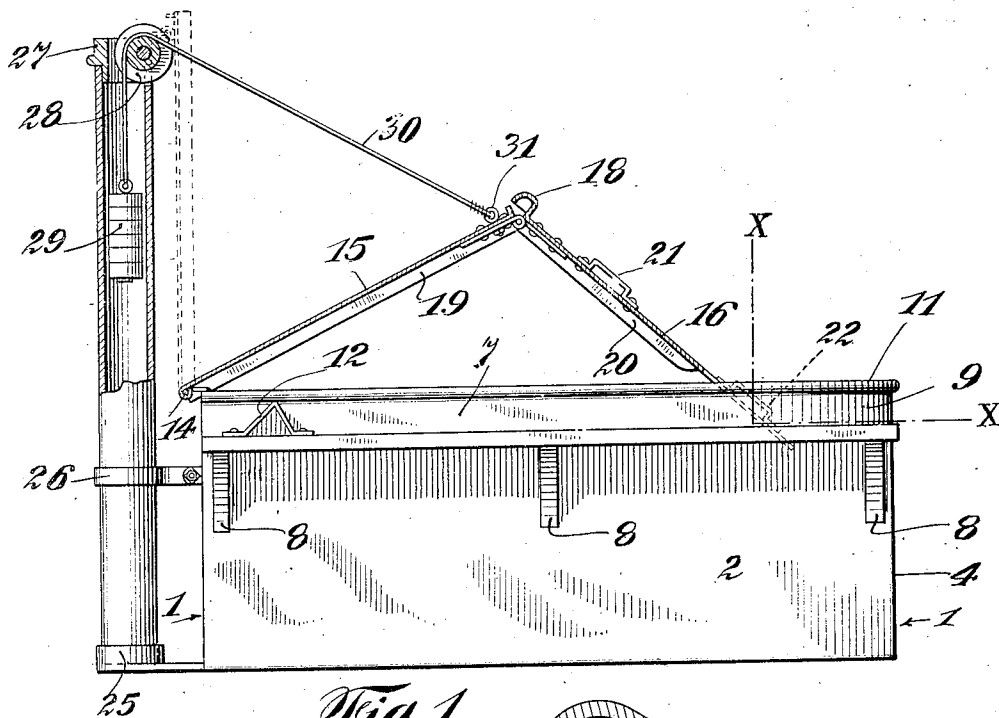


Fig. 1.

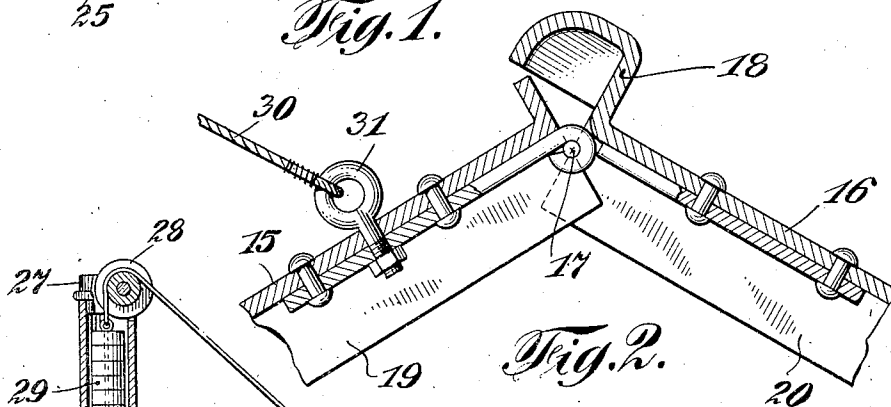


Fig. 2.

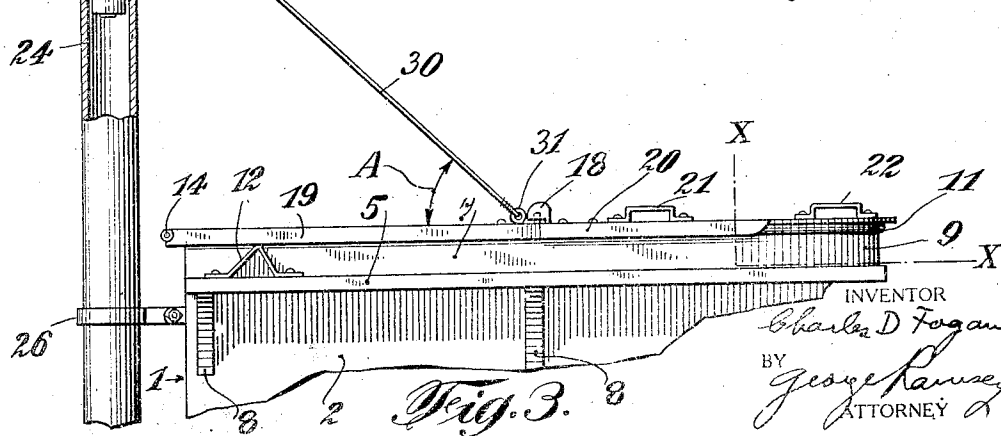


Fig. 3.

INVENTOR
Charles D. Fagan
BY
Jesse Ramsey
ATTORNEY

Feb. 7, 1923.

1,658,044

C. D. FAGAN

COVERED DRAIN PIT AND GREASE RACK

Filed Nov. 18, 1926

2 Sheets-Sheet 2

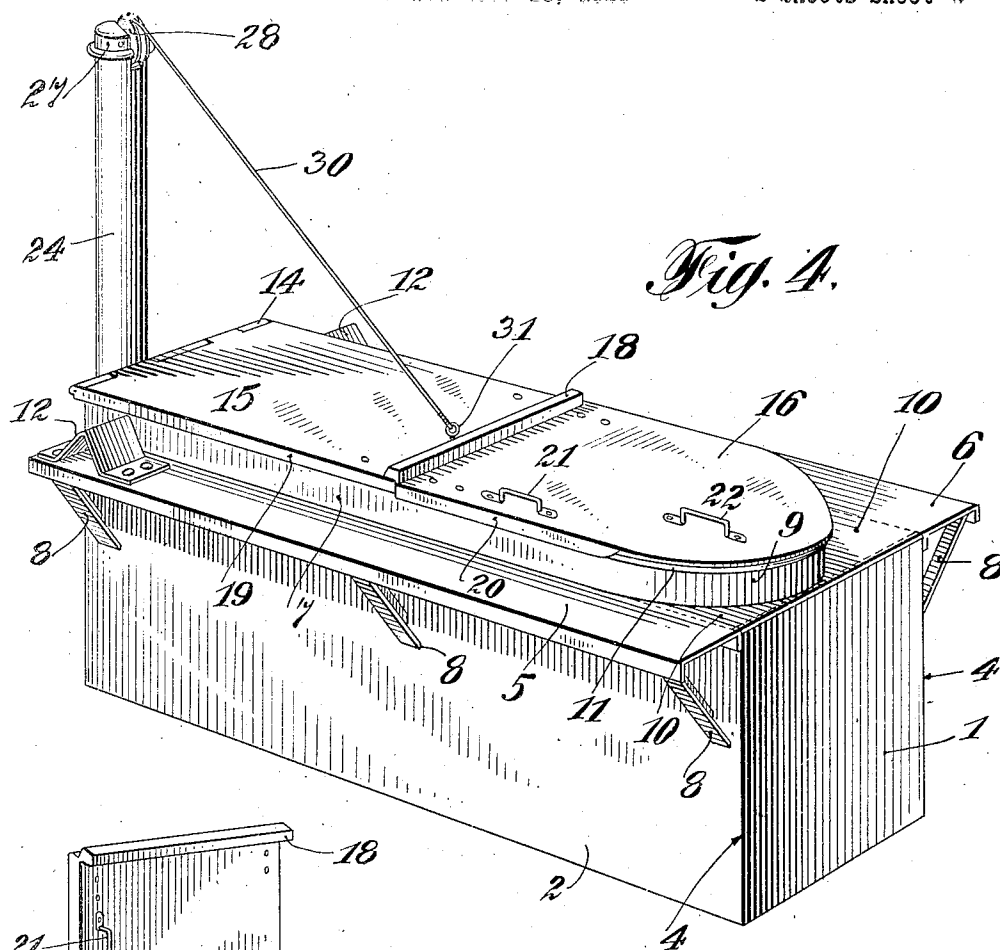


Fig. 4.

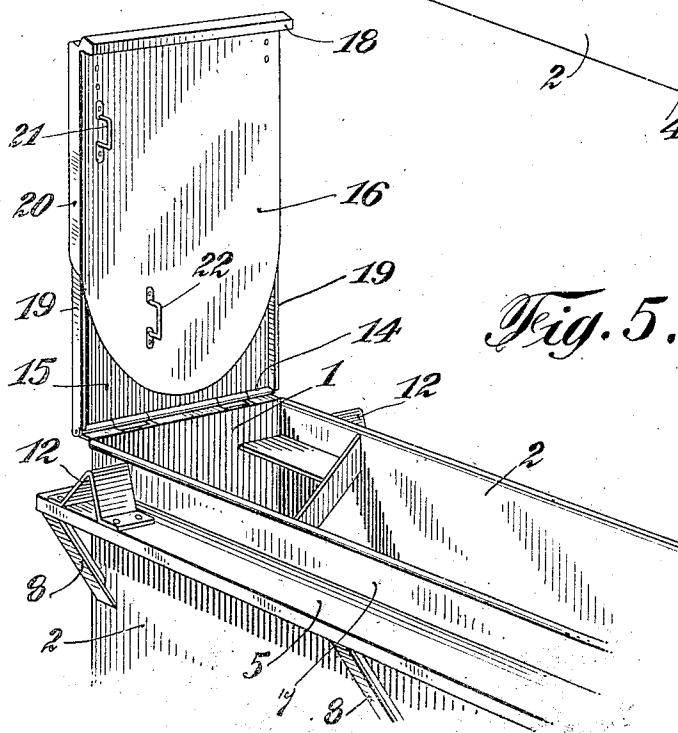


Fig. 5.

Charles D. Fagan

INVENTOR

BY *George Ramsey*
ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES D. FAGAN, OF SHARON, PENNSYLVANIA, ASSIGNOR TO SHARPSVILLE BOILER WORKS CO., OF SHARPSVILLE, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

COVERED DRAIN PIT AND GREASE RACK.

Application filed November 18, 1926. Serial No. 149,078.

The present invention relates to a covered drain pit and grease rack construction adapted for use in connection with garages, filling stations, gasoline stations, greasing and oiling stations and the like. The present invention comprises an improvement upon the pit and rack disclosed in my co-pending application for drain pit and grease rack, Serial No. 108,518 filed May 12, 1926.

The present invention comprises a grease rack and drain pit formed of substantially flat plates of heavy steel which are welded at the edges to comprise an open topped chamber. This construction forms a rigid box which is more economical to manufacture than where rounded corners are used. The runways are welded to the sides of the box or body below the upper edge thereof and a rounded coping is provided at the front end to form a guide to lead the road wheels of an automobile onto the runways. The runways may comprise flat channel irons with their outer edges supported by angle irons that are welded to the side walls of the body and to the under portion of the channel irons. This pit is provided with a cover arrangement and a removable counter weight apparatus to facilitate the opening and closing of the cover. The whole construction is adapted to be fabricated at a suitable shop and then shipped to the place of use, as an article of manufacture. The cover portion is arranged in sections in such manner as to provide hinged overlapping joints so that the cover may be raised with a minimum effort and at the same time effectually protect the pit from severe weather conditions when the pit is not in use.

It is realized that the present invention may be embodied in constructions other than those specifically disclosed herewith, and therefore it is desired that the disclosure shall be considered as illustrative and not in the limiting sense.

Fig. 1 is a side elevation showing the cover partially raised.

Fig. 2 is a detail of the hinge construction for the cover.

Fig. 3 is a detail view showing the top of the pit with the cover lowered.

Fig. 4 is a perspective view showing the rounded guiding end portion and coping.

Fig. 5 is a detail perspective view illustrating the cover lifted and showing the proportional lengths of the preferred cover sections.

The body portion comprises end plates 1 and side plates 2 which are welded together at the corners 4 by any suitable method which will form a solid joint to join up the sides and ends into an open top box like chamber. Channel irons 5 and 6 are welded at their inner portions to the side plates 2 to form runways and are positioned a short distance below the upper edge of the open box to provide parallel coping portions 7 which act as wheel guides to guide an automobile into position over the pit. The outer edges of the channels 5 and 6 are supported by struts 8 comprising angle irons welded at their lower ends to the side plates 2 and at their upper ends to the under portion of the channel runways 5 and 6. The sides and front end are cut away on line $x-x$, Figs. 1 and 3 to permit the front end of the pit to be provided with a circular or curved coping 9 which is welded to the parallel copings 7 to form a continuous coping without a break, so that the coping comprises substantially a U-shaped form with the bottom of the U-shape being toward the front of the pit. The space between the edge of the circular coping 9 and the corners of the tank over the cut away portion are filled by a top plate 10 which is welded in place between the runways and the coping 9 and is also preferably welded to the top edges of the sides and end plate over the cut away part on which the cover plate 10 rests. The upper edge of the coping is finished with a half round 11 which is welded in place by any suitable method. Wheel stops 12 are provided on the runways and may be secured by bolts or other suitable securing means.

At the rear of the tank, an angle bar is welded in position to comprise a hinge member 14 which permits a portion of a section 15 of the cover to comprise an overhanging ledge to protect the end of the pit. This hinged section 15 carries a forwardly extending section 16. These sections are hinged together at 17 with a portion 18 of the second section overlapping the hinged joint so that a substantial leak proof roof is provided for the pit. The first section

15 is provided with flanged sides 19 extending substantially its full length and the second section is provided with flanges 20 which extend as far as the straight coping 7 runs. The flanges 20 overlap the flanges 19 adjacent the portion 18 on the section 16. The forward end of the section 16 is unflanged but is of such width as to extend out over the edges of the pit to shed rain. In order to enable the two sections of the cover to fold when lifted, the hinge 17 is constructed with a pintle displaced out of the plane of the cover portion so that when the cover is lifted, clearance automatically occurs between the two sections. Preferably, the section 16 is shorter than the hinged section 15, so that when the lid is raised the first section 15, having the body hinge, acts as a support for the second section 16. Preferably, the second section 16 is provided adjacent one edge with suitable handles 21 and 22 that enable the workmen to stand on the side of the pit and raise the cover.

A counter weight construction comprising a hollow pipe 24 and connected parts is provided to assist in the operation of the cover. Since these pits are fabricated at one place and shipped to the point of use, it is desirable to arrange the counterweight construction to be detached during shipment and therefore a socket 25 adapted to receive the lower end of the vertical pipe 24 is secured to the lower part of the tank. This acts as a guide to position the pipe 24 in the proper place as well as to anchor the pipe against lateral displacement when in use. A removable collar 26 is arranged to be bolted to suitable eyes or anchors carried by the pit end plate and thus the pipe 24 may be set in position when the tank is being set in the ground in order that the wheel runways 5 and 6 may be level with the surface ground so that an automobile may be run thereon. Preferably, the top of the pipe 25 is provided with a cap 27 which carries a pulley 28 and which also protects and covers the upper end of the pipe. A counter weight 29 is suspended by a flexible cable such as chain or wire rope 30 which passes over the pulley 28 and is attached to the hinged main cover by a suitable anchor 31. Preferably, the pulley 28 is positioned above the hinge 14 a distance equal to that between the hinge 14 and the anchor 31. This produces an angular relation between the cable 30 and the top of the cover section 15, which angle may be designated by A, and is an acute angle when the cover is in position on the pit. At this time, the full weight of the two cover sections are pulling against the cable 30 and angle A is of such a size that the counter weight is not sufficient of itself to raise the cover. When a workman lifts upon the hand holds the

cable 30 becomes effective to apply power more efficiently as the cover is raised. Furthermore, the angle between the cover and the hinge 14 increases as the section 15 moves toward a vertical position, thereby throwing more weight on the hinge 14 as the lid is raised. This unbalancing of forces continues until the lid assumes a vertical position indicated by dotted lines in Fig. 1. At this time, substantially the entire weight of the cover is borne by the hinge 14 and the cable 30 is now pulling at right angles to the face of the section 15, thereby applying the force of gravity on the weight 29 most effectively to hold the cover open while the pit is in use. At this time, the section 16 of the lid is supported entirely by the section 15.

The drain pit and grease rack comprising the present invention is adapted to be set in the earth with the wheel guides 5 and 6 substantially level with the surface of the ground or with a suitable road way adapted to permit an automobile to be run over the pit with ease and safety. Since the pit is made of heavy sheet steel, the liability of breakage is obviated. The pit comprises a complete entity and therefore it may be moved from place to place with comparative ease, and since it is provided with a hinged roof or cover, it may be placed out in the weather without danger of it being filled with rain or snow.

Having thus described my invention, what I claim is:

1. As an article of manufacture, a drain pit and grease rack comprising a body portion of flat metal plates welded together at abutting edges to form corners, a cover plate over a portion of one end of said body portion, a curved coping adjacent said cover plate, and runways secured to the sides of said body portion.

2. As an article of manufacture, a drain pit and grease rack comprising a body portion of flat metal plates welded together at abutting edges to form corners, said plates being cut away at the front end of said body portion, a cover plate over said cut away portion, a curved coping welded to the side plates and to said cover plate, and runways secured to the sides of said body portion.

3. A drain pit and grease rack comprising a body portion having substantially vertical sides and ends, a portion of said sides and the front end being cut away, a curved coping of a height equal to said cut away portion welded at its ends to said sides, and a cover plate welded to the top edges of the cut away sides and end and to the bottom of said curved coping.

4. A drain pit and grease rack comprising a body portion having substantially vertical sides and ends, runways secured to the

sides of said body portion and below the top thereof to form a coping, a portion of said sides and the front end being cut away down to said runways, a curved coping of a height equal to said cut away portion welded at its ends to said sides, a cover plate welded to the top edges of the cut away sides and end and to the bottom of said curved coping, and a reenforcing half-round around the top of said coping.

5. As an article of manufacture, a drain pit and grease rack comprising a body portion, a coping to prevent the road wheels of an automobile from dropping into the pit, and a sectional cover covering said pit, said cover comprising hinged overlapping sections.

6. As an article of manufacture, a drain pit and grease rack comprising a body portion, a coping to prevent the road wheels of an automobile from dropping into the pit, and a sectional cover covering said pit, said cover comprising hinged overlapping sections, and a removable counter weight mechanism, means to anchor said counter weight mechanism to one end of said body portion.

7. As an article of manufacture, a drain pit and grease rack comprising a body portion having a coping on the upper part thereof, and a removable cover cooperating with said coping to form a roof for said pit, said cover comprising hinged sections, an overlapping portion adjacent the hinge between said sections, the pintle of the hinge being offset to provide clearance when said cover is folded.

8. As an article of manufacture, a drain

pit and grease rack comprising a steel plate body portion forming a pit, a cover for said pit, and a removable counter weight mechanism adapted to facilitate the operation of said cover when the pit is in use and adapted to be removed when the article is shipped.

9. An article of manufacture comprising a drain pit and grease rack having a body portion, a hinged cover adapted to cover said pit when not in use, one of said sections being hinged to said body portion and adapted to support the remaining portion of said cover when the cover is removed from over the pit.

10. An article of manufacture comprising a drain pit and grease rack having a body portion forming a pit, a cover for said pit, said cover comprising a plurality of sections, one of said sections being hinged to the body portion and adapted to occupy a vertical position when not in use as a cover, the remaining portion of said cover when open being carried by the section hinged to the body, and means to hold said sections in a vertical position when the cover is open.

11. As an article of manufacture, a drain pit and grease rack having a sheet steel body portion, wheel runways secured to the sides of said body portion below the top thereof to provide a coping to act as wheel guides, a rounded coping at the front end of said body portion, and a hinged cover adapted to be supported on the other end of said body portion.

CHARLES D. FAGAN.