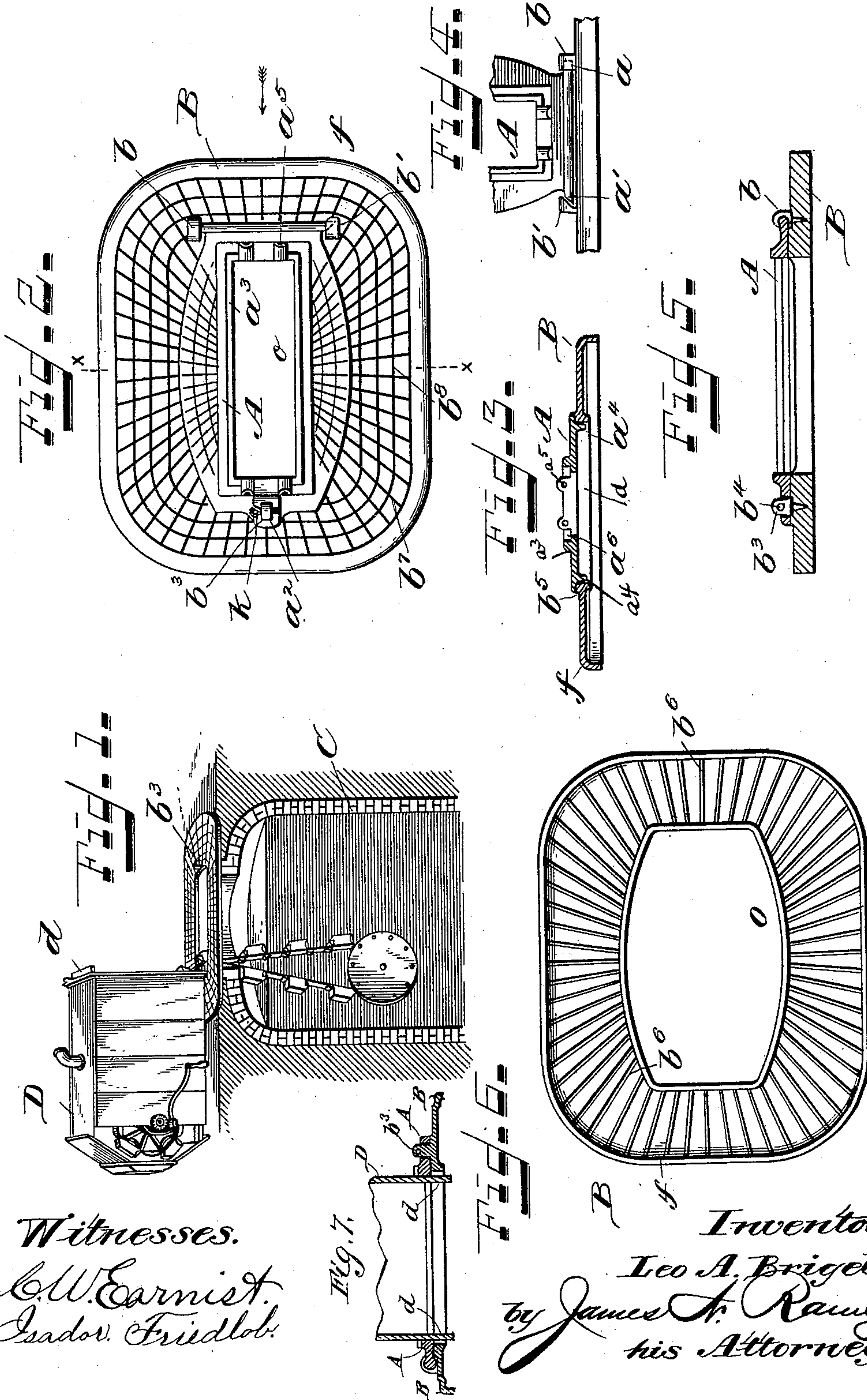


(No Model.)

L. A. BRIGEL.  
PLATFORM FOR WELLS OR CISTERNS.

No. 589,411.

Patented Sept. 7, 1897.





# UNITED STATES PATENT OFFICE.

LEO A. BRIGEL, OF CINCINNATI, OHIO, ASSIGNOR TO THE BUCKET PUMP COMPANY, OF SAME PLACE.

## PLATFORM FOR WELLS OR CISTERNS.

SPECIFICATION forming part of Letters Patent No. 589,411, dated September 7, 1897.

Application filed July 10, 1896. Serial No. 598,765. (No model.)

*To all whom it may concern:*

Be it known that I, LEO A. BRIGEL, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Platforms for Wells or Cisterns, of which the following is a specification.

My invention relates to improvements in platforms for wells and cisterns and may also be used for other similar purposes.

The object of my invention is to provide a platform which permits of convenient and easy access to the interior of a well or cistern for the purpose of cleaning, repairing, &c., without detaching the curb or pump-casing from the platform or taking the pump-fixtures out of the well or removing the platform from its fixed position on the top of the well; which permits the two parts of the platform to be easily detached from or attached to each other for the purpose of removing the pump from the well or replacing it, all without removing screws or bolts or otherwise disturbing the parts permanently secured together; which permits the waste water to run off quickly; which prevents the water from the buckets in the well from splashing out, and which is stronger and more durable than any platform heretofore known.

My invention consists in the construction and arrangement of my platform, in the parts and combination of parts shown in the drawings, and in the whole as an article of manufacture, as more fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my invention, showing the fixed part permanently mounted upon the top of a cistern or well and the movable part detachably connected thereto and raised vertically to permit access to the well, said movable part having a well-curb or pump-casing which carries the pump-fixtures mounted thereon. Fig. 2 is a top or plan view of my platform, showing the parts closed and the curb removed. Fig. 3 is a vertical cross-section taken on the line  $xx$  of Fig. 2. Fig. 4 is a portion of the two parts of the platform, showing the upper movable part raised vertically in a position at right angles to the lower fixed part, illustrating how the parts may be de-

tached. Fig. 5 is a central sectional view showing a modified form of my platform. Fig. 6 is a bottom view of the fixed part of the platform, showing the ribs or corrugations for strengthening the same and binding it more firmly to the cement. Fig. 7 is a sectional view of my platform, showing the movable part closed upon the fixed part and the lower part of the well-curb mounted upon the movable part and having its front and rear lower ends  $d$  projecting a short distance below the horizontal fixed part of the platform.

I preferably construct my platform of cast metal in two parts A and B, which are detachably hinged at the back to each other and secured in front by a key or cotter.

The lower fixed part B is formed with a large central opening O, through which a person may enter the well, and its outer edge has a downwardly-projecting flange  $f$  to add strength and which prevents any rocking or tilting and causes the platform to rest more firmly upon the top of the wall C of the well, upon which it is permanently secured with cement or other suitable material. The lower side of the fixed part preferably has corrugations or ribs  $b^6$  to strengthen it and to bind it more securely to the cement upon which it is placed. The upper sides of both parts of the platform are preferably provided with grooves  $b^7$ , extending from near the center outwardly, and cross-grooves  $b^8$ , extending circularly around upon the top surface to allow the waste water to run off quickly.

On the top and near one end of the fixed part are ears or journal-bearings  $b$  and  $b'$ , the latter of said journal-bearings being notched, as clearly shown in Fig. 4, and near the opposite end a vertical standard  $b^3$ , having a transverse keyhole  $b^4$  near its top, is provided. A bead, rib, or ridge  $b^5$  is preferably formed on the upper surface of this part of the platform around its inner edge to prevent waste water from running into the well.

The upper movable part of the platform is mounted upon and detachably hinged at one end to the fixed part by being provided with journals  $a$  and  $a'$ , which are adapted to take into the corresponding journal-bearings above described, the latter of said journals being beveled to correspond with the notch



in bearing  $b'$ , and at the other end it is provided with a hole  $a^2$ , through which the standard  $b^3$  in the fixed part projects, the two parts being securely held together by a key  $k$  taking through the keyhole in the standard. The movable part is adapted to cover the opening  $O$  in the fixed part, except that it is provided with a central hole  $o$  large enough to permit the pump-fixtures to freely pass through, a rib  $a^3$  being formed on its upper surface near the inner edge thereof to form a socket or seat  $a^6$  for the pump-casing or curb  $D$ , which rests upon the movable part, said movable part forming a permanent base therefor and is held in place preferably by screws taking through the holes  $a^5$  into the curb. The rib prevents the waste water from running into the well and the curb from splitting or breaking. The ends of the curb  $d$  project a short distance below the horizontal plane of the platform and prevent any water from the pump from leaking out between the platform and pump mechanism and causes it to fall back into the well.

The under side of the movable part is preferably provided with two ribs  $a^4$ , extending lengthwise of the same to form a tighter joint and prevent any lateral displacement.

When preferred, the fixed part may be constructed of wood instead of metal and the movable part secured thereto by loop screws or staples, as shown in Fig. 5, one of said loop-screws being provided with a notch to make the movable part detachable. If desired, both bearings may be notched and both journals beveled.

The operation of my platform is as follows: If the well or cistern is closed, as shown in Fig. 2, remove the key and raise the curb and movable part of the platform, upon which the curb is mounted, until the curb rests upon the ground, as shown by Fig. 1. This movement of the pump will cause the pump-fixtures to be drawn to one side of the well or cistern and permit free access thereto. When it is desired to remove the pump entirely from the well, lay the curb over until the movable part is substantially at right angles to the fixed part and then draw the beveled journal away from the well through the notched bearing in a horizontal plane. When that journal is released, the opposite journal will be readily removed from its bearing by drawing the journal slightly endwise.

The advantages of my platform will be apparent, but some of them are superior in strength and durability, adaptability to fit the neck of any well or cistern, saving of time and annoyance, and dispensing with necessity of tearing loose and removal of platform or pump to enter the well or cistern.

I claim—

1. In a platform for wells or cisterns, the combination of the movable part having a central opening detachably hinged to the fixed part having a central opening, substantially as set forth.

2. In a platform for wells or cisterns, the combination of the fixed part provided with central opening, and movable part provided with central opening detachably hinged together by notched bearing and beveled journal, substantially as set forth.

3. In a platform for wells or cisterns, the combination of the journals and bearings detachably hinged together, one or both of said bearings being notched, and one or both of said journals being beveled, substantially as set forth.

4. In a platform for wells or cisterns, the combination of a fixed part having a large central opening and a movable part having a small central opening, said movable part being detachably mounted upon said fixed part and adapted to cover the outer portion of the opening in the fixed part, substantially as set forth.

5. As an article of manufacture, a platform consisting of a fixed part having a large central opening, and a movable part having a small central opening, the movable part being mounted upon and detachably connected to the fixed part, said movable part forming a permanent base for the well-curb or pump-casing, substantially as set forth.

6. As an article of manufacture a cast-iron platform having a central opening, a raised surface or bead around the same, circular and outwardly-extending grooves on the upper surface thereof and downwardly-extending outer flange, substantially as set forth.

7. As an article of manufacture, a cast-iron platform having a central opening, a raised surface or bead around the same, circular and outwardly-extending grooves on the upper surface thereof, downwardly-extending outward flange, and corrugations or ribs on the lower surface, substantially as and for the purpose set forth.

8. As an article of manufacture, a metal platform consisting of a fixed part having a large central opening, a raised surface or bead around the same, circular and outwardly-extending grooves on the upper surface, downwardly-extending outer flange, corrugations or ribs on the lower surface, of a movable part having a small central orifice for the reception of the pump-fixtures, a rib on the upper side of said part near its inner edge and forming a socket for the curb or pump-casing, said parts being suitably connected, substantially as set forth.

9. In a platform for wells or cisterns, a fixed part permanently cemented to the top of the well, a movable part detachably mounted thereon and adapted to partially cover the central opening in the fixed part, said movable part forming a permanent base for the curb which has front and rear ends projecting downwardly into the well a short distance below the horizontal plane of the fixed part of the platform, substantially as and for the purpose set forth.

10. In a platform for wells or cisterns, the



combination of a bearing having a V-shaped notch in the inner edge thereof, with a journal having a beveled or wedge-shaped end adapted to take through said notch and work  
5 in said bearing, substantially as set forth.

11. As an article of manufacture, an iron platform having a central opening, circular and outwardly-extending grooves on the upper surface thereof, downwardly-extending  
10 outer flange and corrugations or ribs on the lower surface, substantially as set forth.

12. In a platform for wells or cisterns, a

well-curb D mounted upon a movable part A of said platform, said curb having downwardly-projecting front and rear lower ends 15 adapted to extend into the well a short distance below the horizontal plane of the fixed part B, substantially as set forth and for the purposes specified.

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Witnesses:

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