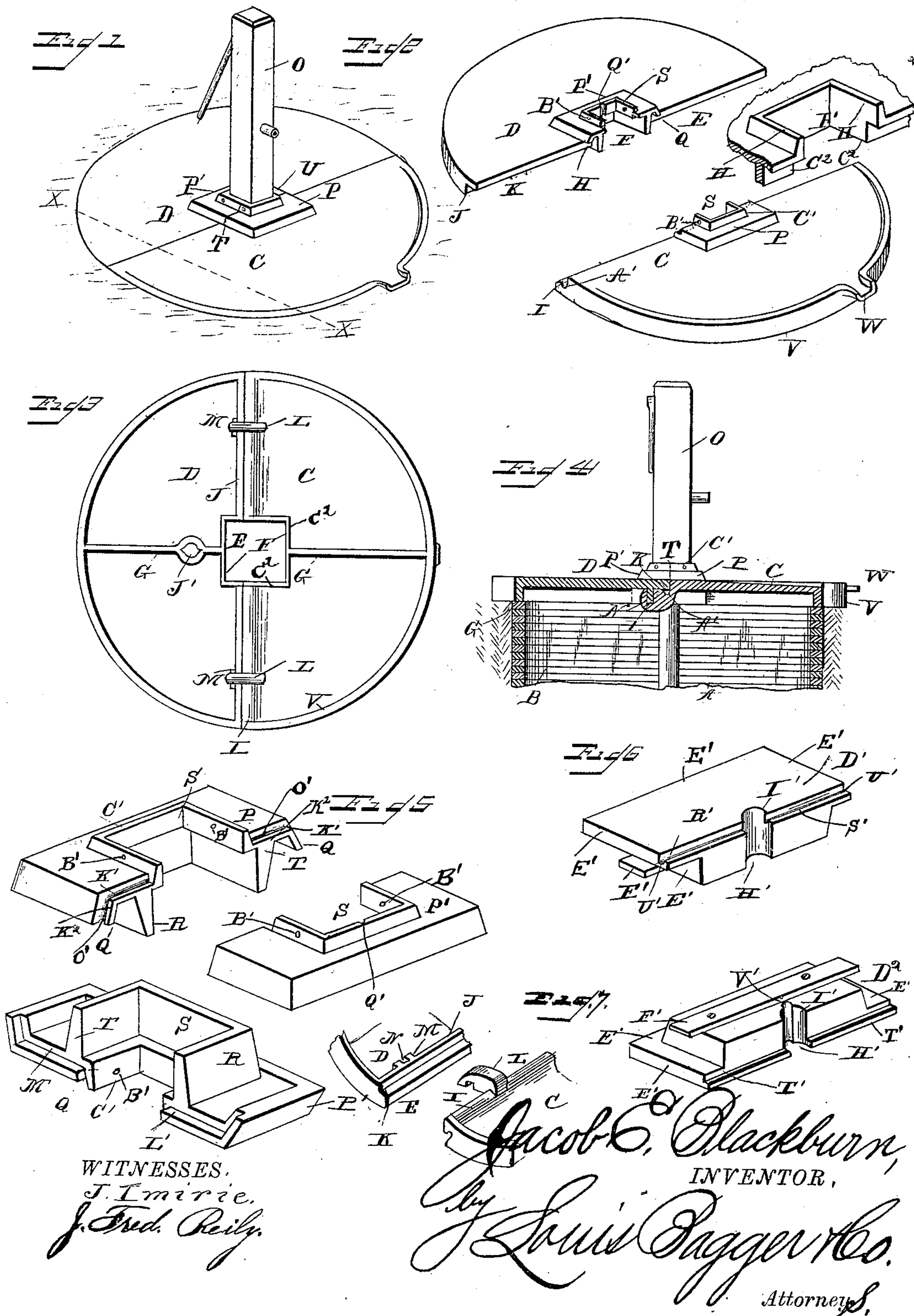


(No Model.)

J. E. BLACKBURN.
WELL OR CISTERN COVER.

No. 386,375.

Patented July 17, 1888.



UNITED STATES PATENT OFFICE.

JACOB E. BLACKBURN, OF FREDERICKTOWN, OHIO.

WELL OR CISTERN COVER.

SPECIFICATION forming part of Letters Patent No. 386,375, dated July 17, 1888.

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To all whom it may concern:

Be it known that I, JACOB E. BLACKBURN, a citizen of the United States, and a resident of Fredericktown, in the county of Knox and State of Ohio, have invented certain new and useful Improvements in Well or Cistern Covers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my new and improved well or cistern cover, showing the same fitted in its operative position around a wooden pump. Fig. 2 is a detail view of the cover, showing the two halves or sections thereof separated. Fig. 3 is a bottom plan view of the cover, showing its two halves hinged together. Fig. 4 is a vertical sectional view of the cover and the upper part of the well or cistern taken on line *x x* of Fig. 1. Fig. 5 shows in detail the grooved blocks or reducers, which are employed to fit around a wooden pump. Fig. 6 shows in detail the blocks which are used around an iron pump, and Fig. 7 shows an inverted view of a portion of the two halves of the cover.

The same letters of reference indicate corresponding parts in all the figures.

My invention consists in a new and improved cover for wells or cisterns, which will be hereinafter fully described and claimed.

Referring to the several parts by letter, A indicates an ordinary well or cistern, and B indicates the circular stone or brick work or wall, on which the cover is set in mortar.

My new and improved cover is formed in two halves or sections, C and D, and the outer edges of these halves are rounded, so that the complete cover is round when the two halves are put together; or, when desired, the cover can be made square, with rounded corners.

Each half of the cover is formed at the center of its straight edge E with a square, or rather rectangular, opening, F, so that when the two halves are put together with their straight edges in contact a square opening will be left in the center of the cover.

Each half of the cover has cast on its under side the strengthening-ribs G, the cover being

formed of cast-iron, and around the upper edges of the central opening, F, of each half is cast an upwardly-projecting flange or shoulder, H, as shown. One half of the cover is intended to remain stationary, after being fitted into place over the mouth of the well or cistern, and this stationary half C of the cover is cast on the lower part of its straight inner edge, E, with a horizontal flange, I, while the straight inner edge, E, of the other half, D, of the cover is cast on its under side with the downward projecting flange or rib J, leaving the horizontal flange or shoulder K, which fits and rests upon the straight flange I of the other half, C, as shown. The flange I of the stationary half is further cast with the projecting hooks L L, having the upwardly-projecting points, while the downwardly-extending rib J of the other half, D, is cast with the small lugs M M, forming between them the seats N N, with and in which the hooks L L engage.

It will be seen that by this construction the stationary half C of the cover can be first secured in position, the wooden pump O being meanwhile braced, and after inserting in the opening F of this half the reducer-block, hereinafter described, the other half, D, can be easily placed in position without disturbing or twisting the pump, the flange or shoulder K along the straight inner edge of the removable half D fitting and resting closely on the straight flange I on the straight inner edge of the stationary half C, with the hooks L L engaging with the seats N N between the small lugs M M, by which construction the cover will be self-supporting at its center, as will be readily seen.

P P' indicate the blocks which are used with a wooden pump. These blocks are cast of iron, and each of them is formed with a downwardly-depending flange, Q, around its outer edge, which extends down over and outside of the flange or shoulder H, that extends around the central opening of its half of the cover, while the square sides R of the cast-block fit down snugly inside of the square openings F of the cover. The top of each block is formed with a square, or rather rectangular, opening, S, so that when the two blocks come together at their inner straight edges, T, a square opening, U, is left for the wooden pump.

When the stationary half C of the cover has

been secured in position, the block P is fitted down in the opening F of the same, with its inner opening, S, inclosing that side or half of the braced wooden pump. When the removable half D is placed or fitted in position, and its block P is placed in position, the two blocks P P' will fit closely around the wooden pump.

It will be seen that when my new and improved cover is thus fitted around a pump it will form a solid and perfect cover for the top of the well or cistern, and at the same time the removable half D of the cover can be readily lifted off when required, to furnish convenient access to the interior of the well or cistern for any purpose without disturbing the other half, C. The rounded outer edge of the cover is cast with a downwardly-extending strengthening-flange, V, and the stationary half C of the cover is cast slanting slightly down toward its outer edge, so that the rim-flange V, which extends around it, projects with its upper edge a little above the top of this half, the half of the cover being thus given a slight slant, which will cause the waste water, which may fall upon it from the pump-spout, to run down and off of the cover at one point through a small spout, W, at the outer edge. The lower horizontal flange, I, on the straight edge of the stationary half C, has slight longitudinal grooves A' A' cast in its upper side, as shown clearly in Fig. 2, through which are carried off any water that may fall upon the platform and get through the joint of the two halves of the cover.

The inner edges of the block P on each side of the central opening are recessed longitudinally on their upper sides to form the long shoulder K' and the flange K², while the inner edges of the other block, P', are recessed longitudinally on their lower side to form the projecting top edge flange, L', and shoulder M'. It will be seen that by this construction when the removable half D of the cover is fitted down the flange L' and the block P' will fit over the recessed inner edge of the block P, and the water that may fall from the pump and get through this joint will be caught in small longitudinal grooves O', which are formed in the upper side of the flange K², and carried off by the same. In the block P' is also formed the small vertical opening Q'', in one side of the opening S, for the admission of any device that may be used in winter on the pump-stock to open the hole of the pump-stock.

By constructing the cover as described and employing the blocks P P' the cover can be placed closely around a wooden pump of any size, as blocks P, having openings of any desired size, can be used, as required, so as to fit closely around the pump. When the cover and blocks P P' have been fitted around the wood pump, the blocks are secured to the pump by means of wood-screws, which can be screwed

through holes B' B' in the upwardly-projecting flange C', which is cast around the upper edge of the openings S of the blocks.

In cases where a metal pump is to be used in the well or cistern, the only change that is necessary is to use instead of the metal blocks P P' wooden blocks D' D², which are made of rectangular shape to fit closely in the openings F F in the halves of the cover, having at their top edges the outwardly-extending flanges E', which fit closely over and rest upon the top of the upwardly-projecting rim-flanges H of the cover, while upon the underside of each block is secured by screws a cross-piece, F', the projecting ends of which fit under the bottom edge flanges, C², of the cover-opening F, as shown in Fig. 6. These wooden blocks are forced into the openings F F of the cover-sections, closing the said openings, so that when the cover-sections are brought together only a small round opening, H', is left in the center of the cover formed by the small semicircular vertical recesses or openings I' I' in the center of the inner sides of the wooden blocks, which fit closely around the iron pump, when any iron pump can be fitted tightly to the cover.

The inner upper edge of the block D' is recessed longitudinally to leave the longitudinal shoulder R' and the lower flange, S'. The inner side of the block D² is cut away from its lower edge up to within a short distance of its top to leave the projecting top flange, T'.

It will be seen that when the block D' has been inserted in the section C of the cover, and the section D, in which the block D² is secured, is placed in position, the projecting top flange, T', on the inner side of the block D² will fit closely over the recessed upper edge of the block D', and the water that may fall from the pump and pass through this close joint will be caught in small longitudinal grooves U', which are formed in the upper side of the flange S', and will be carried off by the same. In the block D² is formed a small vertical opening, V', in one side of the opening H', for the admission of any device that may be used in winter on the pump-stock to open the hole of the pump-stock.

Where an endless-chain pump is to be used, I use the wooden blocks D' D², above described, and the part D of the cover is cast with a hole, J'. (Indicated in Fig. 3 of the drawings.)

From the foregoing description, taken in connection with the accompanying drawings, the construction and advantages of my invention will be readily understood. It will be seen that my new and improved metallic cover for wells or cisterns is simple and very strong in construction, and exceedingly convenient and satisfactory in use. It can be fitted to a pump of any size or kind, either wood or metal, by the use of the metal or wooden blocks, as described, and the side D can be easily removed, without disturbing the

pump, for the purpose of giving access to the interior of the well or cistern for repairing the pump or for any other purpose.

5 Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

10 1. In a well or cistern cover, two halves, each of which is provided with a central recess and a flange, one of the halves being further provided with the lugs having seats or recesses between them, and the other half having the hooks adapted to engage with the sides of the lugs, and the two blocks in the central recesses of the halves, substantially as
15 and for the purpose shown and set forth.

2. In a well or cistern cover, the combination, with two halves, each of which is pro-

vided with an upwardly-flanged recess at the middle of its inner or straight side, of the re-
tainer-blocks for fitting within said recesses, 20
each of which has a downwardly-extending flange around its outer edge adapted to fit over the upward flange around the recess of the cover, said blocks being further provided with a recess around which is formed an up- 25
wardly-projecting flange for securing and retaining the pump in position.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JACOB E. BLACKBURN.

Witnesses:

ABRAHAM U. GEST,
JAMES M. BLAIR.