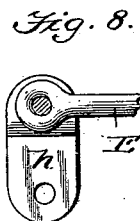
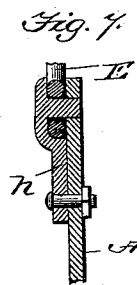
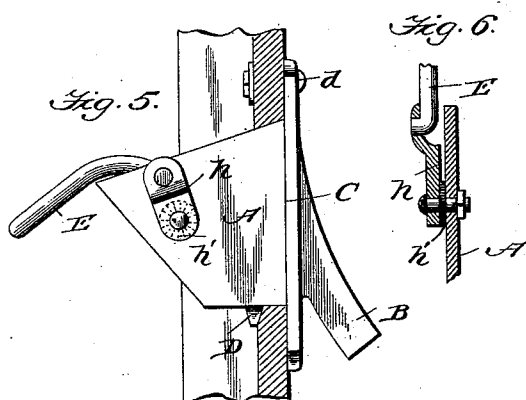
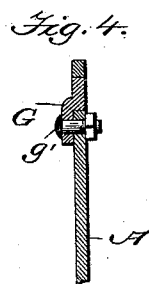
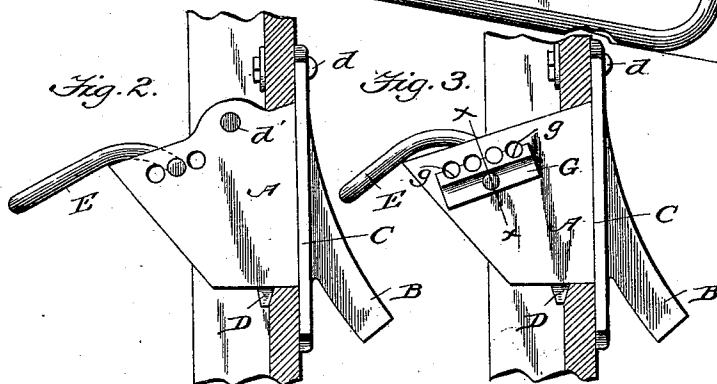
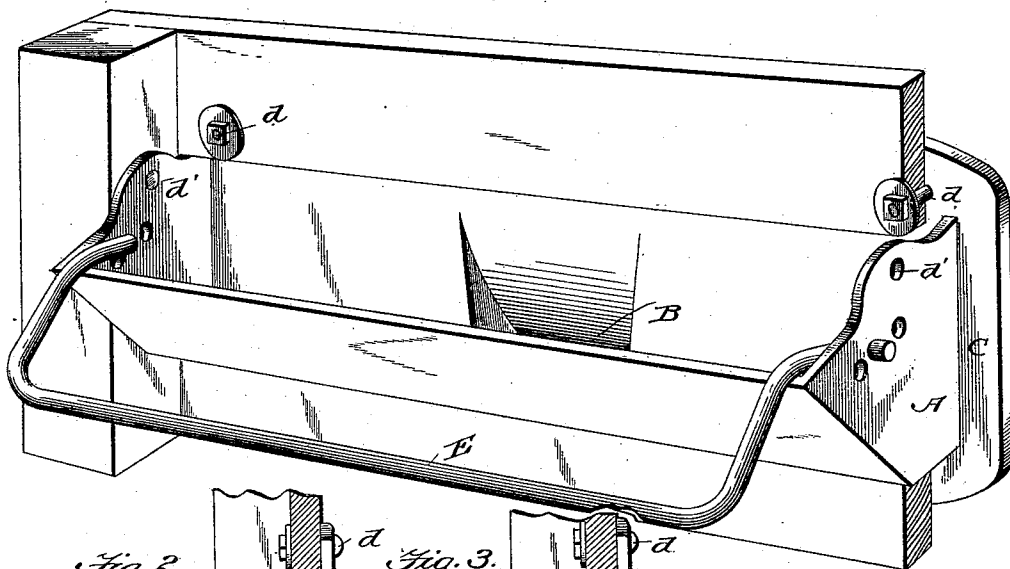


(No Model.)

S. H. SAYRE, Jr.
WELL FIXTURE.

No. 469,922.

Fig. 1. Patented Mar. 1, 1892.



Witnesses:

Thomas Durant

Inventor.
Samuel H. Sayre, Jr.,
BY *Chief & Church*
his Attorneys.

UNITED STATES PATENT OFFICE.

SAMUEL H. SAYRE, JR., OF HAMPTON, VIRGINIA.

WELL-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 469,922, dated March 1, 1892.

Application filed November 7, 1891. Serial No. 411,207. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL H. SAYRE, JR., of Hampton, in the county of Elizabeth City and State of Virginia, have invented certain new and useful Improvements in Well-Fixtures; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates to improvements in well-fixtures, and particularly to the trough employed in connection with the old well-known bucket-and-windlass arrangements. It has been common heretofore in this class of devices to employ a cast-iron trough-shaped receptacle, which is secured to the inside of the well-curb and has a spout projecting through the curb, which empties the water poured into the trough from the bucket into a separate trough or receptacle on the outside. With these troughs much difficulty has been experienced in properly applying them to prevent disfiguration of the well-curb on the outside and to prevent the rotting and water-soaking of the curb around the edges of the trough, it being practically impossible to prevent the water from working in between the trough and curb, this being especially the case where the bucket is tripped automatically and the water dumped into the trough with more or less splashing. These defects and others which will hereinafter appear I design to overcome; and to this end I have constructed a device embodying certain novel details of construction and combinations and arrangements of parts, all as will be hereinafter described, and pointed out particularly in the claims at the end of this specification.

Referring to the accompanying drawings, Figure 1 is a perspective view of a trough constructed in accordance with my invention, showing its application to a well-curb, a portion of the curb being broken away to show the manner of applying the trough. Fig. 2 is an end elevation of the trough and a section of the curb. Fig. 3 is a similar view illustrating a different manner of adjusting the tripping-bail. Fig. 4 is a section on the line *xx*, Fig. 3. Fig. 5 is an end elevation showing still another way of adjusting the trip-

ping-bail, and Figs. 6, 7, and 8 are details of the same.

Like letters of reference in the several figures indicate the same parts.

In carrying the invention into practice I preferably form, as has heretofore been the case, the entire trough and its spout in a single casting, and, referring to the drawings, the letter A indicates the body of the trough proper, preferably rectangular in cross-section, with the inner wall inclined outward to form a wide mouth or opening to the trough, and B indicates the spout curved downward and forward with its opening at the bottom of the trough and its mouth or exit turned outward.

The front wall of the trough is lettered C in the drawings, and in the present instance, instead of being adapted to fit against the inner side of the well-curb, it is extended in the form of a relatively wide flange adapted to fit on the outside of the curb, as shown. Thus any water splashing from the trough does not run in between the trough and curb but drips off into the trough permitting the curb to dry at once.

In applying the trough in the manner pointed out it is only necessary to form a large rectangular opening in the well-curb, which may be easily done by cutting a single plank out between any two of the posts, no nice or accurate fitting being necessary, as is the case where the joints are to be exposed. The opening of course approximates the size of the trough, which latter is inserted from the outside and may be held in place by a variety of means. For instance, lugs D may be cast on the bottom at a proper distance from the front flange for the reception of the edge of the curbing forming the bottom of the opening, and at the top bolts—such as *d*—may be inserted, or holes—such as *d'*—may be formed in ears on the ends of the trough and nails or screws passed through the same into the adjacent posts. The kind of fastening employed at the top, however, is immaterial and may be varied to suit the manufacturer's taste or the exigencies of any particular case; but in every instance I prefer to employ the projections and bottom flange to secure the bottom of the trough.

In connection with these troughs it is com-

mon to employ a bail E, which is pivoted to the ends of the trough and is adapted to co-operate with the bucket in the well understood manner; but with the old contrivances
 5 either the trough has to be located and the curb built to suit the exact diameter of the windlass, depth of the well, or number of superposed convolutions of the rope upon the windlass and the size of the rope, otherwise
 10 the bucket is likely to swing free of the bail and the necessary co-operation between them is prevented. This has given rise to the production and almost universal employment of adjustable bearings for the windlass, and with
 15 a view of dispensing with this complicated and comparatively expensive means of overcoming the difficulty I now propose to adjustably mount the bale E upon the trough in such manner as that it is a comparatively simple
 20 matter when setting up the well-curb and trough to bring the bail into exactly the proper position for co-operation with the bucket no matter how much the length or size of the rope and diameter of the windlass be
 25 varied within reasonable limits, adapting the device at once for use on wells of any depth or with windlasses of various diameters.

The manner of adjustably mounting the bail may vary greatly; but I prefer to form
 30 a series of openings in each end of the trough and bend the ends of the bail outward to form journals adapted to fit in any of the series of holes, the bail itself having sufficient resiliency to permit of its being sprung out of the
 35 holes upon the application of a reasonable force. Where the bail is rigid or there is danger of its being willfully removed, a slot may be formed in each end of the trough having a series of semicircular recesses *g*, Figs. 3
 40 and 4, and a filling-plate *G* may be employed to lock the ends of the bail in any one of said recesses, the plate itself being held in place by a bolt *g'* passing through the wall of the trough.

In Figs. 5 to 8, inclusive, the bail is shown
 45 pivoted in movable arms or pivotal pieces *h*, which are pivoted to the ends of the trough by pivotal bolts or otherwise, and when it is desired to adjust the bail the pivotal bolts are
 50 loosened and the arms moved to bring the bail into the proper position. Corrugations and co-operating projections—such as *h'*—may be located around the pivotal bolts to aid in hold-

ing the arms in adjusted position, or, as shown in Figs. 7 and 8, the bail may have eyes formed
 55 on its ends, and journals on the arms may be made long enough to pass into apertures in the ends of the trough, the bolts serving to hold the whole firmly in place; but in this instance, it will be understood, the journals need
 60 not pass through into the ends of the trough unless desired, as the bolts or other devices will usually be found sufficient.

In Figs. 5 and 6 the ends of the bail are turned out, as in Figs. 1 and 2; but in this instance the arms have the bearings formed therein and the ends of the trough prevent the withdrawal of the bail or the bodily movement of it toward the front or back until the
 70 pivotal bolts are loosened.

The device as a whole will be found far more efficient than those now in use, and because of its easy application and almost universal adaptation to different well-tackles it fills a
 75 long-feit want in this particular line.

Having thus described my invention, what I claim as new is—

1. The herein-described trough for well-curbs, consisting of the elongated wide-mouthed body portion having the depending
 80 flange and spout on the front side, the projections or lugs in rear of said flange for co-operation with the well-curb, and means for fastening the top of the trough to the curb, substantially as described.

2. The combination, with a well-trough having means for attachment to the well-curb, of the horizontally-adjustable bail for co-operation with the bucket, substantially as described.

3. The combination, with a well-trough having means for attachment to the well-curb, of the pivoted horizontally-adjustable bail for co-operation with the bucket, substantially as described.

4. The combination, with a well-trough having means for attachment to the well-curb and a series of holes in each end, of the bail for co-operation with the bucket having the ends formed into journals and sprung into any one
 100 pair of said holes, substantially as described.

SAMUEL H. SAYRE, JR.

Witnesses:

H. L. SCHRONESS,
 WM. P. BAINBRIDGE.