No. 619,712. Patented Feb. 21, 1899.

C. A. BARTLIFF.

PUMP CURB RESERVOIR.

(Application filed Jan. 17, 1898.)

(No Model.)

Fig. 1.

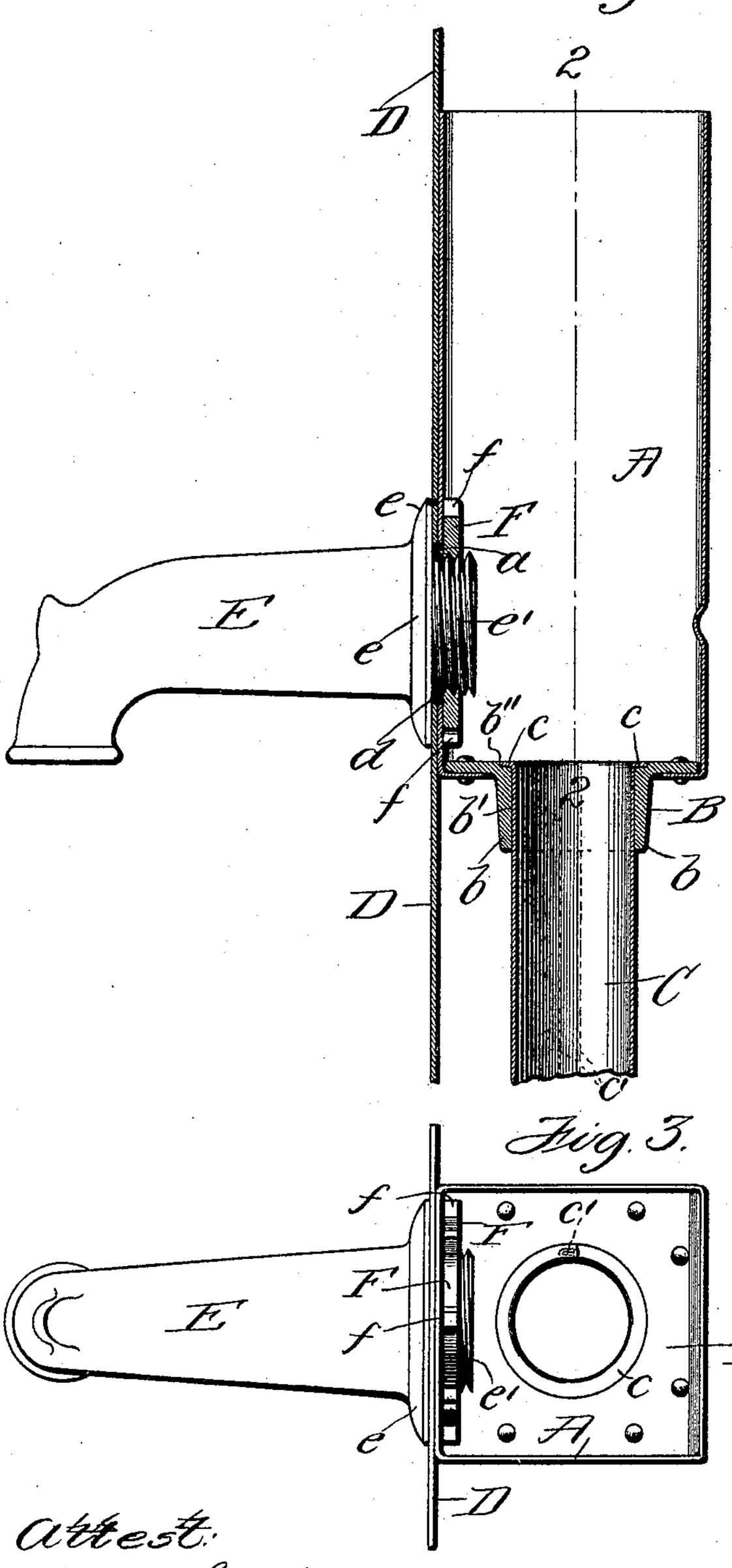

Fig. 2.

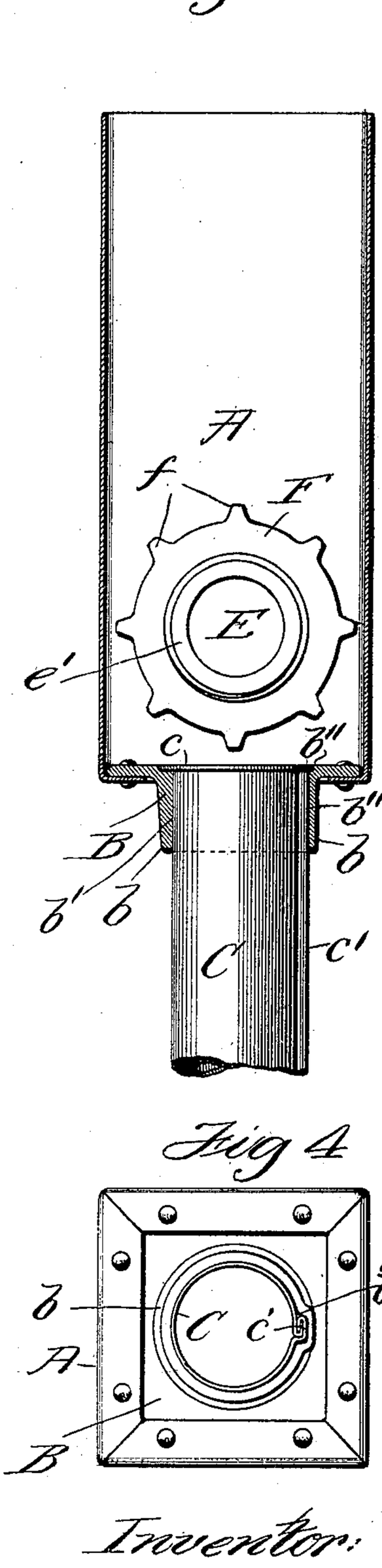

Fig. 3.

Fig. 4

Attest.

Wm. H. Scott.

Ralph Kalish

Inventor:

Charles A. Bartliff.

by Bakewell & Cornwall

Attys.

UNITED STATES PATENT OFFICE.

CHARLES A. BARTLIFF, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE STAR BUCKET PUMP COMPANY, OF SAME PLACE.

PUMP-CURB RESERVOIR.

SPECIFICATION forming part of Letters Patent No. 619,712, dated February 21, 1899.

Application filed January 17, 1898. Serial No. 666,879. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BARTLIFF, a subject of the Queen of Great Britain, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Pump-Curb Reservoirs, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical sectional view of my improved pump-curb reservoir. Fig. 2 is a vertical sectional view of the same on line 2 2, Fig. 1. Fig. 3 is a top plan view of the same. Fig. 4 is an inverted plan view.

This invention relates to a new and useful improvement in reservoirs for pump-curbs, and particularly to that class of pumps known as "chain-pumps," together with means for attaching the same thereto, the object being to construct a reservoir in a cheap and substantial manner and at the same time obviate the present objections existing in the usual form of reservoirs now in general use, the same being hereinafter mentioned; and another object in view is to form a reservoir for pump-curbs which can be rapidly put together.

With these objects in view the invention consists, generally stated, in a reservoir, a conduit-pipe leading thereto, means for securing said conduit-pipe to said reservoir, a spout leading from said reservoir, and means for securing said spout and reservoir to the pump-curb.

The usual forms of reservoirs now in general use are made of galvanized or sheet iron, and are generally secured to one side of the pump-curb by means of a yoke or stirrup-shaped bar of metal, which passes around the outside of said reservoir, usually in a groove adapted to receive it, while the free ends of said yoke pass through the curb and then through flanges on the spout and are threaded to receive suitable nuts. This construction is, however, objectionable, as the reservoir is made, as before stated, of thin material, and in tightening the nuts on the free end of the yoke it constantly weakens and finally crushes the reservoir, especially when handled by experienced persons. Another objection to the usual form of reservoirs is the method of attaching the conduit-pipe thereto, which is usually done by simply flanging the upper end of the conduit-pipe and then soldering the same to the bottom of the reservoir. This is objectionable in that the conduit-pipe is generally quite long, and the perpetual jolting and shaking of the same caused by the entrance and passage of the chain and its respective flights therethrough causes the soldering to soon break away. My invention contemplates means for remedying these many objections, as will be seen by referring to the drawings, in which—

A indicates the reservoir, provided with a bottom B, which is preferably a metallic casting secured to the reservoir by rivets. This bottom B is provided with a boss or nose *b*, of sufficient length for stability, said nose *b* being formed with an opening *b'*, of a sufficient size and suitable shape to receive one end of a conduit-pipe C. The upper end of pipe C is preferably flanged, as shown at *c*, and finds a seat in a suitable counterbore *b''* in the casting B, after which this joint may be soldered or brazed. The conduit-pipe employed in this class of work is made with a lock-joint, which forms a bead *c* on the outside of said pipe. In order to insure a snug fit in the casting B of this pipe, a groove or seat *b'''* is formed in the edge of the opening *b'* and extends the length thereof, in which the bead *c'* finds a seat. This construction not only allows the contour of the pipe to snugly fit the opening *b'*, but the pipe-seam also acts as a key to prevent the turning of the conduit-pipe, which otherwise would break the soldered joint and cause the water in the reservoir to leak.

The reservoir A is attached or clamped to the side of the pump-curb D by means of a spout E and a threaded disk F. The reservoir A is provided at a suitable point, preferably near the bottom, with an opening *a*, and the curb D is provided with a similar opening *d*, adapted to register therewith. The spout E is provided near its inner end with a flange *e*, adapted to rest against the outer face of the curb, and extending inwardly from said flange is a threaded portion *e'*, designed to pass through openings *a* and *d*

and then receive the threaded disk F, which when tightly adjusted firmly clamps the reservoir A to the curb D between said flange *e* and disk F, at the same time supplying the necessary spout to the reservoir.

As it is necessary that the mouth of the spout should point downwardly, the spout should not turn when the same is being screwed in position, but should be held in its correct position and the disk turned to clamp the parts in place, and as the reservoir is too small and the nuts too far down from the top any ordinary wrench would be awkward to handle. To obviate this difficulty, I provide teeth or projections *f* on the periphery of the disk, which may be engaged by a suitable bar and hammered to the correct position, as is obvious. For these teeth or projections notches may be substituted in the periphery of said disk, if desired, which would have the same effect.

I am aware that many minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with a reservoir, formed of thin sheet metal and provided with inwardly-projecting flanges, of a casting forming the bottom of said reservoir, adapted to rest upon, and be riveted to, said flanges of the reservoir, a downwardly-extending nose on said casting, a pipe whose upper end passes through said nose and is flanged outwardly to lock said pipe in position, the seam, or joint, of the metal forming said pipe being received in a groove in said nose to prevent rotary movement of said pipe relative to the reservoir, substantially as described.

2. The combination with a reservoir provided with inwardly-projecting flanges at its lower end, of a casting forming the bottom of said reservoir, said casting resting upon, and being secured to, said flanges, a downwardly-extending nose on said casting, a pipe whose upper end passes through said nose, and is flanged outwardly to lock said pipe in position, the seam or joint of the metal forming said pipe being received in a groove in said nose to prevent rotary movement of the pipe relative to the reservoir, a curb-wall against which the front wall of the reservoir rests, a spout, and means for clamping the reservoir and spout to the curb-wall, substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 31st day of December, 1897.

CHARLES A. BARTLIFF.

Witnesses:
F. R. CORNWALL,
HUGH K. WAGNER.