

No. 621,380.

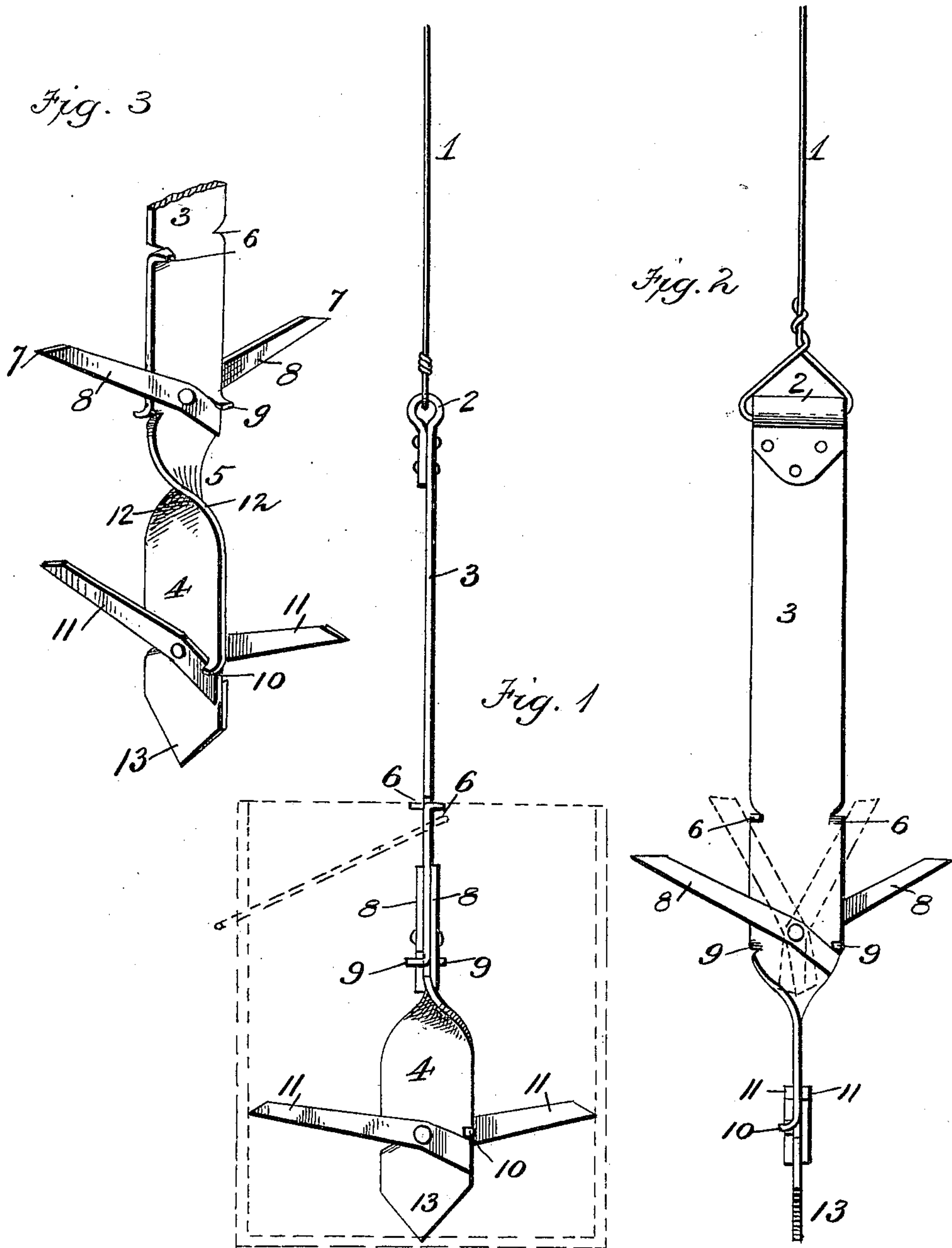
M. V. SHOFFNER.

Patented Mar. 21, 1899.

DEVICE FOR RAISING BAILLESS BUCKETS FROM WELLS.

(Application filed May 14, 1898.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

MUNROE VAUGHN SHOFFNER, OF NEAR QUITMAN, ARKANSAS, ASSIGNOR
OF ONE-HALF TO RUFUS A. JACKSON AND ADAM GUTHRIE, JR.

DEVICE FOR RAISING BAILLESS BUCKETS FROM WELLS.

SPECIFICATION forming part of Letters Patent No. 621,380, dated March 21, 1899.

Application filed May 14, 1898. Serial No. 680,741. (No model.)

To all whom it may concern:

Be it known that I, MUNROE VAUGHN SHOFFNER, a citizen of the United States, residing near Quitman, in the county of Cleburne and State of Arkansas, have invented certain new and useful Improvements in Devices for Raising Bailless Buckets from Wells; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is a device for raising buckets from wells, whether with or without bails; and it consists of a spirally-constructed dart which has arms pivoted thereto and adapted to be sunk into a well and withdrawn by means of a cord.

In the accompanying drawings, Figure 1 is an edge perspective view of my invention sunk into a bucket with the arms open. Fig. 2 is a face perspective view with the arms open. Fig. 3 is a perspective view of the lower part or dart end of my invention with the arms open.

When a bucket is dropped down into a well, this device is sunk into the water dart end foremost, and as soon as it enters the bucket and the dart end strikes the bottom the arms fly open and catch against the inner face of the wall of the bucket and bring the bucket out.

If the bucket is cone-shaped, so that the arms will not catch, or is lying on its side or bottom upward, the dart is let fall with such force as to drive itself through the bucket.

My invention is described as follows:

1 is the rope attached to the upper end of the device.

2 is the loop end of the device.

3 is the plate above the arms.

The lower part 4 of the device is twisted at the point 5 until the edge of the part 4 is at right angles to the plate 3. The plate 3 has each edge cut at an angle, and the part cut is

turned out, forming shoulders 6 for the points 7 of the arms 8 to rest against to prevent them from passing too far over on the plate. The arms 8 are pivoted, one on each side of the plate, a short distance—say, six, eight, or ten inches—below the shoulder 6. At the point where these two arms are pivoted to the plate the edges of the plate are again cut, and the parts thus cut are turned out, forming shoulders 9, under which the short ends of the arms catch, preventing the arms from falling too low. The lower part of the plate 4 is again cut, forming shoulders 10. At this point the lower arms 11 are pivoted to the bar and their upper ends catch in the twist 12, which keeps them from going too far upon the plate, the construction being such that the arms never stand entirely parallel to the plate, so that they may fall of their own weight, and they never fall at right angles with the plate. The lower end of the plate is cut to a sharp point 13, so that it may penetrate the bucket, if necessary. The dotted lines 14 represent the bucket.

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

The combination of the plate 3, having the loop end 2, and sharp end 13; its lower part 4, twisted at right angles to the part 3; cuts in the plate forming shoulders 6, 9, and 10; arms 8, pivoted to the plate above the twist, their short ends catching under the shoulders 9; arms 11, pivoted to the part 4, of the plate, at right angles to the arms 8, and their short ends catching under the shoulders 10, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

MUNROE VAUGHN SHOFFNER.

Witnesses:

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