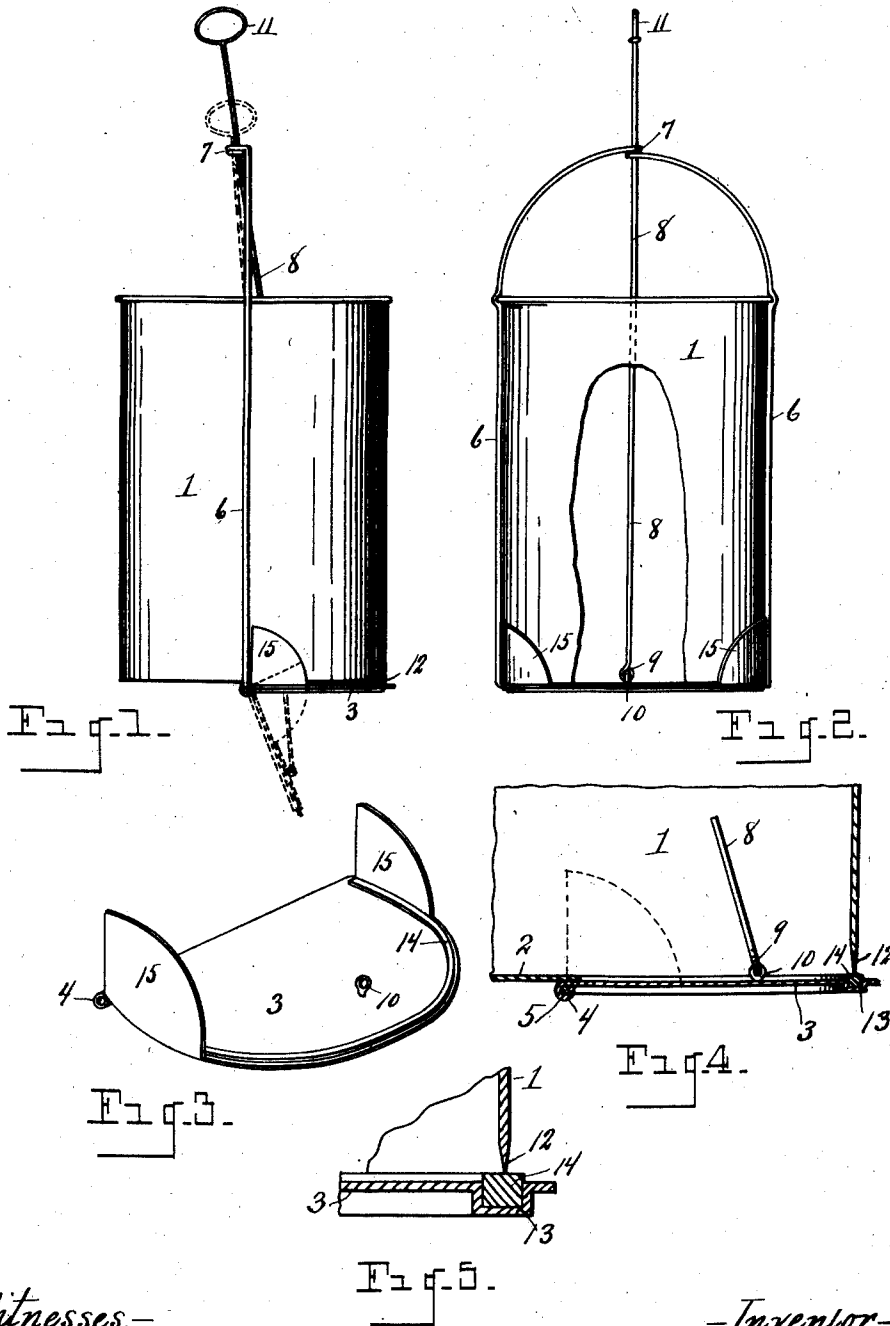


No. 879,144.

PATENTED FEB. 18, 1908.

J. CHAMBERLIN.
BUCKET.

APPLICATION FILED APR. 2, 1906.



-Witnesses.-
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UNITED STATES PATENT OFFICE.

JOHN CHAMBERLIN, OF FLAT ROCK, MICHIGAN.

BUCKET.

No. 879,144.

Specification of Letters Patent.

Patented Feb. 18, 1908

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To all whom it may concern:

Be it known that I, JOHN CHAMBERLIN, a citizen of the United States, residing at Flat Rock, in the county of Wayne, State of Michigan, have invented certain new and useful Improvements in Buckets; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

This invention relates to a dipper or bucket with a hinged bottom, especially designed for use in feeding slop to stock, and in the handling of fluid substances, and consists in the construction and arrangement herein-
after fully set forth and claimed.

The object of the invention is to provide a bucket of simple and inexpensive construction which will serve in a sense as a dipper and wherein the arrangement is such as to enable it to be filled by forcing it bottom downward into a receptacle of slop or other fluid substance, the hinged portion of the bottom being adapted to be opened to permit the bucket to fill and closed to hold the contents therein until carried to the place of feeding or other place of deposit.

A further arrangement provides for discharging the slop or fluid contents from the bucket into a trough or other receptacle without wasting it, and without the liability of spilling it upon the clothes of the operator.

The above object is attained by the structure illustrated in the accompanying drawing, in which:—

Figure 1 is a side elevation of a bucket involving my invention. Fig. 2 is a front elevation, part of the wall of the bucket being broken away, to show the connection of the actuating rod with the hinged portion of the bottom. Fig. 3 is a perspective view of said hinged portion. Fig. 4 is an enlarged transverse section through the lower portion of the bucket and the hinged bottom. Fig. 5 is an enlarged fragmentary view in section, showing the sharpened lower edge of the wall or body of the bucket and a rubber strip in the hinged portion of the bottom which closes against the sharpened edge to prevent leakage.

Referring to the characters of reference,

1 designates the body of the bucket which is preferably made cylindrical and which is provided with a fixed bottom portion 2 of the bottom and is provided on its straight edge with a rolled eye 4 which lies under the projecting edge of the fixed portion 2 of the bottom and receives the inwardly-turned ends 5 of the bail 6, said bail extending upwardly on each side of the bucket and being provided with a coil 7 at its arched central portion.

Passing centrally through said eye 7 is an actuating rod 8 whose lower end is provided with a hook 9 that engages in an eye 10 secured to the hinged portion 3 of the bottom. At the upper end of the rod 8 is a loop 11 which forms a handle by means of which the bucket may be carried. It will be noted that when the bucket is carried by the handle of the rod 8, the entire weight thereof is supported by the eye 10 in the hinged portion of the bottom, whereby said hinged portion is held tightly closed.

To assist in making a tight joint where the hinged portion of the bottom meets the lower edge of the body of the bucket; said lower edge is sharpened, as shown at 12 in Figs. 4 and 5, and said bottom portion is provided in its margin with a channel 13 in which is seated a washer 14 of rubber or analogous material which, when the hinged portion of the bottom is closed will bear against the sharpened lower edge 12 of the bucket, making a tight closure that prevents the escape of the contents.

This bucket may be filled by forcing it downwardly into a receptacle of slop or other fluid substance, through a downward pressure upon the rod 8, the resistance offered by the solid portion of the bottom causing the hinged part to open by the pressure on said rod and the bucket to fill by the entrance of the fluid through the opening in the bottom. When the bucket shall have been sufficiently filled, the bottom is closed by pulling upwardly upon the handle of the rod 8, the sharpened lower edge 12 cutting through vegetable parings or other substances that might prevent the proper closing of the bottom. As the bucket is carried by means of the handle 8, pressure is always maintained upon the bottom to keep it closed. When it is desired to discharge the contents of the bucket, the bail 6 is grasped in one hand and the rod 8 actuated to swing

the hinged portion of the bottom downwardly and permit the contents of the bucket to pass therefrom, or the contents of the bucket may be discharged by setting the solid portion of the bottom on the edge of the trough or receptacle and releasing the rod 8.

To prevent the contents of the bucket rushing out at the sides when the bottom is opened, said bottom is provided with the curved fenders 15 which are secured to the opposite edges thereof near its hinged margin and which close the opening between the hinged bottom and the lower edge of the bucket on the sides as the hinged bottom swings downwardly, thereby preventing the escape of the contents of the bucket at the sides and directing the contents forwardly through the major portion of the opening formed by the downward movement of the hinged bottom.

It will be noted that because of the position of the eye 4 which forms the hinge of the movable part of the bottom under the inner edge of the fixed portion of the bottom, a tight joint is made between the hinged and fixed parts of the bottom when the hinged part is closed for the reason that said parts are brought into close contiguity, as shown in Fig. 4.

Having thus fully set forth my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A bucket having a bottom comprising a fixed part and a movable part, the movable part of the bottom being hinged to swing downwardly, a single actuating rod rigid throughout its entire length jointedly attached directly to the movable part of the bottom at its lower end and provided at its upper end with a handle rigidly connected thereto, and means for guiding said rod.

2. A bucket having a bottom, comprising a fixed part and a movable part, a bail secured to the bucket having a guiding eye therein, disposed centrally of the bucket, a single actuating rod rigid throughout its entire length passing freely through said eye and jointedly attached at its lower end directly to the movable part of the bottom, said rod having at

its upper end a handle by means of which the bucket may be carried.

3. The combination of a bucket having a bottom comprising a fixed part and a movable part hinged to the fixed part, a bail attached to the bucket forming the pintle of said hinge and having a guide formed in its upper portion, a stiff actuating rod passing through said guide and jointedly attached at its lower end to the hinged portion of the bottom, the upper end of said rod having a handle for carrying the bucket.

4. The combination of a bucket having a bottom comprising a fixed portion and a hinged portion, said hinged portion having a gasket to engage the lower end of the bucket when closed to prevent escape of the fluid contents of the bucket the lower edge of the bucket being sharpened where engaged by said gasket and a stiff actuating rod jointedly attached to the hinged part of the bottom and passing upwardly through the bucket.

5. The combination of a bucket having a bottom comprising a fixed part and a hinged part, a stiff actuating rod jointedly attached to the hinged part and passing upwardly through the bucket, said rod having a handle at its upper end, means for supporting said rod and fenders to prevent a sidewise escape of the contents of the bucket when hinged portion of the bottom is opened.

6. A bucket having a bottom provided with a hinged portion to close against the lower edge of the bucket, said lower edge against which said hinged portion closes being sharpened, a vertically movable actuating rod jointedly attached at its lower end to the hinged portion of the bottom, a guide for the upper end of said rod centrally disposed with respect to the bucket, and a carrying handle at the upper end of said rod.

In testimony whereof, I sign this specification in the presence of two witnesses.

JOHN CHAMBERLIN.

Witnesses:

JAMES E. OSBORN,
FRANK L. EDWARDS.