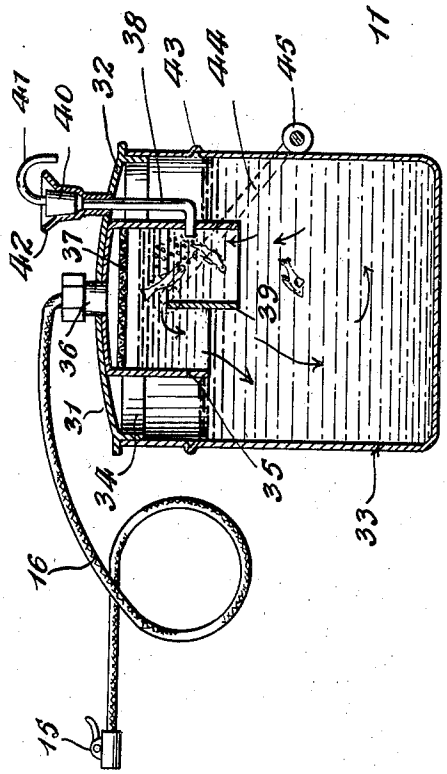
July 9, 1935. P. V. CARPENTER 2,007,326

AUTOMATICALLY AERATED MINNOW BUCKET

Original Filed July 30, 1932

Fig. 1.



INVENTOR:

Purva V. Carpenter,

H. L. Woodward,

ATTORNEY.

Patented July 9, 1935

2,007,326

UNITED STATES PATENT OFFICE

2,007,326

AUTOMATICALLY AERATED MINNOW BUCKET

Purva V. Carpenter, Dallas, N. C.

Application July 30, 1932, Serial No. 626,826
Renewed May 13, 1935

2 Claims. (Cl. 43—56)

The invention relates to means for preserving minnows for fishermen while on long trips by motor on land, or by motor boat. It aims to present a novel device for containing minnows arranged to be maintained in thoroughly aerated condition without the need for hand pumps, compressed oxygen cylinders or the like, but by utilizing a simple connection to the inlet manifold of the motor of the vehicle or boat on which the minnows are being transported.

It is a special aim to present a simple construction of this order novel and adapted to ready use by inexperienced persons, which will operate efficiently for the ends in view.

It is a purpose to present the appliance in such form that it may readily be connected to various motors, of automobiles and boats without difficulty. Another object is to arrange the device so that it may be quickly opened and closed for removal of bait, as required.

Additional objects, advantages and features of invention reside in the construction, arrangement and combination of parts involved in the embodiment of the invention as will be understood more fully from the following description and accompanying drawing, in which,

The figure is a sectional view of a bucket constructed in accordance with my invention.

There is illustrated a universal lid 31 which may be placed on buckets of various kinds, without requiring a watertight fit between the lid and the bucket. In this instance, the bucket 33 is a simple receptacle of any desired manufacture suitable to carry minnow bait. The lid has a central domed part 32 (although this is not essential), and is adapted to be set loosely on the upper edge of the receptacle to which it may be fitted frictionally or centered if desired by means of a flange 34 engaging the upper edge portion of the wall of the bucket. The lid is fitted with a barometric chamber or bell 35, which extends a distance downwardly within the bucket and is spaced from the wall of the bucket a sufficient distance so that the content of the bucket above the plane of the bottom of the bell is substantially less than the content of the bell. A hose 16 is connected to a central outlet 36 at the top of the bell, and a screen 37 is extended across the bell closely below the outlet 36. An inlet tube 38 is extended through the lid 32 between the bell and the flange 34, and then inwardly through the wall of the bell near the bottom of the latter, projecting only slightly within the bell. Extending from the wall of the bell horizontally on one side of the discharge end of the tube 38 inwardly and recurved horizontally to join the wall at the opposite side of the tube, there is a flue piece or wall 39 in the form of a sheet attached at its ends to the wall of the bell so as to form a flue open at top and bottom, its bottom being in a plane with the bottom of the bell or extending therebelow, while the top of the flue stops a short distance above the bottom and below the normal range of the water level in the bell when quiescent.

The upper end of the tube 38 is enlarged to receive a removable tubular plug 40 to which there is fitted a goose-neck pipe 41 forming a continuation of the tube 38 while the enlargement is continued thereabove in the form of a funnel 42. A rib 43 may be formed on the bucket to indicate a normal water level, which may be from one-quarter to one-third the height of the bell 35 above the bottom thereof when the lid is in place.

In the use of the last described form of the device, the bucket being properly filled and the minnows introduced, the lid is put in place as illustrated, and the hose 16 connected by a suitable fitting 15 with the manifold of an internal combustion motor, or other air exhausting means, the goose-neck 41 being in place.

Air is exhausted from the bell partly, permitting atmospheric pressure acting on the surface between the bell and bucket wall to force the water upwardly within the bell. When the water around the bell in the bucket reaches a level near the bottom of the bell, air will be drawn in through the tube 38, bubbling upward from the end thereof through the body of water 44 within the bell. This causes an upward current of water from below the bell through the flue 39, the water passing laterally from the flue within the bell and thence downward into the water within the bucket, thus causing a thorough circulation of the whole body of water in the bucket, and distribution of the aerated water throughout the bucket. It is desirable to make the flue 39 of a size sufficient for minnows to move about therein, so that, they may gain access to the train of bubbles rising from the tube 38. The bucket 33 may be provided with a bail 45, if desired.

The construction of the article may be modified in various ways within the scope of the claims, it will be apparent, without departing from the spirit of the invention, and various materials employed appropriately for the several parts.

I claim:—

1. In a device of the character described, a receptacle, a lid therefor, a barometric bell on the lid extending downwardly in the receptacle, an air exhausting connection with the top of the bell, and an inlet tube from the atmosphere opening within the bell near its lower part.

2. In a device as set forth in claim 1 a flue element formed within the bell extending upwardly over the discharge end of the inlet tube, and stopping short of the normal range of water level in the bell at its upper end.

PURVA V. CARPENTER.