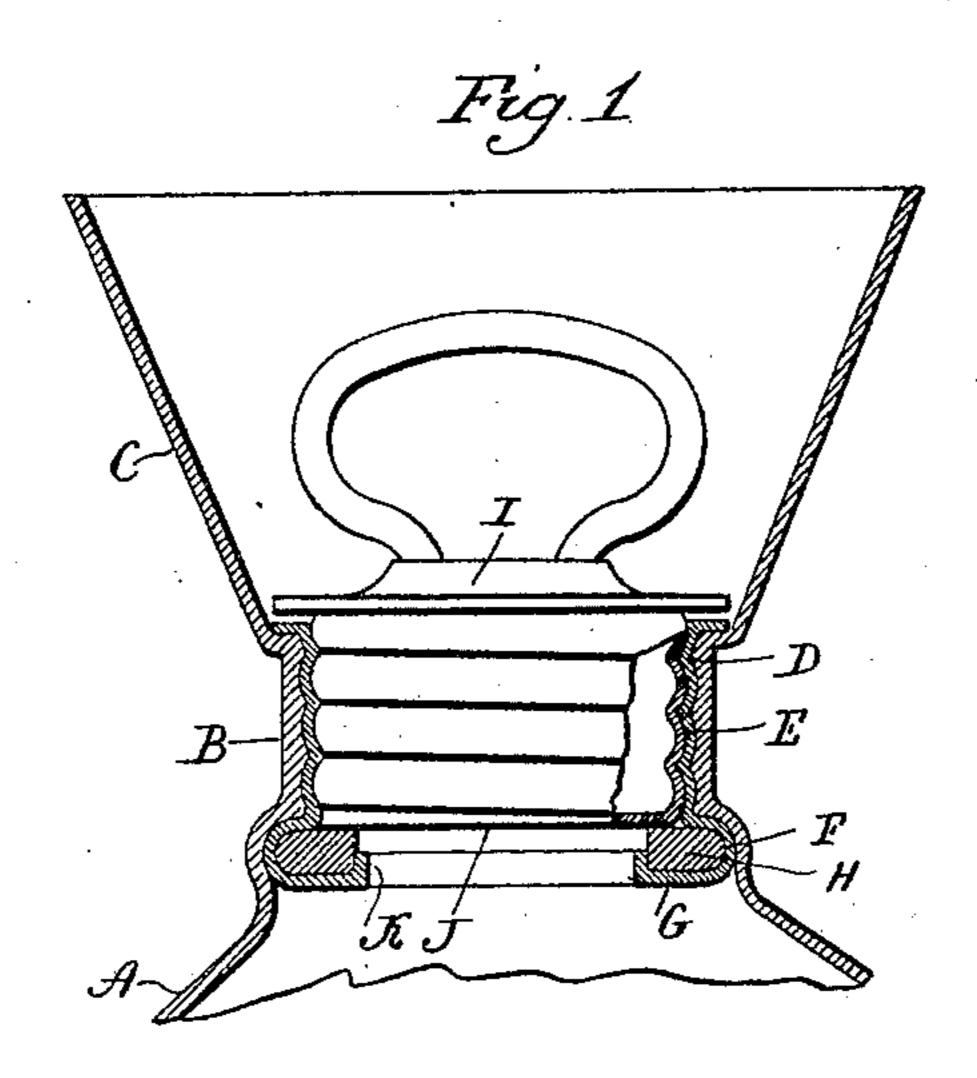
No. 682,854.

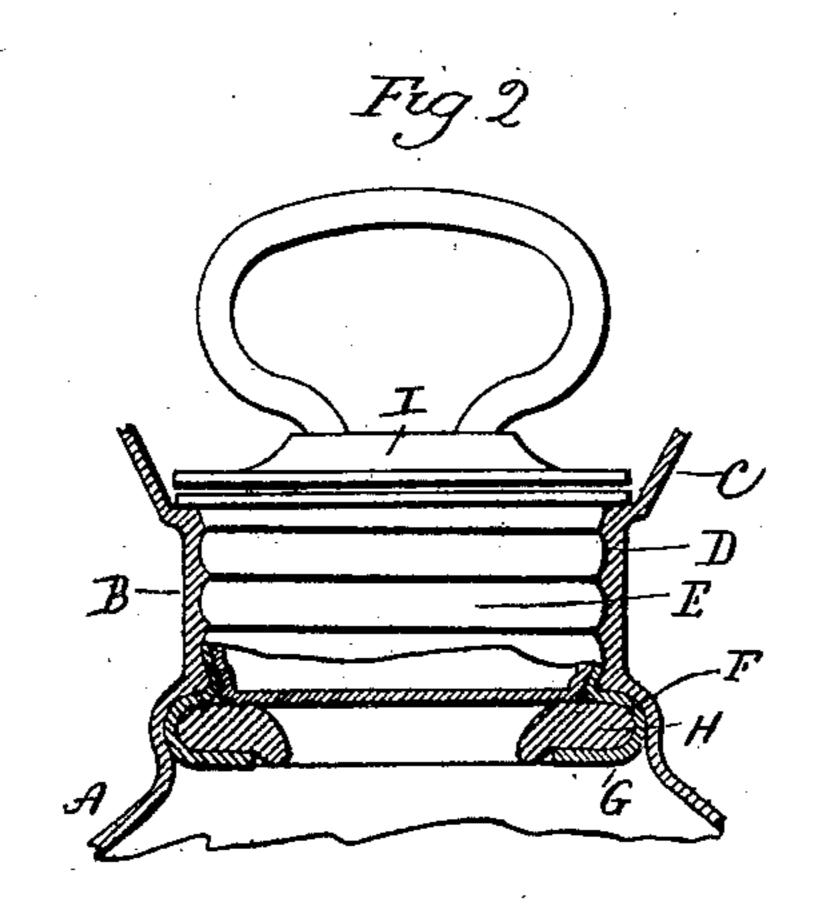
Patented Sept. 17, 1901.

C. E. LONGDEN. STOPPER FOR WATER BAGS.

(Application filed June 17, 1901.)

(No Model.)





Witnesses Lillian D. Helsey. Charles & Longson.
Inventor.
Or atty Segmon Tearer

United States Patent Office.

CHARLES E. LONGDEN, OF HAMDEN, CONNECTICUT.

STOPPER FOR WATER-BAGS.

SPECIFICATION forming part of Letters Patent No. 682,854, dated September 17, 1901.

Application filed June 17, 1901. Serial No. 64,843. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. LONGDEN, of Hamden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Stoppers for Water-Bags; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a broken sectional view of the upper part of a water-bag with a plug and nipple therein constructed in accordance with my invention, and Fig. 2, a similar view illustrating the previous construction of nipples, which it is the object of this invention to im-

prove.

This invention relates to an improvement in stoppers for water-bags, such as include a nipple which is secured within the mouth of the bag, a rubber ring or washer in the bottom of the nipple, and a plug adapted to be 25 screwed into the nipple to a bearing upon the ring, which forms a packing around the edge of the plug and is an improvement upon the invention for which Letters Patent of the United States No. 626,069, were granted May 30 30, 1899, upon my application. With nipples constructed in accordance with that patent the downward pressure of the plug upon the ring compresses the rubber of which the ring is composed and squeezes it out of the 35 nipple into the opening therein, which therefore contracts the size of the opening, and should there be any irregularity in the face of the plug the bag is liable to leak, and in any event the ring soon becomes destroyed. The object of this invention is to provide for holding the rubber packing-ring in posi-

As usual with water-bags of this class, the bag A is formed with a neck B and flaring mouth C. Within the neck is a nipple D, formed, like the nipple described in my previous patent, with rolled screw-threads E, which not only provide internal threads for the plug, but form an irregular external surface for engagement with the neck of the

bag. At the bottom of the nipple is an an-

tion and prevent its being squeezed out of

the bottom of the nipple; and it consists in

the construction, as hereinafter described,

nular recess F between the sides of the nip- 55 ple and the bottom G, which supports a ringlike washer H, which forms a packing for the usual plug I, which is adapted to be turned into the nipple, and is formed with a flat lower face J to bear upon the washer H. As 60 thus far described, the construction is the usual one; but around the opening formed in the bottom G of the nipple I turn the metal inward to form a flange K, which surrounds the inner edge of the washer and projects up- 65 ward about half the thickness thereof. This flange holds the packing washer or ring in position and prevents its being pressed outward into the opening through the bottom of the nipple, and hence always holds the ring 70 in proper position to be engaged by the bottom of the plug and insures a tight joint between the plug and the nipple. It is apparent without illustration that instead of a continuous flange, as shown, a number of fin- 75 gers or points might be turned upward from the bottom of the nipple with practically the same effect as the continuous flange.

In Fig. 2 of the drawings I have illustrated the nipple constructed in accordance with my 80 previous patent, showing the effect of compressing the washer or ring by the plug, which forces the rubber into the opening in the bottom of the nipple. My improvement prevents the mutilation of the ring, and hence 85 materially increases its wearing capacity.

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

The combination with a water-bag, of a nip-90 ple secured in the neck thereof, said nipple formed with an internal annular chamber at its lower end, a central opening in its bottom, and also constructed with an extension projecting upward from the bottom around the 95 said opening, a packing-ring within said chamber at the bottom of the nipple in which it is confined by said upward extension, and a plug adapted to be turned into the nipple to a bearing upon said ring, substantially as 100 described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES E. LONGDEN.

Witnesses:
FREDERIC C. EARLE,
LILLIAN D. KELSEY.