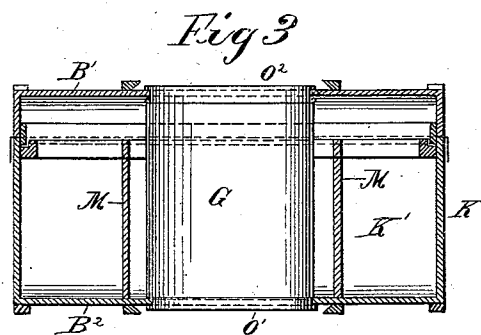
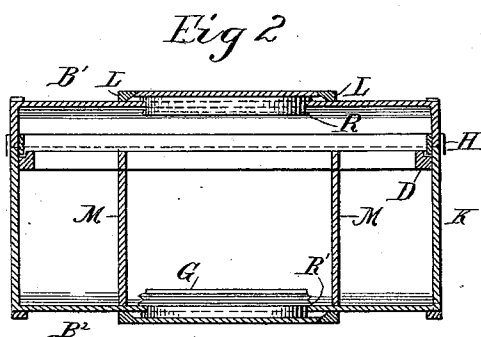
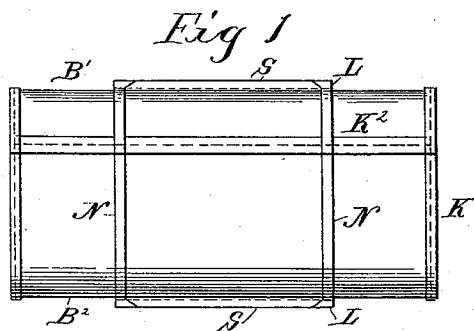


(No Model.)

P. KRENKEL.  
LIFE PRESERVING TRUNK.

No. 492,688.

Patented Feb. 28, 1893.



Witnesses  
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# UNITED STATES PATENT OFFICE.

PAUL KRENKEL, OF LEIPSIC, GERMANY.

## LIFE-PRESERVING TRUNK.

SPECIFICATION forming part of Letters Patent No. 492,688, dated February 28, 1893.

Application filed May 18, 1892. Serial No. 433,485. (No model.)

*To all whom it may concern:*

Be it known that I, PAUL KRENKEL, a subject of the King of Saxony, residing in Leipsic, in the Kingdom of Saxony, Germany, have invented certain new and useful Improvements in Life-Preserving Trunks; 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, which form a part of this specification.

My invention relates to a combined trunk and life saving apparatus, and my object is to produce a device which will be effective, yet simple and compact.

With this end in view my invention consists in the peculiar features and combinations of parts more fully described hereinafter and pointed out in the claims.

In the accompanying drawings: Figure 1 represents a side elevation of my invention. Fig. 2 represents a longitudinal section of the same, the flexible tubing being shown as resting upon the bottom of the trunk. Fig. 3, represents a similar view, the tubing being shown extended and in the position it assumes when the trunk is used as a life preserver.

The reference letter K represents a watertight trunk divided into an upper compartment K<sup>2</sup> and a lower compartment K'. The lower compartment is still further divided by partitions M, forming compartments in either end thereof. The trunk is strengthened by exterior straps N, and the upper and lower faces B', B<sup>2</sup> of the trunk are provided with cleats L at about their centers, in which slide covers S, closing the man-hole at its upper and lower openings O' and O<sup>2</sup>. In the upper opening O<sup>2</sup> there is rigidly inserted a ring R, provided at its lower edge with a circular flange, the purpose of which will be described hereinafter. Also secured in the lower opening O' is another ring R', to which is secured a flexible tubing G, made of rubber or other suitable water-tight material, and which folds upon the lower ring R' when not in use. The cover is made waterproof where it joins the lower compartment K' by means of an over-

lapping flange H extending entirely around its edge, both on the exterior and interior and the interior flange engages packing D, which makes a water-tight connection, thus keeping the interior of the trunk in a perfectly dry condition. The upper end of the tubing G is preferably provided with a flexible ring, which when the tubing is drawn up, as when in use, will spring over the flange on the lower side of the ring R, thereby holding the tubing securely to the upper ring.

When using my device as an ordinary trunk, the lids or covers S are placed between the slides L, thereby closing the openings O' and O<sup>2</sup>, and the tubing G rests upon the lower ring R'. The trunk can now be packed with clothing &c., with safety. If upon a voyage the ship should catch fire, or other accident happen, the owner need only remove the covers S, and draw the flexible tubing up over the flange on the ring R, and step into the man-hole thus formed, his feet passing through the opening O'. The trunk is drawn up under the occupant's arms, which extend over the sides of the trunk, thereby allowing them free and unrestricted movement. The bottom of the trunk does not extend below the occupant's waist, owing to shallowness, and he has therefore unrestricted movement of his lower as well as his upper limbs, whereby he is enabled to walk to the edge of the ship, and if it becomes necessary he can readily jump off, the air-tight trunk forming a buoy which will keep him from sinking.

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

1. A combined life preserver and trunk consisting of a shell, openings in the upper and lower faces of the shell, and collapsible tubing secured to the edge of one of said openings and arranged to extend through the shell and be secured to the edge of the opposite opening, in the manner and for the purpose set forth.

2. A combined life preserver and trunk consisting of a shell, openings in the upper and lower faces of the shell, collapsible tubing secured to the edge of one of said openings and arranged to extend through the trunk and be

secured to the edge of the opposite opening, and covers for closing said openings, in the manner and for the purpose set forth.

3. The combination in a combined trunk  
5 and life preserver, consisting of a hollow shell  
provided with a man-hole through the body  
portion thereof, covers for closing said man-  
hole, flanged rings secured to the upper and  
lower edges of the man-hole, and flexible tub-  
10 ing adapted to engage said rings, whereby

the same is kept in extended position, substantially as described.

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

PAUL KRENKEL.

Witnesses:

CARL BORNGRAEBER,  
WILLIAM KASTEN.