(No Model.)

W. VON RÜDIGER.

ANTICAPSIZING AND LIFE SAVING APPLIANCE FOR SMALL BOATS.

No. 554,349. Patented Feb. 11, 1896.

Fig. 1.

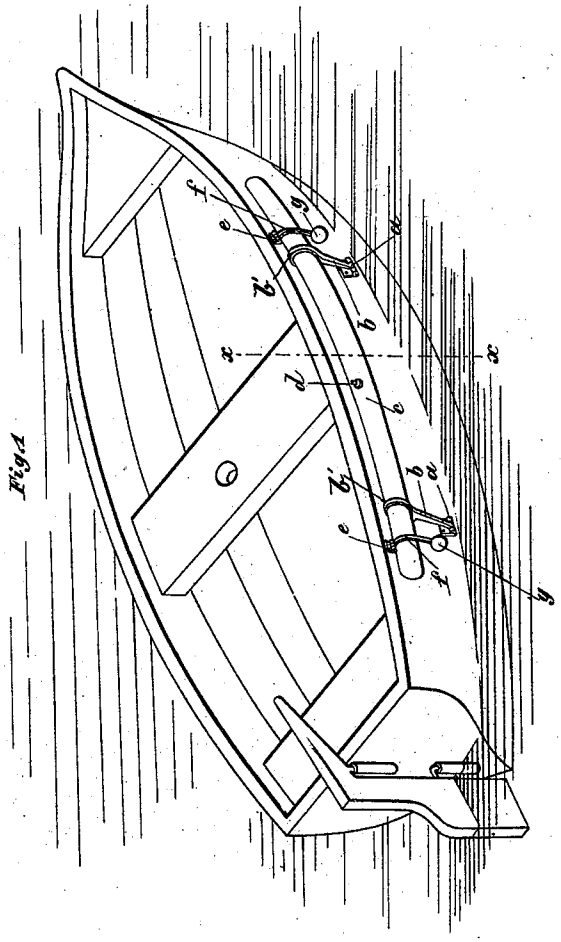
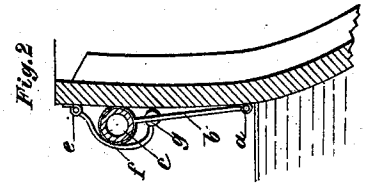


Fig. 2.



Witnesses:-
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UNITED STATES PATENT OFFICE.

WALDEMAR VON RÜDIGER, OF HALLE-ON-THE-SAALE, GERMANY.

ANTICAPSIZING AND LIFE-SAVING APPLIANCE FOR SMALL BOATS.

SPECIFICATION forming part of Letters Patent No. 554,349, dated February 11, 1896.

Application filed September 8, 1894. Serial No. 522,499. (No model.) Patented in England July 23, 1894, No. 14,130; in Belgium August 31, 1894, No. 111,446; in Austria September 25, 1894, No. 44/5,128; in Hungary September 28, 1894, No. 1,274; in France November 29, 1894, No. 240,200, and in Germany January 9, 1895, No. 80,052.

To all whom it may concern:

Be it known that I, WALDEMAR VON RÜDIGER, station-master, of Halle-on-the-Saale, in the Kingdom of Prussia and German Empire, have invented a new and useful Anticapsizing and Life-Saving Appliance for Small Boats, (for which Letters Patent have been obtained in Germany, No. 80,052, dated January 9, 1895; in England, No. 14,130, dated July 23, 1894; in France, No. 240,200, dated November 29, 1894; in Austria, No. 44/5,128, dated September 25, 1894; in Hungary, No. 1,274, dated September 28, 1894, and in Belgium, No. 111,446, dated August 31, 1894,) of which the following is a specification, reference being had therein to the accompanying drawings.

The present invention relates to a simple and cheap device which can be easily applied to skiffs, boats, canoes, &c., for the purpose of preventing or lessening the risks of capsizing (upsetting) of the same, or if such capsizing or upsetting has already taken place of affording opportunity to the persons in the water of keeping themselves above water by holding onto the device.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a boat with my device applied thereto, and Fig. 2 is a section on the line *x x* of Fig. 1.

On each of the two sides of the boat two bands or arms *b*, terminating in loops *b'*, are mounted, so as to be movable about hinges *a* and carrying at their ends the tubes *c*, made of any suitable water-tight material and closed at their ends. These tubes are provided at *d* with valves for the purpose of inflating the tubes with air, and are advantageously situated around that part of the side of the boat where the latter has the greatest width of beam. The tube is fastened to the side of the boat by means of the following arrangement: Bent clips or bands *f* are attached by hinges *e* to the top edge of the side (*i. e.*, just below the gunwale) and are provided at their ends with weights *g* for the purpose of keeping the tubes *c* close up against the side of the boat while the latter is in its normal upright position. The length of the arms or bands *b* is such that the said bands are situated at a sufficient distance below the top edge of the side of the boat to prevent them from becoming damaged by the oars. This arrangement serves to prevent or lessen the risk of capsizing or upsetting of the boat, but if such capsizing or upsetting should, however, take place, the weights *g* will sink and swing, together with the bands *f*, outward about the hinges *e* in such a manner as to release the tubes *c*, which will then float on the top of the water, and thus allow of the persons thrown into the water by the capsizing of the boat catching hold of the tubes *c* and keeping themselves above water, so as to save themselves from drowning or sinking.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination with a boat, of a buoyant body, arms hinged to the boat and supporting said buoyant body at their upper ends, and weighted arms or clips also hinged to the boat and confining the buoyant body in a position adjacent to the side of the boat and adapted to release said body when the boat is overturned, for the purpose specified.

2. The combination with a boat, of a buoyant body, arms hinged at one end to the boat at a point below said body and adapted to swing outwardly from the boat, and said arms supporting said buoyant body at their upper ends, and arms or clips hinged at one end to the boat, weighted at their opposite ends and confining the buoyant body in a position adjacent to the side of the boat and adapted to release said body when the boat is overturned, as and for the purpose specified.

3. The combination with a boat, of a buoyant body, arms hinged at one end to the boat and having loops at their opposite ends through which the said buoyant body passes, and arms or clips hinged at one end to the boat and curved or bent so as embrace the buoyant body and hold it adjacent to the side of the boat, and carrying weights at their opposite ends, as and for the purpose specified.

4. The combination with a boat, of an elongated inflatable tube, a valve therein, arms hinged at their lower ends to the boat and ter-

minating at their upper ends in loops through which said tube passes, the latter lying below the upper edge of the boat, arms hinged at their upper ends to the boat and being curved outwardly and inwardly so as to embrace the said tube, and weights at the lower ends of the said latter arms, for the purpose specified.

In witness whereof I hereunto set my hand in presence of two witnesses.

WALDEMAR VON RÜDIGER.

Witnesses:
WILHELM PACKBUSCH,
RUDOLPH FRICKE.