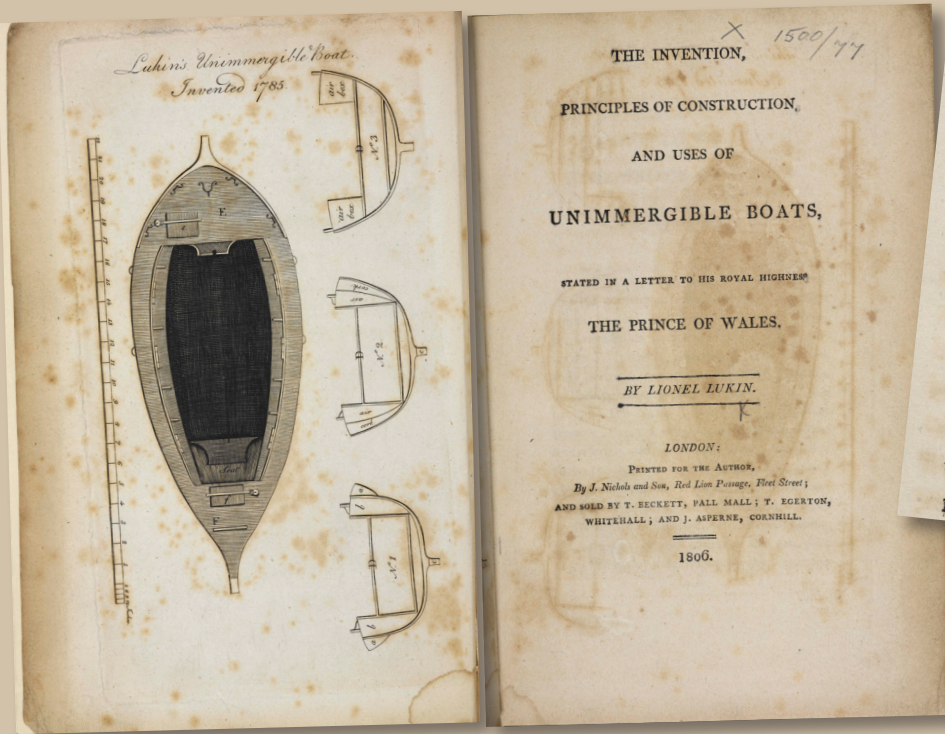


Source 5: Lukin's 'unimmergible' boat



In all cases of *shipwreck*, the power of carrying relief through the most violent surf, which may be done by these boats, must be productive of benefits evident to the least reflection. This particular part of the subject has already obtained considerable notice in the various discussions that have taken place respecting Life Boats; but even in this respect much remains to be done, and the number of valuable lives that might be saved every year by the general introduction and use of these boats on our extensive and dangerous coasts, is surely an object not unworthy the attention of a wise and humane Government.

Lukin's pamphlet
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Thursday se'nnight was launched the *Frances Anne* Life Boat, built at Lowestoft, under the direction of Mr. Lukin, of Long Acre, London, the original inventor and patentee of unimmergible boats. The weather was very unfavourable, an incessant and heavy rain falling all the day. From not so great as it would have been, though some gentlemen, animated by the noble wish of promoting the means for saving the lives of their fellow-creatures, came at a considerable distance to witness the success of the undertaking. At 12 o'clock the boat was launched, wind about S. E., and continued increasing all the time the boat was at sea. After sailing in various directions, she reached the North-end of Corton Sand, upon which the sea and surf were very high. The utility of the boat was eminently shewn in turning the whole length upon the sand without shipping any water. When she came off the sand, the plugs were taken up, and the water suffered to rise as high as the air casks, which were lashed within the boat, would allow. She then stretched under a press of sail to Pakefield; the water with which her bottom was filled, did not appear to retard her progress. There were 16 persons in the boat, including some gentlemen who had volunteered their services. Tho' all of them got over to the leeward side, and some of them stood on the gunwale, yet from all their weight, the press of sail and the plugs still open, her side was not depressed, nor did the water within increase. On her return near the shore, she was by means of buckets completely filled with water, and the intention was, whilst in that state, that she should receive as many persons on board as was possible. On account of the stormyness of the day, no boat could go off from the beach, but 4 more persons from another vessel were taken in. It is calculated she would have carried 50 persons with safety, when quite full of water. In the melancholy cases which are frequently occurring on this coast, there is every reason to conclude, that many lives will now be saved, which would otherwise be lost. The seamen too, will be enabled to render their assistance, on these occasions, with a

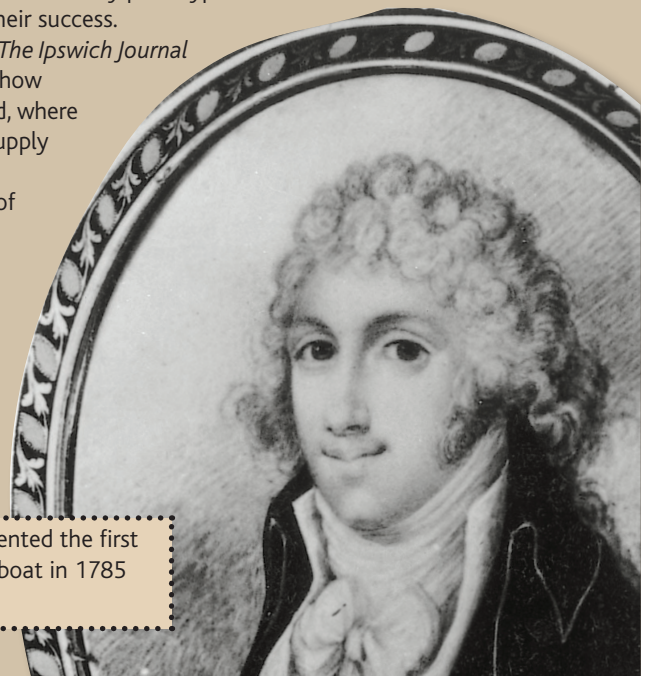
confidence and security to which they have been unaccustomed. Too great praise cannot be given to Mr. Lukin and Mr. Lionel Lukin, his son, for their unwearied attention in superintending the building of this boat, and for prolonging their stay at Lowestoft many weeks, for the sole purpose of seeing her finished. The boat has an iron keel, which serves her for ballast, with a contrivance of casks, placed at her bottom, to be filled with water when necessary to increase her ballast. Other air casks, for the purpose of buoyancy, and to prevent her sinking, though filled with water, are fixed round her inside. She has also projecting gunwales, with concealed air boxes, and cased with cork. Although the safety of a life boat depends very little upon her form, yet this boat is built after a model which the Lowestoft seamen consider to be best adapted to their shore, for rowing, for sailing, for stowage, and for every other useful purpose. The life boat built by Mr. Greathead, of Shields, 1800, and for which there was a very liberal subscription, was found on trial to be unfit for this coast, because of the distance from the sands on which the shipwrecks generally happen, and on account of the difficulty of rowing any boat from the shore, because of the strength of the current and surf. Mr. Lukin's boat is calculated to overcome all these obstacles. R. Sparrow, Esq. of Worlingham-hall, whose zeal and endeavours to promote the adoption of life boats have been unceasing, availed himself of the casual and temporary residence of Mr. Lukin at Lowestoft, to build the present boat. The funds arising from the old subscription, of which Mr. Sparrow was Treasurer, have, by this new undertaking, been exhausted. It is therefore incumbent upon the original subscribers to consider by what mode their benevolent intentions may be most effectually accomplished. There is no doubt that a liberal and humane public will be ready to aid their efforts, and that an appeal will be no sooner made to their countrymen, than their exertions will be shewn in supplying those funds which may provide for current expences, unavoidable accidents, and contribute to preserve the lives of our fellow-creatures, when most exposed to danger.

Lionel Lukin, a London coachbuilder, designed the world's first 'unimmergible' boat and patented it in 1785. Lukin built pockets of air and cork into the structure of the boat so that it would always float.

Four years later, the charitable Crewe Trust placed an order for him to adapt a coble (a type of fishing boat) to his 'unimmergible' design. From 1789, this coble was kept at Bamburgh in Northumberland for the purpose of saving lives from shipwreck.

In 1806, Lukin brings his pamphlet *The Invention, Principles of Construction, and Uses of Unimmergible Boats* to the attention of His Majesty The Prince of Wales to highlight the threat of life lost at sea. He describes the extensive experiments carried out by himself and others on early prototypes of this boat, proving their success.

An article in *The Ipswich Journal* in 1807 shows how Lukin continued, where requested, to supply 'unimmergible' boats to areas of Britain's coast.



Lionel Lukin invented the first 'unimmergible' boat in 1785
Courtesy: RNLI

Extract from *The Ipswich Journal*:
Saturday 28 November 1807
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1. The article in *The Ipswich Journal* describes the trial of Lukin's boat off the Suffolk coast. Why was this lifeboat suitable for this area of coastline?
2. Lukin used several methods to draw attention to his designs. What were they?
3. Imagine you had created such an important lifesaving invention. How would you plan to promote it and get it accepted?
4. How much have lifeboats changed since these early designs? Look at the RNLI's website RNLI.org to find out about current lifeboat design.
5. What has made the modern improvements to the RNLI's lifesaving equipment possible?