#### South Shields Volunteer Life Brigade

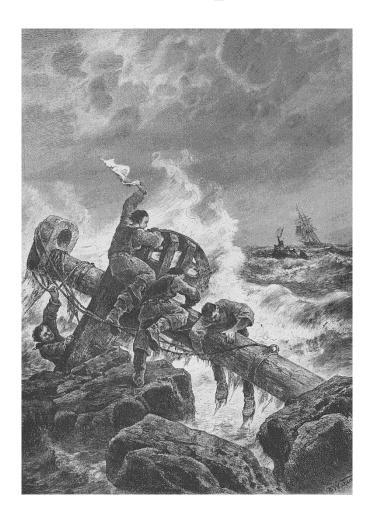


Established 1866

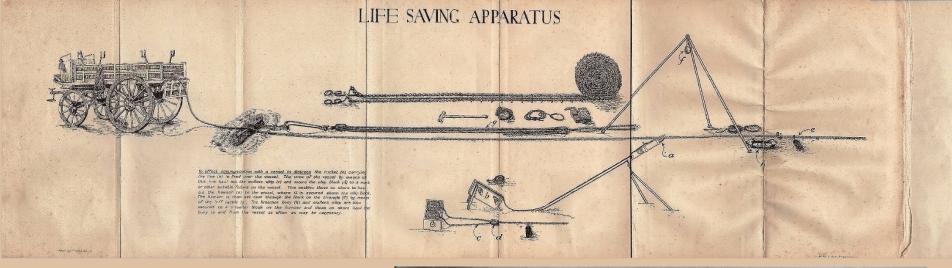
## **Ship to Shore Rescue**

The Equipment (Apparatus) 1855 to 1948

## **Ship to Shore Rescue**







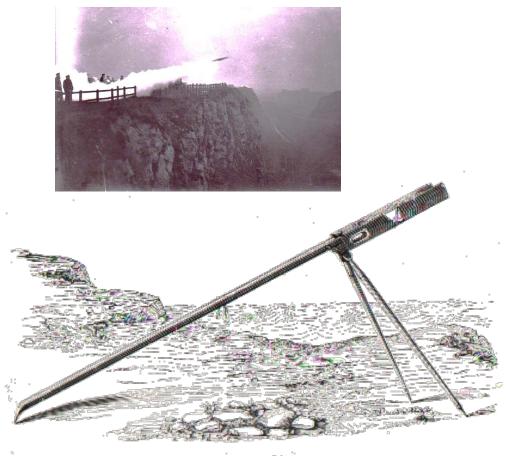
- Rocket & Launcher
- Rocket line
- Whip
- Hawser
- Anchor
- Luff (block and tackle)
- Tripod
- Breeches Buoy
- Tally boards
- Hawser cutter
- Other equipment
- L.S.A. Wagon



### **Rocket Launcher**

## Rocket Launcher and Rocket

During the years
these have come in
many forms but for
most of the period
of ship shore
rescue at South
Shields the Boxer
rocket and launcher
was used



Bookst Machine.

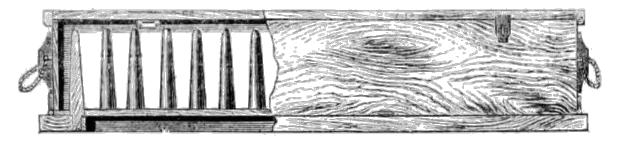
## **Rocket Line**

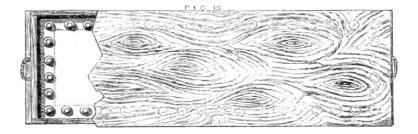
### Rocket

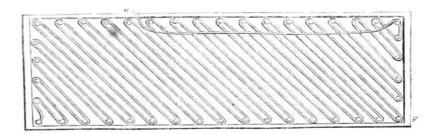


### Line

The son of John Dennette hit upon one of the best methods for both stowage and transportation of the line. This consisted of a rectangular wooden box with pins on a frame that joined to the box through a series of holes in the bottom of the box and could be removed before line was fired. This was one of the greatest contributions to the apparatus that John Dennette made





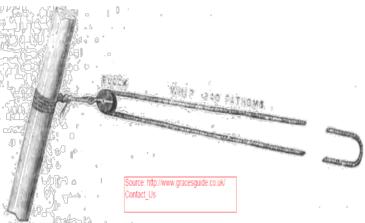


# The Whip

## The Whip or Endless Line

This was two lines of hemp each end lashed together in a box made of timber with a wooden block rove through with a rope tale, tied to the rocket line and signal made to crew on board to haul away. This was to be tied to one of ship's mast or the highest point on the ship available to its crew.



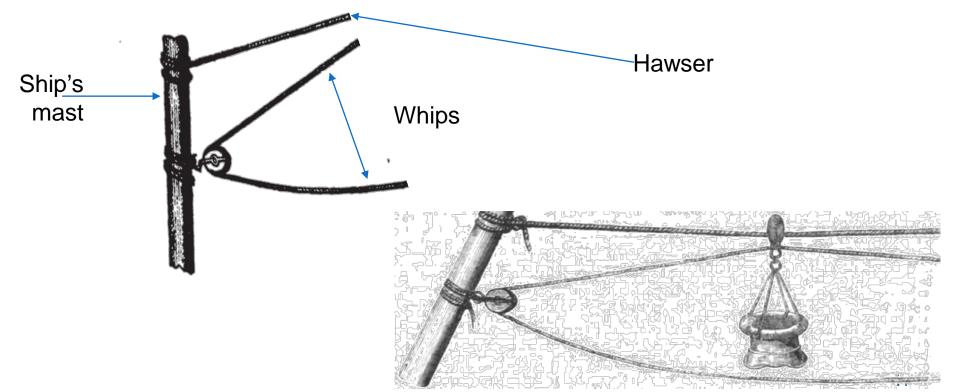




## Hawser

### Hawser

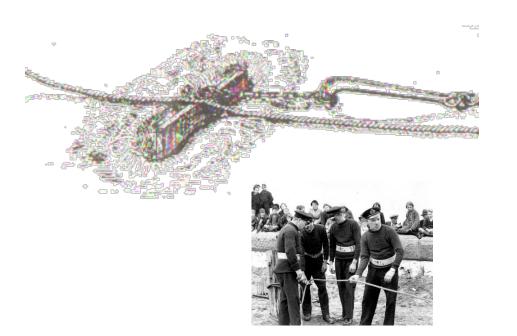
The Hawser was a line (Rope) which was tied to the whip at the shore side, so those on the shore can pull the hawser to the ship using the other whip, those on board the stricken vessel then tied it above the whip and signalled the shore when completed.



## Anchor

### **Anchor**

This was put in place by anchor section of the rescuers from the time of the crew on board signalling they had successfully located the rocket line. The anchor can consist of either a iron anchor and or a large board with a 6½ ft chain and steel ring





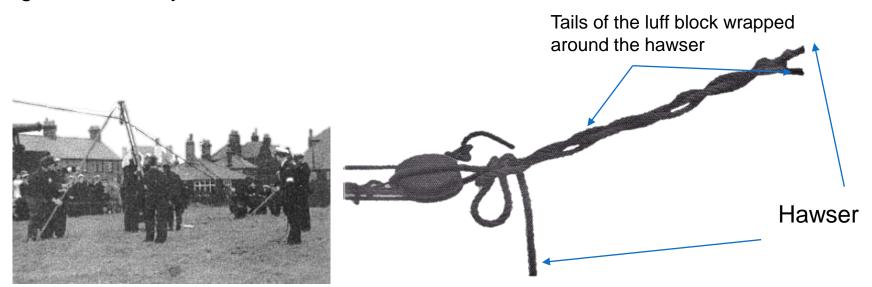
A large wooden post was sunk into the ground of the drill area at South Shields to act as anchor during practice drills and demonstrations

# Luff

## The Luff (Block and Tackle)

This consisted of two eight inch blocks (20 cm) one with a steel hook to enable it to be attached to the ring of the anchor or on chain of the board, the second block was fitted with two rope tails bent onto the hawser so that the hawser was attached to both the luff and anchor.

This would enable those on shore to keep the hawser taut at all times regardless of any movement of the vessel.



# Tripod

## Tripod (Triangle)



The Tripod originally known as the triangle was made of iron with an eye in the crown for the snatch block. This was provided in order to keep the hawser and breeches buoy clear of breakers and rocks. The rear leg has a Turk's Head worked in the centre and painted white from the Turk's Head to the foot.

The snatch block was a galvanised block fitted with a swivel hook to enable it to be hung from the tripod, the hawser was then placed into the block through.



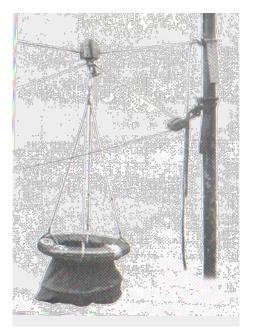


## **Breeches Buoy**

## Breeches Buoy

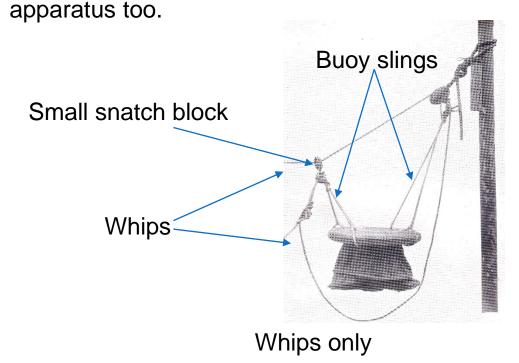


These were invented by Lieutenant Kisbee R. N. they consisted of a circular cork life buoy fitted with a pair canvas breeches and first named petticoat breeches but soon renamed breeches buoy



### **Breches Buoy used with Whips only**

This was necessary when the ship was in danger of breaking up and there was no time to wait for hawser to be hauled out and tied in place on-board, or when the masts had broken away and no other substantial object of any height could be used to tie the



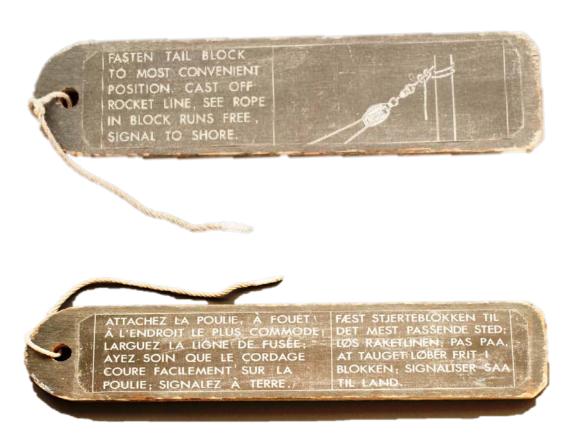
Whips tied off at highest point available

## Tally Boards

### Tally Boards

# The whip board

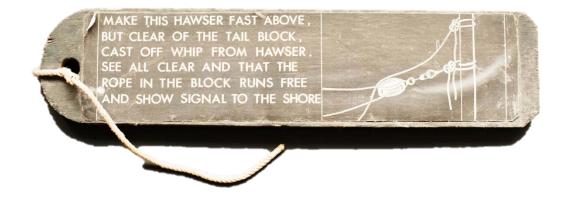
Used to instruct crews on how the whip block and tail were to be tied to the vessel. The instructions were in three languages, English, French and Norwegian.



### Tally Boards

# The hawser board

Used to instruct crews on how to tie the hawser in place. Also in the three chosen languages.



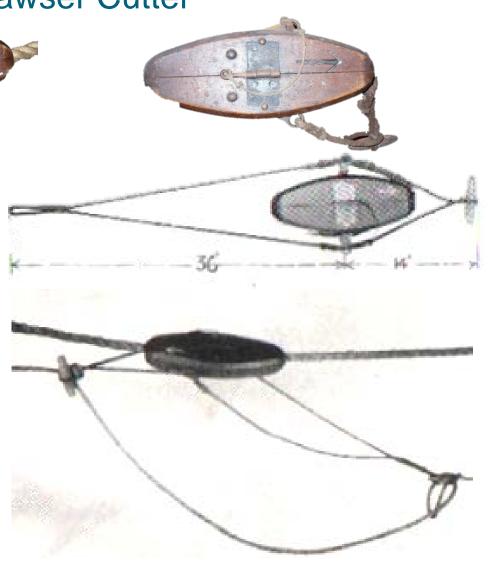


## Hawser Cutter

#### **Hawser Cutter**



Used to recover the lines from a shipwreck leaving only a small length of hawser and the tail block from the whip.



#### Development of the Hawser Cutter

#### James Pengelly

A commissioned boatman at Penzance developed the first cutter as means of recovering the lines once rescue had been completed

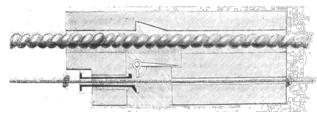


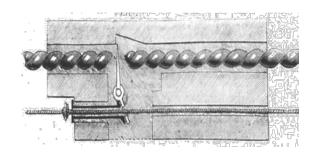


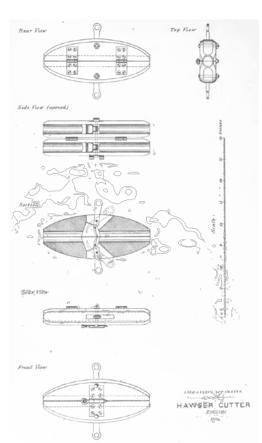
The first diagram shows
Pengelly's cutter being hauled
off, and the second diagram how
the cutter worked.

## The Improved Cutter

This appears to be a combination of both a Rev. Hicks of T.V.L.B. and Thomas Gray of H.M.C.S. work on improving the cutter.





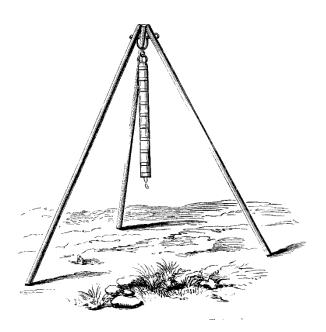


The final design adopted by the Board of Trade for all stations

# Other Equipment

## Other Equipment

#### Lighting Tripod



#### Water Breaker

This would hold three gallons of fresh water for use of wetting the end of the rocket line.

#### Life Belt

This was standard cork and canvas covered buoy with a life line with a splice eye at one end and a Turk's Head knot at the other.

#### Signal Flag Red

This was used during daylight hours to answer signals from the vessel. {at night a lantern with a red lens was Used}

# The Apparatus Cart



## The Apparatus Cart

- Formerly referred to as the L.S.A. Waggon
- Fitted with good springs this enable the waggon to be taken over rough and broken ground
- Could be towed either by a team of two or four horses
- •Man hauled using central pole shafts and harnesses attached to front wheels.



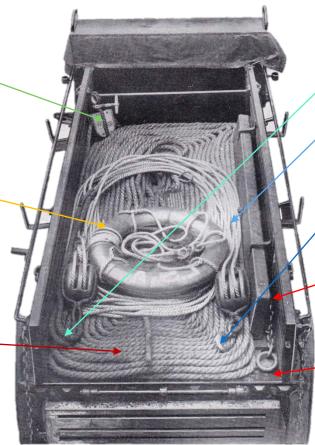
## **Apparatus Cart**

Plan view of inside of the cart's loading bay

Traveller Block

Breeches buoy

Hawser



Luff block tails to connect to hawser

Luff

Luff block with to connect with anchor

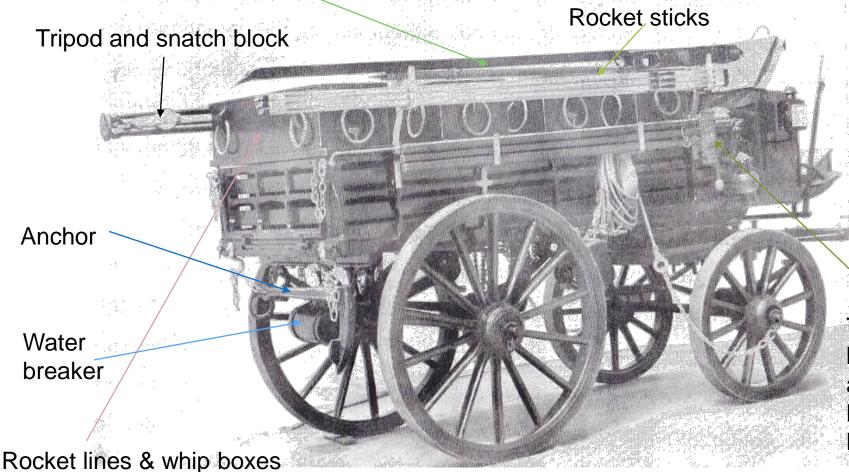
Board to be used with or instead of anchor

Steel ring and 4 foot chain connected to board

## Apparatus Cart

Right hand side view

Rocket launcher



Tally board and heaving line

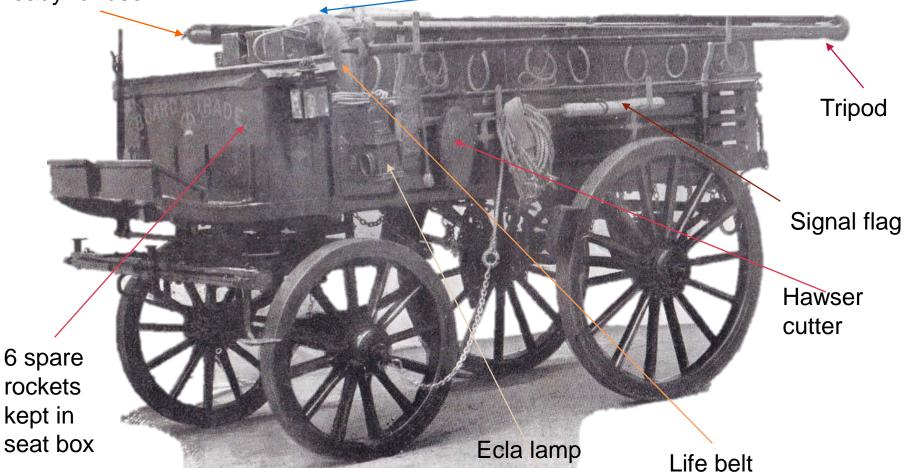
32

## Apparatus Cart

Boxer rocket within launcher ready for use

Left-hand side view

Life belt



### Acknowledgements

## We would like to thank the following for there with content of this presentation

- •We would like to thank Graces Guide for use of the illustrations used in this presentation.
- For further information on Victorian and Edwardian Engineering please go to:
- http://www.gracesguide.co.uk
- Present and past members of S.S.V.L.B.
- •Also used are the content and illustrations taken from C.G. 3. as published in 1927 by the Board of Trade (Description Of The Rocket Apparatus For Saving Life From Shipwreck).

#### The End

If you would like to know more please go to:



www.thess vlbhistory.co.uk