

= HMS Birkenhead (1845) =

HMS Birkenhead , also referred to as HM Troopship Birkenhead or Steam Frigate Birkenhead , was one of the first iron @-@ hulled ships built for the Royal Navy . She was designed as a steam frigate , but was converted to a troopship before being commissioned .

She was wrecked on 26 February 1852 , while transporting troops to Algoa Bay at Danger Point near Gansbaai , 140 kilometres from Cape Town , South Africa . There were not enough serviceable lifeboats for all the passengers , and the soldiers famously stood firm , thereby allowing the women and children to board the boats safely .

Only 193 of the 643 people on board survived , and the soldiers ' chivalry gave rise to the " women and children first " protocol when abandoning ship , while the " Birkenhead drill " of Rudyard Kipling 's poem came to describe courage in face of hopeless circumstances .

= = Description and history = =

The Birkenhead was laid down at John Laird 's shipyard at Birkenhead as the frigate HMS Vulcan , but renamed soon after to Birkenhead after the town where she was built . She had two 564 horsepower (421 kW) steam engines from Forrester & Co that drove a pair of 6 @-@ metre (20 ft) paddle wheels , and two masts rigged as a brig .

According to her designer , John Laird :

The designs I submitted , and which were finally approved , were of a vessel 210 feet (64 m) long (being about 20 feet (6 @. @ 1 m) longer than any vessel of her class had been built) , and 37 ? 6 beam with a displacement of 1918 tons on the load water @-@ line of 15 ? 9 . The only change made by authorities at the Admiralty in these designs was the position of the paddle shaft , which they ordered to be moved several feet more forward ; the change was unfortunate as it makes the vessel , unless due care is taken in stowing the hold , trim by the head . With this exception , I am answerable for the model , specification , displacement and general arrangement of the hull of the vessel .

The ship was divided into eight watertight compartments , while the engine room was divided by two longitudinal bulkheads into four compartments , making 12 watertight compartments in total . She had a round stern and a bow that ended in a large figurehead of Vulcan , holding a hammer in one hand , and some of " the bolts of Jove " that he had just forged in the other . Her armament was originally intended to be two 96 @-@ pounder pivot guns , one forward and the other aft , and four 68 @-@ pounder broadside guns .

= = = Launch = = =

The Birkenhead was launched on 30 December 1845 by the Marchioness of Westminster . Her hull then weighed 903 tons and drew 9 @. @ 75 feet (2 @. @ 97 m) , although she was at this time missing approximately 15 tons of cabin fittings . Machinery , stores , and other fittings were expected to add an additional 1 @, @ 000 or so tons , increasing her draught six more feet . She undertook her maiden voyage to Plymouth in 1846 , averaging 12 knots (22 km / h) to 13 knots (24 km / h) for the journey .

She remained laid up for some time , before being put to varied use around England , Scotland and Ireland . In November 1846 , Isambard Kingdom Brunel 's iron ship SS Great Britain ran aground on the sands of Dundrum Bay , Ireland . There was doubt as to whether she could be re @-@ floated . Brunel advised that if anyone could rescue the ship then the man to do it was the naval engineer James Bremner . He was engaged and the Great Britain was re @-@ floated on 27 August 1847 with the assistance of HMS Birkenhead .

The Birkenhead was never commissioned as a frigate , as two factors came into play while she was still under construction , that resulted in her being converted into a troopship . Firstly , the Royal Navy 's warships were switched from paddle wheels to more efficient propeller propulsion , following an experiment organised by the Admiralty in 1845 in which the benefits of the propeller over the

paddle wheel were dramatically demonstrated . Secondly , the Admiralty had doubts about the effects of cannon shot against iron hulls ? in a number of trials carried out at Royal Arsenal in 1845 , at lower velocities shot made a jagged hole that was hard to plug .

As part of her conversion to a troopship in 1851 , a forecastle and poop deck were added to the Birkenhead to increase her accommodation , and a third mast added , to change her sail plan to a barquentine . Although she never served as a warship , she was faster and more comfortable than any of the wooden sail @-@ driven troopships of the time , making the trip from the Cape in 37 days in October 1850 .

= = Final voyage (1852) = =

In January 1852 , under the command of Captain Robert Salmond RN , the Birkenhead left Portsmouth conveying troops from ten different regiments , including the 74th Regiment of Foot and Queen 's Royal Regiment , to the 8th Xhosa War (then called the " Kaffir War ") against the Xhosa in South Africa . On 5 January , she picked up more soldiers at Queenstown (now Cobh) , Ireland , and conveyed some officers ' wives and families .

On 23 February 1852 , Birkenhead docked briefly at Simonstown , near Cape Town . Most of the women and children disembarked along with a number of sick soldiers . Nine cavalry horses , several bales of hay and 35 tons of coal were loaded for the last leg of the voyage to Algoa Bay .

She sailed from Simon 's Bay at 06 : 00 on 25 February 1852 with between 630 and 643 men , women and children aboard , the exact number being in some doubt . In order to make the best possible speed , Captain Salmond decided to hug the South African coast , setting a course that was generally within 3 miles (4 @.@ 8 km) of the shore . Using her paddle wheels , she maintained a steady speed of 8 @.@ 5 knots (15 @.@ 7 km / h) . The sea was calm and the night was clear as she left False Bay and headed east .

Shortly before 02 : 00 on 26 February , while Birkenhead was travelling at a speed of 8 knots (15 km / h) , the leadsman made soundings of 12 fathoms (22 m) . Before he could take another sounding , she struck an uncharted rock at 34 ° 38 ' 42 " S 19 ° 17 ' 9 " E with 2 fathoms (3 @.@ 7 m) of water beneath her bows and 11 fathoms (20 m) at her stern . The rock lies near Danger Point (today near Gansbaai , Western Cape) . Barely submerged , it is clearly visible in rough seas , but it is not immediately apparent in calmer conditions .

Captain Salmond rushed on deck and ordered the anchor to be dropped , the quarter @-@ boats to be lowered , and a turn astern to be given by the engines . However , as the ship backed off the rock , the sea rushed into the large hole made by the collision and the ship struck again , buckling the plates of the forward bilge and ripping open the bulkheads . Shortly , the forward compartments and the engine rooms were flooded , and over 100 soldiers were drowned in their berths .

= = = Sinking = = =

The surviving soldiers mustered and awaited their officers ' orders . Salmond ordered Colonel Seton to send men to the chain pumps ; sixty were directed to this task , sixty more were assigned to the tackles of the lifeboats , and the rest were assembled on the poop deck in order to raise the forward part of the ship . The women and children were placed in the ship 's cutter , which lay alongside . Two other boats were manned , but one was immediately swamped and the other could not be launched due to poor maintenance and paint on the winches , leaving only three boats available . The two large boats , with capacities of 150 men each , were not among them .

The surviving officers and men assembled on deck , where Lieutenant @-@ Colonel Seton of the 74th Foot took charge of all military personnel and stressed the necessity of maintaining order and discipline to his officers . As a survivor later recounted : " Almost everybody kept silent , indeed nothing was heard , but the kicking of the horses and the orders of Salmond , all given in a clear firm voice . "

Ten minutes after the first impact , the engines still turning astern , the ship struck again beneath the engine room , tearing open her bottom . She instantly broke in two just aft of the mainmast . The

funnel went over the side and the forepart of the ship sank at once . The stern section , now crowded with men , floated for a few minutes before sinking .

Just before she sank , Salmond called out that " all those who can swim jump overboard , and make for the boats " . Colonel Seton , however , recognising that rushing the lifeboats would risk swamping them and endangering the women and children , ordered the men to stand fast , and only three men made the attempt . The cavalry horses were freed and driven into the sea in the hope that they might be able to swim ashore .

The soldiers did not move , even as the ship broke up barely 20 minutes after striking the rock . Some of the soldiers managed to swim the 2 miles (3 @. @ 2 km) to shore over the next 12 hours , often hanging on to pieces of the wreck to stay afloat , but most drowned , died of exposure or were taken by sharks .

I remained on the wreck until she went down ; the suction took me down some way , and a man got hold of my leg , but I managed to kick him off and came up and struck out for some pieces of wood that were on the water and started for land , about two miles off . I was in the water about five hours , as the shore was so rocky and the surf ran so high that a great many were lost trying to land . Nearly all those that took to the water without their clothes on were taken by sharks ; hundreds of them were all round us , and I saw men taken by them close to me , but as I was dressed (having on a flannel shirt and trousers) they preferred the others . I was not in the least hurt , and am happy to say , kept my head clear ; most of the officers lost their lives from losing their presence of mind and trying to take money with them , and from not throwing off their coats .

- Letter from Lieutenant J.F. Girardot , 43rd Light Infantry , to his father , 1 March 1852 .

The next morning , the schooner *Lioness* discovered one of the cutters , and after saving the occupants of the second boat made her way to the scene of the disaster . Arriving in the afternoon , she found 40 people still clinging to the rigging . It was reported that of the approximately 643 people aboard , only 193 were saved . Captain Edward WC Wright of the 91st Argyllshire Regiment was the most senior army officer to survive ; he was awarded a brevet majority for his actions during the ordeal , dated 26 February 1852 .

The number of personnel aboard is in some doubt , but an estimate of 638 was published in *The Times* . It is generally thought that the survivors comprised 113 soldiers (all ranks) , 6 Royal Marines , 54 seamen (all ranks) , 7 women , 13 children and at least one male civilian , but these numbers cannot be substantiated , as muster rolls and books were lost with the ship .

Of the horses , eight made it safely to land , while the ninth had its leg broken while being pushed into the sea .

= = = Aftermath = = =

A number of sailors were court martialled as a result of the accident . The court was held on 8 May 1852 on board HMS *Victory* in Portsmouth , and attracted a great deal of interest . However , as none of the senior naval officers of the Birkenhead survived , no @-@ one was found to be to blame . Captain Edward WC Wright of the 91st Argyllshire Regiment told the court martial :

The order and regularity that prevailed on board , from the moment the ship struck till she totally disappeared , far exceeded anything that I had thought could be effected by the best discipline ; and it is the more to be wondered at seeing that most of the soldiers were but a short time in the service . Everyone did as he was directed and there was not a murmur or cry amongst them until the ship made her final plunge ? all received their orders and carried them out as if they were embarking instead of going to the bottom ? I never saw any embarkation conducted with so little noise or confusion .

In 1895 , a lighthouse was erected at Danger Point to warn shipping of the dangerous reef . The lighthouse is about 18 metres (59 ft) tall and is visible for approximately 25 nautical miles (46 km) . In 1936 , a remembrance plate for the Birkenhead was affixed to its base by the Navy League of South Africa . A new Birkenhead memorial was erected nearby in March 1995 . In December 2001 , the plaque was moved closer to the lighthouse .

A memorial in St Giles ' Cathedral , Edinburgh , bears the following inscription :

In memory of Lieut.-Colonel Alexander Seton , Ensign Alex . C. Russell , and forty @-@ eight N.C.O.s and men of the 74th Highlanders who were drowned at the wreck of H.M.S. ' Birkenhead ' on the 26th February 1852 , off Point Danger , Cape of Good Hope , after all the women and children on board had been safely landed in the ship 's boats .

Frederick William IV of Prussia recognised the bravery of the soldiers and ordered an account of the incident to be read at the head of every regiment in his army . Queen Victoria ordered the erection of an official Birkenhead monument at the Chelsea Royal Hospital . In 1892 , Thomas M. M. Hemy painted a widely admired maritime depiction of the incident , " The wreck of the Birkenhead " . Prints of this painting were distributed to the public . In 1977 , the South African mint issued a " Heroes of the Birkenhead Medallion " gold coin commemorating the 125 years since the sinking , featuring Hemy 's painting on one of the faces of the coin .

= = Legacy = =

= = = Birkenhead drill = = =

The sinking of the Birkenhead is the earliest maritime disaster evacuation during which the concept of " women and children first " is known to have been applied . " Women and children first " subsequently became standard procedure in relation to the evacuation of sinking ships , both in fiction and in real life . The synonymous " Birkenhead drill " became an exemplar of courageous behaviour in hopeless circumstances , and appeared in Rudyard Kipling 's 1893 tribute to the Royal Marines , " Soldier an ' Sailor Too " :

To take your chance in the thick of a rush , with firing all about ,
Is nothing so bad when you 've cover to ' and , an ' leave an ' likin ' to shout ;
But to stand an ' be still to the Birken 'ead drill is a damn tough bullet to chew ,
An ' they done it , the Jollies -- ' Er Majesty 's Jollies -- soldier an ' sailor too !
Their work was done when it ' adn 't begun ; they was younger nor me an ' you ;
Their choice it was plain between drownin ' in ' eaps an ' bein ' mopped by the screw ,
So they stood an ' was still to the Birken 'ead drill , soldier an ' sailor too
The phrase also appears in Robert A. Heinlein 's 1956 Double Star :

I knew I was sunk @-@ but , damn it , if you are caught by the Birkenhead Drill , the least you owe yourself is to stand at attention while the ship goes down .

And in David Weber 's 1991 novel Mutineers ' Moon :

And if he was caught in the Birkenhead Drill , he could at least try to do his best till the ship went down .

= = = Birkenhead treasure = = =

There is a persistent rumour that the Birkenhead was carrying a military payroll of £ 240 @,@ 000 in gold coins weighing about three tons , which had been secretly stored in the powder @-@ room before the final voyage .

Numerous attempts have been made to salvage the gold . In 1893 , the nephew of Colonel Seton wrote that a certain Mr. Bandmann at the Cape obtained permission from the Cape Government to dive the wreck of the Birkenhead in search of the treasure . A June 1958 salvage attempt by a renowned Cape Town diver recovered anchors and some brass fittings , but no gold . In 1986 @-@ 1988 , a combined archaeological and salvage excavation was carried out by Aqua Exploration , Depth Recovery Unit and Pentow Marine Salvage Company . Only a few gold coins were recovered , which appear to have been the personal possessions of the passengers and crew .

The rumour of treasure and the shallow depth of the wreck at 30 metres (98 ft) have resulted in the wreck being considerably disturbed over the years , despite its being a war grave . In 1989 , the British and South African governments entered into an agreement over the salvage of the wreck , sharing any gold recovered .

= = = HMS Birkenhead as namesake = = =

Three placenames in the Canadian province of British Columbia were conferred in honour of the Birkenhead disaster by Hudson 's Bay Company explorer Alexander Caulfield Anderson , a boyhood friend and cousin of Lt @-@ Col. Seton of the 74th Regiment of Foot , on a traverse of uncharted country between the Fraser Canyon and the coastal Lower Mainland in 1846 . Named after his cousin , Seton Lake cuts west through the Coast Mountains from the Fraser Canyon town of Lillooet , beyond which is its twin Anderson Lake .

A few miles southwest from the head of Anderson Lake is Mount Birkenhead , on the north side of the low pass connecting the valley of those lakes to that of the Birkenhead River . The river , the valley area near Mount Birkenhead known as Birken , and Birkenhead Lake at the summit of the pass were in turn named after the mountain , and not directly by Anderson .

= = = Other name legacies = = =

According to local tradition , Salmonsdam Nature Reserve in the Overberg is named after Captain Robert Salmond . Locals to this day call Great White Sharks " Tommy Sharks " after the Tommys that were taken by them in water .