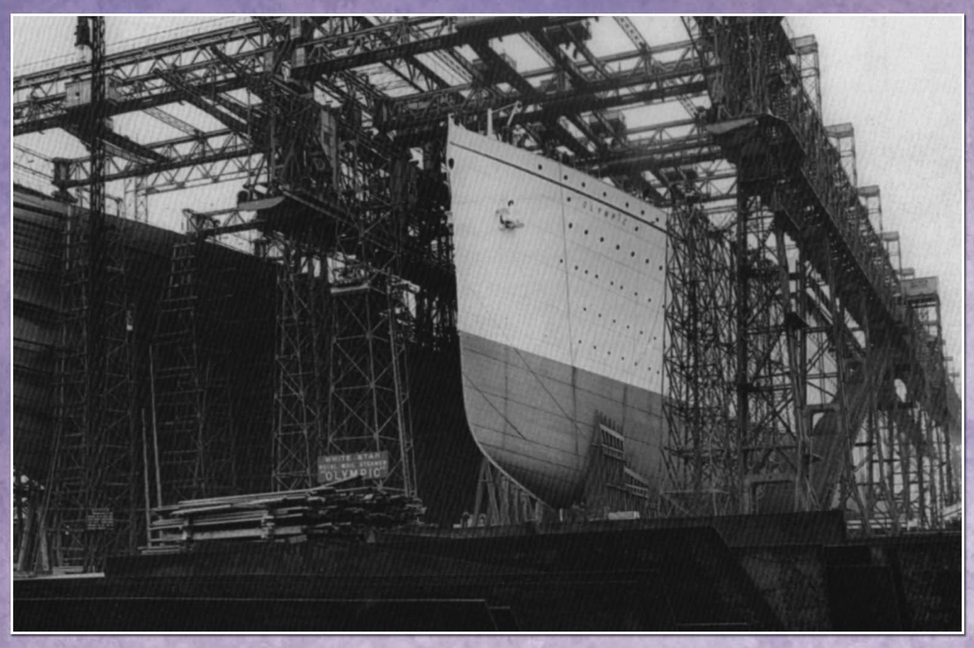


Building of the Titanic:

- Titanic was 269m (882ft 9in) in length. The height from her keel plate to the top of the funnels was 53 metres. Her masts were used as flag poles and supports for the Marconi radio receiver. The crow's nest was located on the foremast.
- Titanic and her sister ship, the Olympic, had a gross cargo capacity of 46,329 imperial tonnes.
- She was constructed on a steel frame, clad in a skin of steel plates. More than 3 million metal rivets were used to fasten the ship together.
- The ship was powered by two huge steam engines, powered by 29 boilers, containing 159 coal furnaces, driving the three bronze propellers. Over 660 metric tonnes of coal a day was consumed to produce 46,000 horsepower, delivering a speed of 23 knots or 43kmph.
- Electricity generators on board powered services such as refrigeration and lighting. The brave crew managed to keep power running until just minutes before she sank.
- Titanic was fitted with a main anchor weighing 17 tonnes and two smaller side anchors.
- Harland and Wolff employed over 15,000 men to work on the Olympic and Titanic from 5 ½ days a week, with 7 ½ days unpaid holidays.
- The ship cost Stg£1.5million to build. The modern-day equivalent would be approximately €300million.

The R.M.S Titanic

Life on board the Titanic

Titanic came replete with many of the latest conveniences and distractions of the time, including:

- Electric lighting in every berth and electric heating in 1st class staterooms.
- Medical services, including a doctor's surgery.
- Smoking rooms and barber shops in 1st and 2nd Class.
- Heated swimming pool and a magnificent Turkish bath with hot, temperate and cool rooms, a shampooing room and massage couch and a plunge pool.
- A squash court and separate gymnasium with electric horses, an electric camel, rowing machines, bicycles and a vibration machine.
- A library as well as a reading and writing room in 1st Class.
- A sycamore-panelled library in 2nd Class, doubling as their writing room.
- An on-board telephone system.

COST OF TICKETS:

- Titanic could carry up to 3,547 passengers and crew, although only approximately 2,223 people were aboard when she sank.
- There were 898 crew, including officers, 289 stokers, 29 engineers, and 18 stewardesses plus other staff.
- There were approximately 735 1st class passengers, 674 2nd class and 1,026 3rd class passengers on board. Passengers paid:
  - 3rd Class – from £6 10 shillings (from Cobh)
  - 2nd Class – from £13
  - 1st Class – from £86 to £870 for a promenade suite on B deck.

DINING AND SOCIALISING:

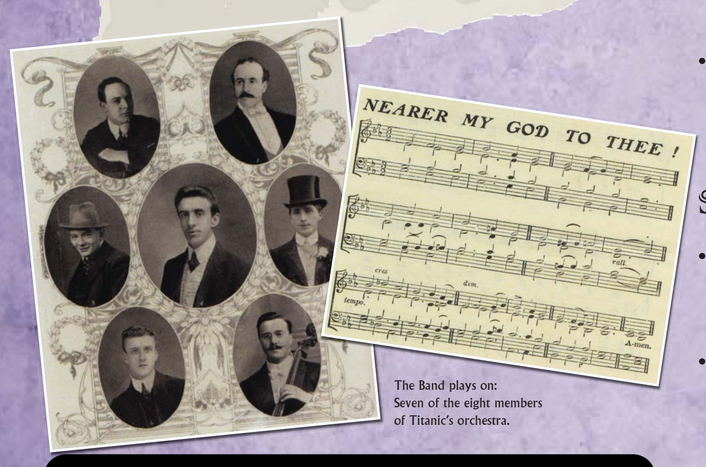
- Magnificent dining rooms and cafés were available to the 1st and 2nd class passengers, the grandest of which was the 1st class dining saloon. This opulent dining area was 10,488 sqft in size, and could seat 554 people. Other restaurants on board included: the fashionable Verandah Café, which was decorated with white wicker furniture and live palm trees, and a French restaurant with a team of 55 cooks and waiters, only one of whom survived.
- The oak-panelled 2nd Class dining saloon had mahogany furniture, with crimson leather upholstery and a specially-designed linoleum floor.
- 3rd class passengers had one dining hall open to them, which was simply furnished with teak furniture where passengers were accommodated in two sittings. Passengers also socialised in the pine-panelled general room and smoking room.

The fine crockery used by diners aboard the ship

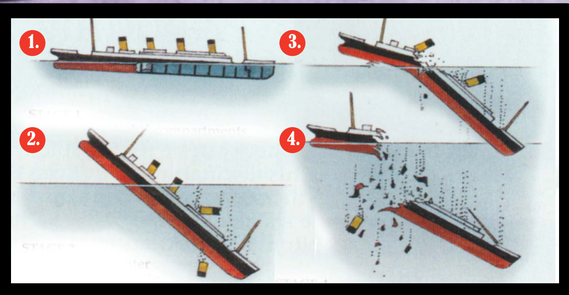
3rd class menu

SLEEPING:

- Each class had a proportion of cabins or staterooms on board. There were 416 1st class staterooms, 162 in 2nd Class and 257 in 3rd Class.
- 3rd Class families were berthed in individual cabins, and women were together in grouped cabins. Single men were placed in the men's dormitory, located next to the post room and 1st Class baggage store. Although modest in scale and decoration, this accommodation was considered to be the best available for steerage passengers on the Transatlantic route.
- 2nd Class passengers had comfortable and attractive cabins, with mahogany furniture and good quality carpeting and drapery.
- There was a range of options available to 1st class, from smaller cabins to the two grand parlour suites of which the White Star Line said "They are on a scale of unprecedented magnificence. Nothing like them has ever appeared on the ocean".

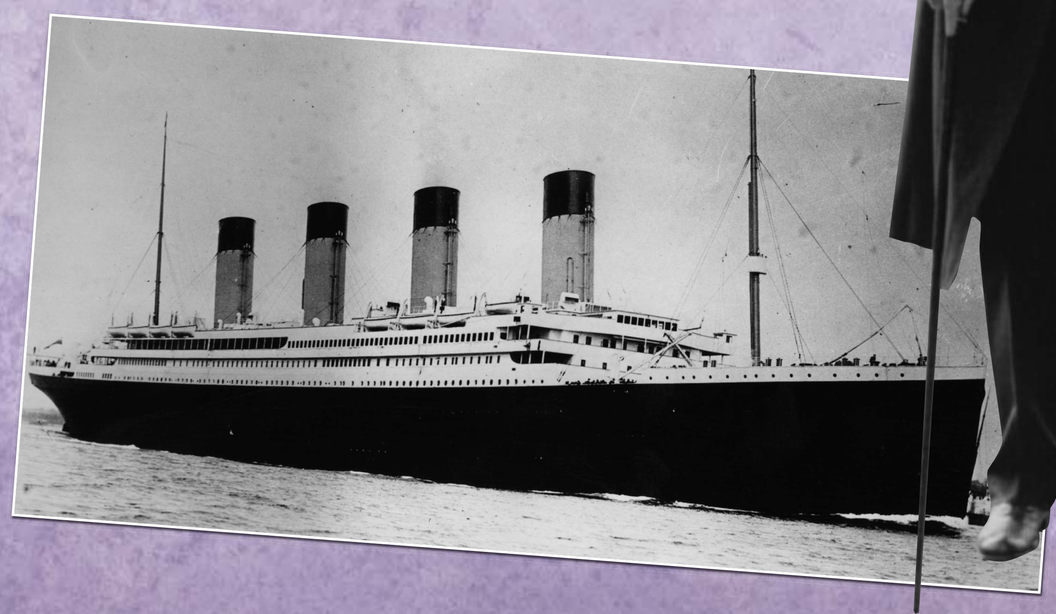


The Band plays on:
Seven of the eight members of Titanic's orchestra.



How the Titanic sank:

- Six of the watertight compartments were punctured by the iceberg and took on water. The flooded compartments pulled the bow (front) downwards, causing the water to spill over the bulkheads, flooding more compartments.
- As the bow sank, the stern (rear) rose. The falling debris and collapsing funnels killed many people on the boat deck, including John Jacob Astor IV.
- The keel then broke between the third and fourth funnels and the bow sank. The stern actually floated for a short time, before joining the rest of the ship on the bottom of the Atlantic.



Contributing factors to the disaster:

Metal fatigue – The steel used in the hull and rivets possibly became brittle due to a combination of a fire in the coal store and exposure to low water temperatures. Also, a lower grade of pig-iron known as"Best" was used rather than the highest grade, "Best Best". This meant when the hull was punctured, the metal split and broke apart in an unpredictable way.

Watertight Compartments – Although Titanic had 16 watertight compartments, the height of the bulkheads separating them was only 3 metres above the waterline. When one compartment flooded, the water simply flowed over the top, flooding the rear sections.

Lifeboats – Early designs for Titanic had included provision for at least 32 lifeboats holding 65 people each. The davits which held them could hold up to 48. The number of lifeboats was reduced to 20 partly to save money, to improve her appearance and increase passenger space on the boat deck. In 1912, the legal requirement for a ship of that size was 16 lifeboats. It was felt that help would always be close at hand in the busy Atlantic shipping lanes, negating the need for many lifeboats. On the night of the sinking, the lifeboats were not filled to capacity and an estimated 472 others could have been saved.

Wireless – The radio (wireless) operators were employees of the Marconi Corporation and not the White Star Line. Remarkably, there was no direct line from the wireless room to the bridge, meaning that there were delays in passing on the ice warnings.

Weather – The sea was dead calm, with no wind or waves which meant that the iceberg was very difficult to see from the crow's nest. The water temperature at the time of the sinking was reported to be at freezing (0°C). At that temperature, a person in the water would quickly succumb to hypothermia.

Manoeuvring – It has been speculated that if Titanic had collided with the iceberg bow-first, she may have remained afloat as fewer of the watertight compartments would have been breeched. However, other severe damage and fatalities would most certainly have occurred.