

= La Galissonnière @-@ class ironclad =

The La Galissonnière class ironclads were a group of wooden @-@ hulled , armored corvettes built for the French Navy during the 1870s , meant as a heavier armed and faster version of the Alma @-@ class ironclad . While all three ships were begun before the Franco @-@ Prussian War of 1870 ? 71 , the construction of the last two ships was delayed for years . The navy took advantage of the extended construction time of the latter ships to upgrade their armament . La Galissonnière bombarded Sfax in 1881 as part of the French occupation of Tunisia . She and her half @-@ sister Triomphante participated in a number of battles during the Sino @-@ French War of 1884 ? 85 . Their sister Victorieuse had a much quieter career . All three ships were decommissioned in the 1890s .

= = Design and description = =

The La Galissonnière @-@ class ironclads were designed as faster , more heavily armed versions of the Alma @-@ class ironclads by Henri Dupuy de Lôme . They used the same central battery layout as their predecessors , although the battery was lengthened 4 meters (13 ft 1 in) to provide enough room to work the larger 240 @-@ millimeter (9 @. @ 4 in) guns . A two @-@ propeller layout was adopted in an unsuccessful attempt to reduce the ship 's draft . The two later ships were designed by Sabattier who reduced the number of screws from two to one to improve their sailing qualities , added an 194 @-@ millimeter (7 @. @ 6 in) bow chaser under the forecastle and increased the caliber of the secondary armament .

La Galissonnière measured 76 @. @ 62 meters (251 ft 5 in) between perpendiculars , with a beam of 14 @. @ 84 meters (48 ft 8 in) . She had a mean draft of 6 @. @ 55 meters (21 ft 6 in) and displaced 4 @, @ 654 metric tons (4 @, @ 580 long tons) . The ship had a metacentric height of .926 meters (3 ft 0 @. @ 5 in) . Victorieuse and Triomphante were 76 @. @ 85 meters (252 ft 2 in) between perpendiculars and had a beam of 14 @. @ 88 meters (48 ft 10 in) . The two ships had a mean draft of 6 @. @ 3 meters (20 ft 8 in) and displaced 4 @, @ 150 metric tons (4 @, @ 080 long tons) . The crew of all three ships numbered between 352 and 382 officers and men .

= = = Propulsion = = =

La Galissonnière had two Wolf vertical compound steam engines , each driving a single 3 @. @ 8 @-@ meter (12 ft 6 in) propeller . Her engines were powered by four oval boilers . On sea trials the engines produced a total of 2 @, @ 370 indicated horsepower (1 @, @ 770 kW) and the ship reached 13 @. @ 08 knots (24 @. @ 22 km / h ; 15 @. @ 05 mph) . La Galissonnière carried 500 metric tons (490 long tons) of coal which allowed the ship to steam for 3 @, @ 240 nautical miles (6 @, @ 000 km ; 3 @, @ 730 mi) at a speed of 10 knots (19 km / h ; 12 mph) . She was ship @-@ rigged with three masts and had a sail area around 1 @, @ 707 square meters (18 @, @ 370 sq ft) .

Victorieuse and Triomphante had a single vertical compound steam engine driving a single propeller and the same boilers as La Galissonnière . During trials their engines produced 2 @, @ 214 indicated horsepower (1 @, @ 651 kW) and the ships reached 12 @. @ 75 knots (23 @. @ 61 km / h ; 14 @. @ 67 mph) . They only carried 330 metric tons (320 long tons) of coal which allowed the ships to steam for 2 @, @ 740 nautical miles (5 @, @ 070 km ; 3 @, @ 150 mi) at a speed of 10 knots (19 km / h ; 12 mph) . They were also ship @-@ rigged with three masts , but had a sail area of 1 @, @ 730 square meters (18 @, @ 600 sq ft) .

= = = Armament = = =

All three ships mounted four of their six 240 @-@ millimeter Modèle 1870 guns in the central battery on the battery deck . The other two 240 @-@ millimeter guns were mounted in barbettes on the upper deck , sponsoned out over the sides of the ship . In La Galissonnière the sponsons were

positioned abaft the funnel , but the two later ships had theirs just forward of the funnel . La Galissonnière 's secondary armament of four 120 @-@ millimeter (4 @.@ 7 in) guns was also mounted on the upper deck . They were replaced by six 100 @-@ millimeter (3 @.@ 9 in) guns in 1880 .

The armor @-@ piercing shell of the 19 @-@ caliber 240 @-@ millimeter gun weighed 317 @.@ 5 pounds (144 @.@ 0 kg) while the gun itself weighed 15 @.@ 41 long tons (15 @.@ 66 t) . It had a muzzle velocity of 1 @,@ 624 ft / s (495 m / s) and was credited with the ability to penetrate a nominal 14 @.@ 4 inches (366 mm) of wrought iron armour at the muzzle . The guns could fire both solid shot and explosive shells .

The ship received four 37 @-@ millimeter (1 @.@ 5 in) Hotchkiss 5 @-@ barrel revolving guns in 1878 . They fired a shell weighing about 500 g (1 @.@ 1 lb) at a muzzle velocity of about 610 m / s (2 @,@ 000 ft / s) to a range of about 3 @,@ 200 meters (3 @,@ 500 yd) . They had a rate of fire of about 30 rounds per minute . La Galissonnière also received several towed Harvey torpedoes .

While Victorieuse and Triomphant were on the stocks , their armament was reinforced by an additional 194 @-@ millimeter chase gun and the secondary armament was increased to six 138 @-@ millimeter (5 @.@ 4 in) guns . They also received the Hotchkiss guns and Harvey torpedoes as per La Galissonnière before completion . The 20 @-@ caliber 194 @-@ millimeter gun fired an armor @-@ piercing , 165 @.@ 3 @-@ pound (75 @.@ 0 kg) shell while the gun itself weighed 7 @.@ 83 long tons (7 @.@ 96 t) . The gun fired its shell at a muzzle velocity of 1 @,@ 739 ft / s (530 m / s) and was credited with the ability to penetrate a nominal 12 @.@ 5 inches (320 mm) of wrought iron armour at the muzzle . The 138 @-@ millimeter gun was 21 calibers long and weighed 2 @.@ 63 long tons (2 @.@ 67 t) . It fired a 61 @.@ 7 @-@ pound (28 @.@ 0 kg) explosive shell that had a muzzle velocity of 1 @,@ 529 ft / s (466 m / s) .

== Armor ==

The La Galissonnière @-@ class ships had a complete 150 @-@ millimeter (5 @.@ 9 in) wrought iron waterline belt , approximately 2 @.@ 4 meters (7 @.@ 9 ft) high laid over 650 millimeters (26 in) of wood . The sides of the battery itself were armored with 120 millimeters (4 @.@ 7 in) of wrought iron backed by 520 millimeters (20 in) of wood and the ends of the battery were closed by bulkheads of the same thickness . The barbettes armor was 120 millimeters (4 @.@ 7 in) thick . The unarmored portions of their sides were protected by thin iron plates .

== Construction ==

== Service ==

La Galissonnière 's initial commissions were in the Pacific and in the Caribbean , but she was assigned to the Levant Squadron (French : Division Navale du Levant) when she bombarded the Tunisian port of Sfax in July 1881 as part of the French occupation of Tunisia . In early 1882 La Galissonnière was the flagship of the Levant Squadron under Rear Admiral Alfred Conrad . Both La Galissonnière and Triomphante were assigned to the Far East Squadron in 1884 , under the command of Vice Admiral Amédée Courbet , and participated in several actions during the Sino @-@ French War of 1884 ? 85 . Both ships fought in the Battle of Fuzhou , destroying a small Chinese fleet and coastal defenses defending the Min River . They supplied landing parties during the Battle of Tamsui in October 1884 , but they were forced to retreat by Chinese troops , although suffering few casualties (11 killed and 4 wounded between the two ships) . Nothing is known of any further participation by La Galissonnière in the war , but Triomphante helped to capture the Pescadore Islands in March 1885 during the Pescadores Campaign .

Victorieuse was placed into reserve after she finished her sea trials in 1876 . She had two commissions as flagship of the Pacific and China Squadrons and was relieved as the flagship of the latter by La Galissonnière in April 1884 . She became flagship of the Levant Squadron after she

arrived in France , but was in bad shape and soon placed in reserve at Cherbourg . Victorieuse was on summer maneuvers off the Iberian coast in July 1893 . The ship was initially condemned in May 1897 , but this was reversed so she could convoy torpedo boats to Bizerte . That plan was later cancelled and Victorieuse was paid off in 1899 , becoming guardship of the outer harbor at Brest until finally condemned the following year .