

= French ironclad Couronne =

The French ironclad Couronne (" Crown ") was the first iron @-@ hulled ironclad warship built for the French Navy in 1859 ? 62 . She was the first such ship to be laid down , although the British armoured frigate HMS Warrior was completed first . The ship participated in the Franco @-@ Prussian War of 1870 ? 71 , but saw no combat . She was served as a gunnery training ship from 1885 to 1908 before she was hulked the following year and became a barracks ship in Toulon . Couronne was scrapped in 1934 , over 70 years after she was completed .

= = Design and description = =

Designed by the French naval architect Camille Audenet as an iron @-@ hulled version of the Gloire @-@ class ironclads , Couronne was also intended to fight in the line of battle , unlike the first British ironclads . The ship was classified as an armoured frigates because she only had a single gun deck and her traditional disposition of guns arrayed along the length of the hull also meant that she was a broadside ironclad . The ship was 80 @.@ 85 metres (265 ft 3 in) long , with a beam of 17 metres (55 ft 9 in) . She had a maximum draft of 7 @.@ 8 metres (25 ft 7 in) , a depth of hold of 9 @.@ 7 metres (31 ft 10 in) and displaced 6 @, @ 428 tonnes (6 @, @ 326 long tons) . The ship 's metacentric height of 1 @.@ 8 metres (6 ft) meant that she rolled less and was a better sea boat than the Gloires . Her gun ports were slightly higher above the waterline than those of her predecessors , 2 metres (6 ft 7 in) , and Couronne took aboard less water as well . She had a crew of 570 officers and enlisted men .

The ship had a single horizontal return connecting @-@ rod compound steam engine that drove a six @-@ bladed , 5 @.@ 8 @-@ meter (19 ft 0 in) propeller using steam provided by eight Indret oval boilers for a designed speed of 12 @.@ 5 knots (23 @.@ 2 km / h ; 14 @.@ 4 mph) . Figures for the engine 's designed power vary wildly , from 2 @, @ 000 to 3 @, @ 200 indicated horsepower (1 @, @ 500 to 2 @, @ 400 kW) , but Couronne reached 13 knots (24 km / h ; 15 mph) from 2 @, @ 597 metric horsepower (1 @, @ 910 kW) during her sea trials . She carried a maximum of 675 tonnes (664 long tons) of coal which allowed her to steam for 2 @, @ 410 nautical miles (4 @, @ 460 km ; 2 @, @ 770 mi) at a speed of 10 knots (19 km / h ; 12 mph) . The details of Couronne 's sailing rig are not precisely known , but presumably she was fitted with a light barquentine rig with three masts like that of the Gloire @-@ class ships . It is also unknown if she had the same multiple changes of rigging as those ships .

Couronne was armed with 36 Modèle 1860 164 @.@ 7 @-@ millimetre (6 @.@ 5 in) rifled breech @-@ loading guns , 30 of which were positioned on the single gun deck in the broadside . The remaining 4 guns were placed on the upper deck as chase guns . They fired a 44 @.@ 9 @-@ kilogram (99 @.@ 0 lb) shell at a muzzle velocity of only 322 metres per second (1 @, @ 060 ft / s) and proved to be ineffective against armour . The ship was rearmed multiple times during her career , the first of which was the replacement of the chase guns by four 220 @-@ millimetre (8 @.@ 7 in) howitzers in 1864 and the replacement of the rest of the guns by improved Modèle 1864 guns . The ship was subsequently rearmed with 16 Modèle 1864 or 1866 194 @-@ millimetre (7 @.@ 6 in) guns on her main deck and six 164 @.@ 7 @-@ millimetre guns on the upper deck as chase guns . Her final armament configuration before she became a gunnery training ship in 1881 was eight 240 @-@ millimetre (9 @.@ 4 in) Modèle 1870 guns and four 194 @-@ millimetre Modèle 1870 guns on the main deck . A pair of 120 @-@ millimetre (4 @.@ 7 in) guns and a dozen 37 @-@ millimetre (1 @.@ 5 in) 5 @-@ barrelled Hotchkiss revolving cannon were mounted on the upper deck .

Couronne 's wrought iron hull was completely protected by armour plates 120 millimetres thick . The armour backing consisted of two layers of teak , totaling 380 millimetres (15 in) in thickness , an iron lattice work 33 millimetres (1 @.@ 3 in) thick , and the 20 @-@ millimetre (0 @.@ 79 in) side of the hull . The ship had a conning tower with armour 100 millimetres (3 @.@ 9 in) thick and 12 @.@ 7 millimetres (0 @.@ 5 in) of armour underneath the wooden upper deck .

= = Construction and service = =

Ordered on 4 March 1858 , Couronne was laid down at the Arsenal de Lorient on 14 February 1859 , launched on 28 April 1861 and commissioned on 2 February 1862 at a cost of 6 018 885 francs . On 19 June 1864 , Couronne played an incidental role in the Battle of Cherbourg as she escorted the Confederate commerce raider CSS Alabama out of French territorial waters to her fight with USS Kearsarge . While assigned to the Mediterranean Fleet , the ship made a port visit in August 1865 to Brest where the fleet hosted the British Channel Fleet . A few days later the French fleet made a reciprocal visit to Portsmouth where it was hosted by the Channel Fleet .

During the Franco - Prussian War the ship was assigned to Vice Admiral Léon Martin Fourichon 's squadron that blockaded German ports in the Heligoland Bight in August and September 1870 . The four German ironclads at Wilhelmshaven sortied in search of the French squadron in early August before the French arrived and in mid - September after the French were forced to abandon the blockade for lack of coal . Couronne returned to Toulon on 10 December . In 1876 , she was assigned to the Mediterranean Squadron . From 1881 to 1885 , Couronne was reconstructed to serve as a gunnery training ship , replacing Souverain : her armour was replaced by wood of the same thickness , two boilers were removed and her propeller was replaced . Her rigging was replaced by a full ship rig and iron spar deck and poop decks were fitted which gave her the appearance of a steam ship of the line of the Napoléon type . The ship was rearmed with an assortment of guns of various calibres for training purposes . Her crew and trainees numbered 1200 officers and enlisted men . Couronne was replaced as a gunnery training ship on 1 December 1908 and disarmed on 1 September 1909 . She was subsequently converted to a floating barracks at Toulon until she was scrapped in 1934 .