

Paddle corvettes (2nd class, 220 nhp, launched 1838-43)

VELOCE class (launched 1838-41)

PHOQUE class (converted packets, launched 1842)

ELAN class (converted packets, launched 1843)

ARCHIMEDE (launched 1842)

VELOCE class paddle corvettes (2nd class)

Displacement:	1334t (<u>Pluton</u> 1509t)
Dimensions:	190ft 5in wl, 194ft 11in deck x 29ft 6in mld, 30ft 1in ext x 13ft 11in mean and max. Depth 11ft 10in. (<u>Pluton</u>) 197ft 8in deck x 30ft 4in ext x 14ft 6in mean, 15ft 1in max.
Same, meters:	<u>58.05, 59.40 x 9.00, 9.16 x 4.23, 3.60m. (Pluton) 60.25 x 9.24 x 4.41, 4.60m</u>
Machinery:	220nhp (Fawcett in <u>Vélocé</u> , Schneider in <u>Pluton</u> , Indret in others). Side-lever, 440ihp, trials 8 to 9.5kts. Coal 320t in <u>Pluton</u>
Hull material:	Wood
Armament:	(Orig) 3-22cm shell, 4-16cm shell (Often only the 16cm were embarked). (<u>Pluton</u> 1841) 2-22cm shell, 4-30p. (<u>Pluton</u> 1844) 2-22cm shell, 2-30p No.1
Complement:	123

<u>Name</u>	<u>Builder</u>	<u>Laid down</u>	<u>Launched</u>	<u>Commiss.</u>	<u>Fate</u>
VELOCE	Rochefort	15.9.36	12.3.38	1.7.38	Stk. 16.11.60
LAVOISIER	Indret	16.8.36	4.10.38	1.1.39	Stk. 29.4.65
CAMELEON	Rochefort	17.7.37	20.11.39	1.8.40	Stk. 15.2.58
GASSENDI	Indret	15.6.37	27.9.40	26.9.40	Stk. 14.2.65
PLUTON	Brest	26.2.38	22.4.41	11.8.41	Lost 14.11.54

Class. In 6.33 the minister ordered the director of Indret, Gengembre, to draft plans for 220nhp machinery following as closely as possible the design of the successful 160nhp engines in the aviso Sphinx. Gengembre wanted to build more innovative machinery, and did not produce plans acceptable to Paris until 3.35. Perhaps anticipating trouble, the navy in 7.36 ordered one set of 220nhp engines from the English company which had built the engines of Sphinx. The hull plans for the class by Hubert, approved in 9.36, also followed Sphinx very closely. The beam over the paddle boxes was 51ft 2in (52ft 7in in Pluton). The class was completed with a three masted rig, but Pluton (probably followed by others) was rigged with two masts in 1844, reducing her sail area from 1438 sq.yd. to 1318 sq.yd.

Vélocé, which received the English machinery, was an immediate success. In contrast, none of the three ships engined by Indret was particularly successful. The poor performance of Lavoisier, Gengembre's first ship, which recorded only 8 to 8.3 knots on her initial trials, was blamed on numerous unauthorized modifications made to the engine plans by Gengembre. (Her speed rose to 9 knots when her boilers were replaced in 1841.) Gassendi was also a disappointment. Although this ship began to

go into commission a day before her launch, she was still running trials in April 1842 when she made only 8 knots. In 1843 her boilers were judged to be too small and were replaced, and in 1854 her engines were replaced with engines taken out of Elan.

Disposals. Véloce and Caméléon were BU 1865. Gassendi became a coal hulk and was BU 1866. Lavoisier became a mooring hulk at Lorient and was BU 1887. Pluton was blown ashore in a storm at Eupatoria in the Crimea in company with the sail ship of the line Henri IV.

PHOQUE class converted packets paddle corvettes (2nd class)

Displacement:	1196t
Dimensions:	181ft 1in wl, 183ft 11in deck x 30ft 2in mld, 30ft 9in wl, 31ft 1in max x 13ft 1in mean
Same, meters:	<u>55.20, 56.05 x 9.20, 9.36 x 9.48, 4.00m</u>
Machinery:	220nhp (Stehelin in <u>Phoque</u> , Pauwels in <u>Espadon</u>). Side-lever, trials 8.88kts (<u>Phoque</u>), 9.06kts (<u>Espadon</u>)
Hull material:	Wood
Armament:	(Orig) 6-16cm shell
Complement:	123 (est.)

<u>Name</u>	<u>Builder</u>	<u>Laid down</u>	<u>Launched</u>	<u>Compl.</u>	<u>Fate</u>
PHOQUE (15)	Indret	2.3.41	7.7.42	21.4.44	Stk. 28.9.55
ESPADON (16)	Indret	2.3.41	4.10.42	21.4.44	Stk. 16.12.52

Class. This and the next class were ordered on 23.8.40 as part of the 1840 packet program to provide branch lines in the New World in support of the transatlantic 450nhp packets. Their engines were ordered in 11.40 from relatively small engine builders: Stéhélin and Huber of Bitschwiller, Bas Rhin, and Pauwels near Paris. Plans by Boucher used for the first two ships were approved in 2.41. All four ships were allocated to the navy permanently in 7.45 for use on the West Africa station. The completion dates in the tables are the dates of machinery trials. The beam over the paddle boxes was 51ft 10in. They originally had three masts with square sails on the foremast only and a sail area of 1380 sq.yd. Phoque was rigged in 1850 as a brig with 2177 sq.yd. of sails. The increase was due to the fact that her new mainmast was further from the funnel and could carry a full set of square sails.

Disposals. Phoque became a mooring hulk at Rochefort, was renamed Pingouin before 1865, and was BU 1878. The early demise of Espadon was attributed to rapid construction and continuous use on foreign stations. Her engines were reused in the aviso Ténare.

ELAN class converted packets paddle corvettes (2nd class)

Displacement:	1035t
Dimensions:	177ft 5in wl x 29ft 6in mld x 12ft 8in mean
Same, meters:	<u>54.08 x 9.00 x 3.85m</u>
Machinery:	220nhp (Stehelin in <u>Elan</u> , Pauwels in <u>Caïman</u>). Side-lever, trials 8.8kts (<u>Elan</u>), 9.22kts (<u>Caïman</u>)
Hull material:	Wood
Armament:	(Orig) 6-16cm shell
Complement:	123 (est.)

<u>Name</u>	<u>Builder</u>	<u>Laid down</u>	<u>Launched</u>	<u>Compl.</u>	<u>Fate</u>
ELAN (17)	Indret	15.8.41	30.3.43	16.12.43	Stk. 28.10.51
CAIMAN (18)	Indret	8.41	28.6.43	15.10.43	Lost 2.4.54

Class. As in the case of the 450nhp packets, an attempt was made to lighten the designs of the 220nhp ships. Revised plans by Boucher for the two ships which had not yet been begun were approved in 7.41.

Disposals. The rapid demise of Elan was attributed to the use of bad wood in her construction. Caïman was lost in the Gulf of Aden off the coast of Ethiopia.

ARCHIMEDE paddle corvette (2nd class)

Displacement:	1309t
Dimensions:	181ft 1in wl, 186ft 8in deck x 30ft 2in mld, 30ft 9in ext x 13ft 11in mean
Same, meters:	<u>55.20, 56.90 x 9.20, 9.36 x 4.25m</u>
Machinery:	220nhp (Schneider). Side-lever, 9kts
Hull material:	Wood
Armament:	(Orig) 2-22cm shell, 4-16cm shell
Complement:	123

<u>Name</u>	<u>Builder</u>	<u>Laid down</u>	<u>Launched</u>	<u>Commiss.</u>	<u>Fate</u>
ARCHIMEDE	Brest	12.4.41	25.4.42	1.9.42	Stk. 25.4.53

Class. This ship was designed for naval use to the same specifications as the packets of the Phoque class. Her plans were drafted by Hubert and approved in 3.41. Her sail area was 1133 sq.yd.

Disposal. Archimède became a hulk, was renamed Alligator before 1865, and was BU1868.