
American Steam Navigation in China, 1845-1878

PART VII

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XI. AMERICAN SHIPOWNERS IN THE PHILIPPINES

WHILE American shipowners in the Philippines are not in general within the scope of the present paper, two of the most prominent firms at Manila, Russell and Sturgis (trading in China as Russell, Sturgis and Co.), and Peele, Hubbell and Co., have already been mentioned in connection with steam shipping on the coast of China and something should be said of those of their steamers which at some time operated in China or Japan. Russell Sturgis and Robert Shaw Sturgis were partners in Russell and Co. H. P. Sturgis, probably a connection, was registered owner of *Fernando de Norzagarey*, a steamer of 348 tons built at Brooklyn, New York, in 1858. She arrived at Shanghai from Manila on 28 December 1858 and on 15 January 1859 departed for Japan. Returning, she arrived at Shanghai on 28 February 1859 and left for Amoy on 16 March.⁶⁷⁵ She was sold in 1860 to the French for use as a warship.

On 26 January 1866, Russell, Sturgis and Co. purchased the steamer *Feima* and placed her under the American flag, and on 10 February she left for Manila. *Feima* was a well-known vessel in the China coast and river trade. She was a wooden paddle steamer of 121 tons net and had been built by J. C. Cowper at Whampoa, being launched on 28 June 1856 and intended for Lyall, Still and Co.'s service between Hong Kong, Canton and Macao.⁶⁷⁶ In the spring of 1862 *Feima* came to Shanghai and was advertised for sale.⁶⁷⁷ Moses and Co. purchased her and ran her on the Ningpo route.

⁶⁷⁵ CRS, Shanghai.

⁶⁷⁶ CM, 3 July 1856.

⁶⁷⁷ NCH, 12 April 1862.

The iron screw steamer *Albay*, 366 tons, built at Govan (Glasgow) in 1871, was first owned jointly by E. M. de Bussche and George Brown⁶⁷⁸ who transferred her to Russell and Sturgis on 8 March 1872.⁶⁷⁹ Her new owners employed her largely between China and the Philippines under the Spanish flag until she was wrecked in a typhoon at Hong Kong on 22 September 1874.⁶⁸⁰ Subsequently she was raised and rebuilt and in 1877 returned to the British flag with Alfred Thomas Manger of Hong Kong as registered owner. On 24 August 1877 he sold the ship to John Stewart Lapraik, who owned her—latterly together with other owners—until she was transferred in 1883 to the Douglas Steamship Company, in which Lapraik was interested. They continued to operate *Albay* until she was wrecked near Swatow on 25 December of that year.⁶⁸¹

Henry W. Hubbell, of Peele, Hubbell and Co., had a part interest in *Thames*, a wooden screw steamer of 644 tons, built in 1862 by George Greenman and Co. at Mystic Bridge, Connecticut, partly for their own account. Under Captain Devereux, she left San Francisco for Nagasaki on 22 July 1867 and was reported as at Nagasaki on 6 November 1867.⁶⁸² *Thames* must have returned to the United States before long, as she was surveyed at New York in February 1869. Her end came when she burned off Cape Hatteras, 4 June 1869, without loss of life.⁶⁸³

XII. CONCLUSION

With this account we end the history of American steam navigation in China. Its great days came to a close with the sale of the Shanghai S. N. Co.'s ships and properties in 1877, and a year or two later only *Pingon* of all the steamers trading on the coasts and rivers of China was flying the American flag. The flag reappeared during the Sino-French war of 1883 when the entire fleet of the China Merchants' S. N. Co. was transferred to Russell and Co. and placed under the American flag, but this was only a temporary measure (of uncertain legality) to protect the ships from capture, and on 31 July 1885 they reverted to their Chinese owners and flag. After that, there were from time to time American steamers in service in China, principally on the Yangtze and notably those of the Standard Oil Co., the Dollar S.S. Co. and the Yangtze Rapids S.S. Co., but they have

⁶⁷⁸ See under A. Heard and Co. above.

⁶⁷⁹ *BD*. *Albay* was apparently built for operation by Russell and Sturgis. See *The Artizan*, XXIX (1871), 142.

⁶⁸⁰ *NCH*, 8 October 1874.

⁶⁸¹ *NCH*, 9 January 1884. *BD* says *Albay* was wrecked 20 December 1883.

⁶⁸² *BSL*, 25 December 1867. *CRS*, Nagasaki fails to confirm this.

⁶⁸³ *Lytle List*. *SBF*, June 1954.

not been numerous nor have they formed a substantial portion of the shipping engaged in those waters. Others, however, have been more tenacious and, although largely excluded from the coast and river trade of China under present conditions, a number of companies, including the China Navigation Co. (John Swire and Sons Ltd.), the Indo-China Steam Navigation Co. (Jardine, Matheson and Co.), and Reederei M. Jebsen A.G.⁶⁸⁴ have sufficiently adapted themselves to changing circumstances as to be able to continue in the shipping business.

As one looks over the three and a half decades covered in the present paper, there emerge definite patterns, both of shipping and of ships. As to the former, one has to distinguish four periods. The first was the pioneering stage, lasting approximately through 1859, when the number of steamers was small and the routes not well developed and subject to frequent interruptions through hostilities of various sorts. Following the treaty of Peking in 1860 there came a period of relative stability along the coasts and principal rivers of China, of which an immediate result was a tremendous increase in the number of steamers trading and in the number of their operators. Much secondhand tonnage, some of it highly antiquated, appeared and competition was widespread and keen. For a while there was enough accumulated business for all and this activity reached its peak about 1862, but then trade not only shrank to its normal levels but also failed to exhibit the growth that had been expected of it. As a result there began around 1864 or 1865 a period of readjustment and rationalization. The larger ownerships became larger, while the smaller became smaller and often disappeared entirely. Complete monopoly obtained only on the Yangtze and Ningpo routes and then not for long, but the powerful companies soon came to working agreements with one another. The fourth period may be said to have begun with the formation of the China Merchants' S. N. Co. in 1872, when native shipping enterprises became of importance, exhibiting a trend toward nationalism and self-sufficiency that had appeared in Japan a few years earlier and was appearing elsewhere in the world, notably in South America, and was to prove one of the factors which caused the virtual disappearance of the American flag from the river and coastal trade of the Far East.

Correspondingly, one can trace a development in the types of American ships in use in China. Aside from a few steamers for local service, the earlier American steamers on the China coast were really auxiliary sailing vessels, a type of ship enjoying considerable popularity at that time,

⁶⁸⁴ See, e.g., 'Butterfield & Swire, 1867-1957,' *The Blue Funnel Bulletin*, January 1957; 'Jardines' and the Ewo Interests (Jardine, Matheson & Co., Ltd.) (New York, 1947); E. Hieke, *Die Reederei M. Jebsen A.G., Apenrade* (Hamburg, 1953).

the thought being that they would combine the best features of both steam and sail. This hope, however, was not realized in practice, and this kind of ship, American or otherwise, had disappeared almost completely by the early 1860's. The steamers that followed them were typical American sound and coastwise steamers of the period. Particularly the former were greatly superior to their rivals both in ease and economy of operation and in cargo capacity, and they were largely responsible for the secure place that American steam shipping occupied in that part of the world. It is worth noting that Edward Cunningham thought of American steamers of the sort used on the western rivers as best adapted to the Yangtze trade, but except for a few very small vessels they were never used. Conditions on the lower Yangtze more nearly resembled those on the Hudson River and Long Island sound and the upper Yangtze was not yet opened and western river steamboats of that period would probably not have been stout enough for service there anyway.

Well adapted as these American steamers had been to the coast and river trades of China when they first came out, it had appeared by the late 1860's that wooden hulls were not in general very durable nor beam engines and paddle wheels very efficient. A few of the wooden steamers had long lives, but the majority did not last more than eight or ten years, even if they escaped shipwreck or fire. Rotting of their timbers, often aggravated by strain from overloading, made many of the ships unseaworthy before long, and in the annual report of the S. S. N. Co. for 1873 the directors state that they 'have felt it their duty to order iron vessels to replace the wooden steamers as fast as the latter become unserviceable. They commend the same policy to their successors and believe that, by careful management, the change from wood to iron can be accomplished effectively and economically.' Iron steamers, however, could be built more cheaply in Britain than in the United States, with the result that nearly all the later American steamers in China were British built.⁶⁵⁵ The river steamers, particularly, showed the influence of American design, and the iron screw steamers, both for coast and for river service, that came out in the 1870's established types that were not greatly modified down to recent years.

The American influence in steam navigation in China continued after the virtual disappearance of the flag not only in ship design but also in the work of numerous Americans who chose to remain in China, often

⁶⁵⁵ Of those responsible for the Shanghai S. N. Co.'s policies, H. H. Warden was in later years the principal, if not the only, advocate of building the ships in America. See K.-C. Liu, *Steamship Enterprise in China, 1862-1877*, Chap. III, 'Six Years of "American Monopoly", 1867-1872,' (later referred to as III), pp. 38-39 (ms.).

for the remainder of their lives. Perhaps the most prominent and successful of these was H. B. Endicott, who, in 1873, left the employ of A. Heard and Co. to become the first Shipping Manager of the China Navigation Co. in Shanghai, a position in which he remained until his death at the age of seventy in 1894. Mr. A. V. T. Dean of Messrs. John Swire and Sons, Ltd., writes me that Endicott was a very competent man and that the China Navigation Co. owes much to him. The agreement of sale of the S. S. N. Co. provided that the China Merchants' S. N. Co. should take over the services of the Marine Superintendent of the former company, referring presumably to Miers Coryell, who, however, returned to America after a few years. In 1882 a Mr. Middleton, who had formerly been with the S. S. N. Co., became a responsible official (probably Marine Superintendent) of the Chinese company, a position he held for twenty-five years until his retirement in 1907.⁶⁸⁶ A number of the S. S. N. and other American captains also went with the C. M. S. N. Co., including Andrews, Friend, Morse, Patterson, Paul, Pratt, Wells, Wilson and Winsor.

No one cause can be assigned to the disappearance of the American flag from Chinese waters, a disappearance which was essentially equivalent to that of the Shanghai S. N. Co. As of 1867, when competition with the S. S. N. Co. was about at a minimum, that on the Yangtze was provided primarily by the Union S. N. Co., as already mentioned, and that on the Northern Route by Trautmann and Co., essentially a German company whose ships were operated under the British flag and were taken over in August 1868 by the newly formed North China Steamer Co., with Trautmann and Co. as general agents. Neither of these companies was very strong and the S. S. N. Co. could make working agreements with them on terms which left the American company in an overwhelmingly dominant position. This situation, however, could not and did not last and both competing services later fell into stronger hands. The Union Co.'s service on the Yangtze was taken over by the China Navigation Co. in the spring of 1873, as has already been stated; while Jardine, Matheson and Co., who had entered the Northern Route in March 1869, took over the nearly bankrupt North China Steamer Co. in February 1871 and merged it into the China Coast S. N. Co. in January 1873.⁶⁸⁷ Both the China Navigation Co. and the China Coast S. N. Co. had fleets, mostly of up-to-date vessels, about equal in number of ships and in tonnage to the S. S. N.

⁶⁸⁶ See *Twentieth Century Impressions of Hong Kong, Shanghai and Other Treaty Ports of China* (Arnold Wright, Editor) (London, 1908), p. 466.

⁶⁸⁷ Information regarding competition on the Northern Line is taken largely from K.-C. Liu, *op. cit.*, III, 13-20 (ms.).

fleets on the corresponding lines, and in addition J. S. Swire in the latter part of 1874 acquired two seagoing steamers which he sent to China, thereby inaugurating a coastwise service allied to the China Navigation Co., although it was not merged into the latter until several years later. With these new British competitors the Shanghai S. N. Co. soon made very successful amicable working agreements, but by 1876 the competition, although friendly, was none the less formidable and real. Competition from the China Merchants' S. N. Co., which extended also to the Ningpo Line, was both less friendly and less formidable, but its importance was steadily growing.⁶⁸⁸ To hold their own the Shanghai S. N. Co. had to employ British-built ships and man them with native crews and this aroused antagonisms in the United States which appear in the less friendly official climate, as reflected, for instance, in the consular regulations of 1874. All these circumstances must have helped the directors of the Shanghai S. N. Co. to decide to get out while the getting was good and this they did very skillfully, so that, as R. B. Forbes says,⁶⁸⁹ 'The enterprise was completely wound up as a most successful speculation for all concerned.' But these words themselves suggest what was perhaps the deepest reason for the disappearance of American shipping in China. At this time the American West and Midwest were being opened up and it was to internal enterprises that Americans were turning and away from foreign lands and from the sea. They did not have the British or Scandinavian feeling for belonging on the sea. Navigation in the waters of China was a speculation, to be given up readily when better opportunities for profit arose at home. Nevertheless the chapter of steam navigation which they wrote in the years 1845-1878 is an important one and it has seemed desirable to collect the facts before they are lost. 'Quae jacerent in tenebris omnia, nisi litterarum lumen accederet.'

The author's interest in this subject was first aroused by the Potter photographs at the Peabody Museum of Salem and it was his friends there who first suggested that he follow up this interest by writing on the American steamers in China. This paper has been based very largely on material found at the Peabody Museum, the Essex Institute, the Mariners' Mu-

⁶⁸⁸ K.-C. Liu, *The Creation of the China Merchants S. N. Co., 1872-1874*, especially p. 56 (ms.). See also Paper No. 5 of the 1956 Conference on the Chinese Economy, by the same author: *The Steamship Business in Nineteenth-Century China*.

⁶⁸⁹ *Reminiscences*, 2nd ed., p. 367. Forbes is referring primarily to the original shareholders of the Shanghai S. N. Co., particularly the Americans. A further factor appears to have been the involvement of P. S. Forbes in the affairs of the short-lived China Transpacific S. S. Co. (see under A. Heard & Co., above), for which Russell and Co. had been appointed agents in China. As a result he was badly in need of cash, a need which, in part, at least, could be met by liquidation of the S. S. N. Co. (From notes furnished me by Dr. K.-C. Liu.)

seum, the National Archives, the Library of Congress, and the Baker and Widener Libraries of Harvard University, and the author takes pleasure in acknowledging the helpfulness of these institutions and the kind cooperation of their staffs.

Messrs. Matheson and Co., Ltd., and John Swire & Sons, Ltd., both of London, through Mr. Alan Reid and Mr. A. V. T. Dean respectively, have kindly furnished the author with interesting and useful information, which is much appreciated, as is the kindness of Mr. Elwin M. Eldredge of Clermont, New York, who from his extensive notes has made available information on the builders and dimensions of the engines of American-built steamers treated in the present paper. Finally, the author is especially indebted to Dr. K.-C. Liu of Harvard University who has generously shared his extensive knowledge of the affairs of the companies engaged in shipping on the Yangtze and the North China coast in this period and in particular has made available copies of manuscripts not yet published.

APPENDIX I

SYNOPSIS OF AGREEMENT OF SALE OF PROPERTY OF SHANGHAI S. N. CO. TO
THE CHINA MERCHANTS S. N. CO.⁶⁹⁰

1. The agreement is made by Russell and Co., subject to ratification by the shareholders of the Shanghai S. N. Co.
2. The Shanghai S. N. Co. is to sell and the China Merchants S. N. Co. to buy all steamers, floating and landed property, etc., of the S. S. N. Co. as of 31 December 1876 for Tls. 2,000,000.
3. The purchase money is to be paid as follows:

On or before the signing of the agreement:	Tls. 180,000;
On or before 31 January 1877:	220,000;
On or before 31 March 1877:	600,000;

 the balance to be paid at the rate of Tls. 50,000 quarterly over five years.
4. The purchasers may forestall any payments.
5. Eight per cent interest shall be paid on the unpaid balance.
6. The property shall be at the risk of the purchasers from 1 January 1877.
7. Russell and Co. are to continue the working of the steamers and the business for the account and risk of the purchasers until 31 March 1877.
8. The purchasers are to have the management of the steamers and property after the payment of 31 March 1877.
9. The purchasers are entitled to have all steamers and property absolutely made over to them on payment of the whole purchase money, or such amounts of steamers and property as correspond to a fair equivalent of the purchase money paid.
10. The purchasers are to insure the steamers and property of which they have management but which have not yet been absolutely transferred.
11. The purchasers are to take over any leases of frontage, etc.
12. The purchasers are to take over the service of the Marine Superintendent of the S. S. N. Co.
13. The purchasers are not to run the purchased steamers on the south coast or between Hong Kong, Canton and Macao before certain dates, by agreements of the Shanghai S. N. Co. in 1867 with Jardine, Matheson and Co., Augustine Heard and Co., and the Hong Kong, Canton and Macao S. B. Co. (soon to expire).
14. The payment due 31 March may be made on 28 February and the purchasers thereby obtain the benefits due on the former date.
15. Provision for further agreements.

The foregoing is taken from *NCH*, 18 January 1877. At a special meeting of the S. S. N. Co. shareholders on 15 January 1877, at which 20,000 shares out of 22,500 were represented, the above proposal was accepted and the liquidation of the company assented to.

⁶⁹⁰ *NCH*, 18 January 1877.

APPENDIX II

THE SHANGHAI S. N. CO. RETURNS OF CAPITAL AND ACCUMULATIONS

Date	Return	Rate	Amount
6 March 1877	1st	Tls. 70 per share	Tls. 1,575,000
8 October	2nd	5	112,500
8 March 1878	3rd	5	112,500
8 April	4th	3	67,500
15 July	5th	2½	56,250
21 October	6th	2	45,000
15 January 1879	7th	2	45,000
9 April	8th	4	90,000
16 July	9th	2	45,000
20 October	10th	2	45,000
19 January 1880	11th	2	45,000
9 April	12th	3¼	73,125
9 July	13th	2	45,000
19 October	14th	2	45,000
1 June 1885	15th (final)	1	22,500
		107¾	2,424,375

The final general meeting of the Shanghai S. N. Co. (in liquidation) was held on 18 May 1885. After taking into account the return of capital payable on 1 June, the final balance sheet, dated 2 May 1885, was as follows:

Dr.		
Returns of capital and accumulation.		Tls. 2,424,375.00
Liquidation account.		557,200.83
		<u>2,981,575.83</u>
Cr.		
Stock.		2,250,000.00
Insurance and depreciation fund.		615,902.35
Interest account.		115,673.48
		<u>2,981,575.83</u>

After payment of the fifteenth distribution there would remain Tls. 479.68, which Russell and Co. would hold in trust. This amount, together with anything realized from an *Alabama* claim of about \$16,000 then pending, was eventually to be distributed to the stockholders of record 1 June 1885. Certain leases, whose existence had prevented the winding up of the company earlier, had by then expired. Accordingly, the directors resigned as of the close of the meeting, and on their recommendation the shareholders voted unanimously to bring the existence of the Shanghai S. N. Co. to a close.⁶⁹¹

⁶⁹¹ NCH, 22 May 1885.

APPENDIX III

TECHNICAL DETAILS OF STEAMERS MENTIONED IN TEXT⁰⁹²

Name (Year Built)	Material	Type	Tonnage		Builder	Hull		Builder	Engine Type	Dimensions
			Gross	Net		Dimensions	Builder			
Abbotsford (1870)	Iron	scr.	1035.24	649.36	Blackwood	227.5	x 29.4	x 15.7	Cpd.	26" x 46" x 36"
Acantha (1868)	Iron	scr.	1042.26	652.84	Lawrie	236.0	x 28.2	x 16.8	D.A.	48" x 48" x 33"
Aegon (1870)	Iron	scr.	1112.84	836.45	London & G.	231.2	x 31.2	x 21.85	Cpd.	31" x 54" x 33"
Albany (1871)	Iron	scr.	584.59	366.23	Dobie	170.0	x 26.5	x 17.3	Cpd.	25" x 45" x 30"
Alexander (1855)	Wood	scr.	420.00/95		Webb	159.6	x 25.4	x 12	V. B.	26" x 26" x 26"
Altona (1872)	Iron	scr.	1819.02	1185.20	Backhouse	280.0	x 35.0	x 24.5	Cpd.	33" x 67" x 36"
Anna (1859)	Wood	pad.	67.11/95		Ridout	112.5	x 20.7	x 3.1		
Antelope (1855)	Wood	scr.	415.0/95		Hall	155.6	x 26.11	x 10.6	I. B.	30" x 30" x 26"
Ariel (1855)	Wood	pad.	1736.39		Simonson	252.0	x 32.6	x 20.8	V. B.	75" x 132"
Arizona (1865)	Wood	pad.	2793.44		Steers	333.8	x 44.8	x 41.0	V. B.	105" x 144"
Ashuelot (1863) ⁰⁹³	Wood	scr.	323.19		Englis	138.0	x 29.2	x 11.6	Osc.	36" x 56" x 32"
Bellona (1872) ⁰⁹⁴	Iron	scr.	1098	707	Denton	229.5	x 30.3	x 16.9	Cpd.	27" x 50" x 33"
Bengal (1853)	Iron	scr.	2036.11	1302.71	Tod	310.0	x 39.2	x 25.4	G. B.	80" x 80" x 60"
Blythoode (1870)	Iron	scr.	1214.48	770.46	Denton	230.0	x 32.0	x 17.2	Cpd.	44" x 78" x 42"
Bunker Hill (1861)	Wood	scr.	63.56/95		Boole	60.4	x 8" x 16.6"	x 7.3"	Cpd.	28" x 56" x 36"
Cadiz (1853)	Iron	scr.	815.94	481.14	Tod	226.4	x 28.4	x 18.6	D. A.	15" x 13" x 15"
Capron (1872) ⁰⁹⁵	Wood	scr.	374	136	Poillon	120.0	x 22.2	x 11.0	T. G.	58" x 56" x 48"
Carolina (1849) ⁰⁹⁶	Wood	scr.	544.68/95		Birely	149.7	x 27.9	x 14.0	D. A.	30" x 30" x 30"
Chekiang (1862) ⁰⁹⁷	Wood	pad.	1864.10/95		Steers	264.4	x 36"	x 14.4"	D. A.	44" x 44" x 36"
Chi Kiang (1862)	Wood	scr.	240.44/95		Jewett	101.4	x 22.10"	x 11.5"	V. B.	70" x 132"
Chieflain (1859) ⁰⁹⁸	Wood	scr.	722	389	Deptford	176.0	x 33.0	x 17.3	Hor.	20" x 20" x 24"
Chihli (1807)	Iron	scr.	1402.11	772.81	Napier	246.0	x 34.6	x 21.0	D. A.	45" x 24"
Chihli (1871)	Iron	scr.	1145.08	739.41	Englis	212.6	x 33.5	x 18.8	G. B.	31" x 60" x 36"
Chusan (1852)	Iron	scr.	699.87	529.01	Ravenhill	190.0	x 29.5	x 16.1	Cpd.	39" x 39" x 24"
Chusan (1866)	Wood	pad.	1633.93		Simonson	253.0	x 40.0	x 15.0	Osc.	62" x 144"
Chusan (1874)	Iron	pad.	1381.13	953.43	Elder	300.9	x 50.2	x 10.0	V. B.	62" x 144"
City of Exeter (1870)	Iron	scr.	1053.90	787.86	Pearse	228.2	x 29.25	x 17.15	V. B.	62" x 144"
Columbia (1850)	Wood	pad.	777.24/95		Westervelt	193	x 29	x 19.5"	Cpd.	28" x 53" x 33"
Confucius (1853)	Wood	pad.	468.6/95		Collyer	161	x 26.8"	x 11.6"	S. L.	57" x 60"
Consolation (1873)	Iron	scr.	1182.37	768.41	Aitken	242.0	x 30.5	x 22.4	V. B.	50" x 120"
Contest (1859)	Iron	scr.	522.80/95		Loring	146	x 25'10.8"	x 14'8.4"	Cpd.	30" x 60" x 36"
									D. A.	38" x 38" x 32"

Name (Year Built)	Material	Type	Tonnage		Hull		Engine		
			Gross	Net	Builder	Dimensions	Type	Dimensions	
<i>Fychow</i> (1866)	Wood	pad.	1633.93		Simonson	253 x 40 x 15		V. B.	62" x 144"
<i>Ganges</i> (1850) ⁷⁰⁹	Iron	pad.	1189.58	742.30	Tod	235.3 x 29.4 x 18.4		S. L.	77" x 77" x 78"
<i>General Ward</i> (1863)	Wood	scr.	70 55/95		Boole	65.8 x 16.7 x 7.2			
<i>Glendarroch</i> (1871)	Iron	scr.	1509.37	954.39	Stephen	272.3 x 33.1 x 24.2		Cpd.	34" 60" x 36"
<i>Glengyle</i> (1864)	Iron	pad.	1933.28		Denny	297.3 x 58.3 x 14.8		Incl.	58" 58" x 108"
<i>Golden Age</i> (1853)	Wood	pad.	1869.56	1265.52	Brown	272" 10" x 41" 10" x 25" 1"		V. B.	83" x 144"
<i>Governor General</i> (1848)	Wood	pad.	761 65/95		Webb	209 x 30 x 12		V. B.	54" x 132" 710
<i>Hangchow</i> (1863)	Wood	pad.	2024.54		van Deussen	252.5 x 39.6 x 17.1		V. B.	60" x 120"
<i>Hankow</i> (1866)	Wood	pad.	725 87/95		Collyer	213" 6" x 30" 6" x 11" 7"		V. B.	48" x 144"
<i>Hellespont</i> (1849) ⁷¹¹	Iron	scr.	445.30	330.50	Mare	174.5 x 24.4 x 14.5		I. D. A.	36" 36" x 24"
<i>Hirado</i> (1865)	Comp.	pad.	1294		Collyer & L.	265 x 56 x 10.6		V. B.	60" x 144"
<i>Hokaido</i> (1861)	Wood	pad.	1055			200' x 33' x 11' 6"		V. B.	50" x 132"
<i>Honan</i> (1871) ⁷¹²	Iron	pad.	566	339	S. S. N.	218.0 x 31.2 x 9.0			50" x 96"
<i>Hong Kong</i> (1849)	Wood	pad.	232.3	149.7	Pitcher	133.0 x 18.0 x 11.55			38" 38" x 3.9'
<i>Honque</i> (1868)	Wood	pad.	665		Roberts	155 x 26 x 17			
<i>Houquah</i> (1863)	Wood	scr.	397 49/95		B. & B.	126.0 x 23.6 x 14.3			
<i>Hupoh</i> (1870)	Iron	pad.	2745.79	2006.18	Ingils	277.2 x 42.3 x 14.25			
<i>Huquang</i> (1862) ⁷¹³	Wood	pad.	1599 91/95		Steers	280' 4" x 36" x 13' 8"		D. A.	36" x 96"
<i>John S. Williams</i> (1862)	Wood	scr.	161 19/95		Lawrence	92' x 19' x 6'		V. B.	66 1/2" x 144"
<i>John T. Wright</i> (1860)	Wood	pad.	369 73/95		Hammond	168' x 26' 8" x 8' 8"		Cpd.	29" 57 1/4" x 144"
<i>Kaga-no-kami</i> (1861)	Wood	scr.	338.39		Sampson	158.9 x 27.9 x 12.0		D. A.	28" x 28"
<i>Kankakee</i> (1863)	Wood	scr.	313.59		Westervelt	137.0 x 29.2 x 11.6		Hor.	30" 30" x 18"
<i>Kewanee</i> (1861)	Wood	scr.	236.59		Robb	141.0 x 27.2 x 11.2		Osc.	2-cyl.
<i>Kiang Loong</i> (1862)	Wood	pad.	945 26/95		Ingils	270' 8" x 39' 7" x 10' 5"		V. B.	72" x 144"
<i>Kiangse</i> (1862) ⁷¹⁴	Wood	pad.	1086 20/95		Erected by Thomas Hunt & Co., Whampoa				
<i>Kiangsoo</i> (1862)	Wood	scr.	240 44/95		Lawrence	204' x 33' 6" x 16' 9"		V. B.	50" x 132"
<i>Kinshan</i> (1863)	Wood	pad.	1722	1381	Jewett	101' 4" x 22' 10" x 11' 5"		D. A.	22" 22" x 20"
<i>Kiukiang</i> (1863)	Wood	pad.	1065 11/95		Roosevelt	234.4 x 35.4 x 11.8		V. B.	56" x 130"
<i>Kiushiu</i> (1862)	Iron	scr.	839.35	684.99	Ingils	243' 6" x 36" x 12' 8"		V. B.	58" x 12"
<i>Kureda</i> (1872) ⁷¹⁵	Wood	scr.	644	386	Robinson	199.9 x 27.8 x 19.0		Cpd.	24" 44" x 30"
<i>Kwangchow</i> (1871)	Iron	scr.	1335.39	864.11	Poillon	194.3 x 26.7 x 16.9		Cpd.	24" 42" x 34"
<i>Laptek</i> (1872)	Iron	scr.	734	462	Denny	271.3 x 30.1 x 22.6		Cpd.	34 1/2" 60" x 36"
<i>Lily</i> (1856)	Wood	pad.	413		Jackson	189.0 x 25.0 x 19.7		Cpd.	16" 32" x 56"
<i>Lotus</i> (1861)	Iron	scr.	594.99	461.42	Cowper	179 x 22 x —			
			669.33	517.17	Henderson	202.0 x 27.1 x 15.2			
<i>Luzon</i> (1864) ⁷¹⁶	Iron	scr.	1066	743	Blackwood	{ 220.2 x 29.1 x 14.9 219.9 x 28.2 x 14.8		Cpd.	27" 50 3/4" x 26"

Name (Year Built)	Material	Type	Tonnage		Hull		Builder	Builder	Engine Type	Dimensions
			Gross	Net	Builder	Dimensions				
Maggie Lauder (1863)	Iron	scr.	129.68	68.90	Miller	90.4 x 20.7 x 9.5	Delamater	D. A.	50" x 30" x 34"	
Manchu (1866)	Wood	scr.	803.63		Mallory	195.4 x 37.0 x 17.0	Mare ⁷¹⁷	D. A.	58" x 58" x 48"	
Mars (1862)	Iron	scr.	1021.46	679.44	Mare	261.6 x 31.3 x 21.1	Kenay	D. A.	24" x 24" x 24"	
Martin White (1854) ⁷¹⁸	Wood	scr.	189 31/95		Birely	92' x 23' x 10'	Neptune	D. A.	26" x 26" x 26"	
Mary A. Boardman (1862)	Wood	scr.	483 2/95		Englis	154' x 27' x 12.4"	Samuelson	Cpd.	27' .50" x 33"	
Mecca (1872)	Iron	scr.	1066.90	686.81	Osbourne	220.8 x 30.0 x 16.6				
Meteor (1850)	Wood	scr.	136.57	86.04	Tobey	105.9 x 17.6 x 8.6	Greenock	D. A.	62" .62" x 36"	
Meteor (1864)	Wood	scr.	1221.15		Hall	255.5 x 34.8 x 16.8	Hogg	D. A.	45" .45" x 30"	
Midas (1844)	Wood	tw. scr.	186 13/95		Oswald	100' x 21' 7" x 9' 5"	Clark	D. A.	24" .24" x 21"	
Milbanke (1868)	Iron	scr.	1296.13	843.11	Englis	234.3 x 31.1 x 17.6	Englis	D. A.	{ 41 1/2" .41 1/4" x 33"	
Millet (1856) ⁷¹⁹	Iron	scr.	304.82	181.61	Englis	120.2 x 30.15 x 10.7	Tulloch	S. T. G.	{ Trunk 18"	
Min (1856) ⁷²⁰	Iron	scr.	192	130	Denny	125.0 x 21.0 x 12.0	West Point	V. B.	70" x 144"	
Mississippi (1854)	Wood	pad.	2026 26/95		Edwards	285' x 38' 4" x 14'	Neptune	V. B.	65" x 150"	
Moyune (1865)	Wood	pad.	1223 81/95		Englis	254' 6" x 38' 8" x 13'				
Mona (1863)	Iron	scr.	693.95	542.21	Backhouse	188.7 x 28.3 x 17.3	Howden	Cpd.	48" .90" x 48"	
Mongol (1873)	Iron	scr.	2259.35	1463.65	Dobie	300.5 x 35.4 x 31.2		Cpd.	25" .44" x 33"	
Mountain (1869) ⁷²¹	Comp.	scr.	673	448	Laing	190.6 x 26.1 x 13.4	Morgan	V. B.	80" x 132"	
Nanking (1873)	Comp.	pad.	2330	1468	Rowland ⁷²²	295.5 x 50.0 x 11.5	Morgan	V. B.	85" x 144"	
Nevada (1865)	Wood	pad.	2143.82		Simonsen	281.0 x 40.0 x 16.3	Allaire	V. B.	90" x 144"	
New York (1865)	Wood	pad.	2217.00		Simonsen	292.6 x 41.7 x 26.5	Atlantic	D. A.	26" .26" x 26"	
Nippon (1863)	Comp.	scr.	399.58		Atlantic	154.0 x 24.9 x 16.0	Allaire	V. B.	82" x 144"	
Oregonian (1866)	Wood	pad.	1914.45		Lawrence	275.5 x 42.4 x 21.3	Neafe	V. B.	60" x 120"	
Oriplamme (1863)	Wood	pad.	1204 73/95		Lawrence	227' x 38' 3" x 19'				
Packong (1875)	Iron	pad.	733	557	Farnham	158.0 x 28.0 x 15.6	Elder	Cpd.	32" .62" x 38"	
Pauitong (1873)	Stl. & Iron	scr.	1061.37	640.59	Elder	211.0 x 33.0 x 13.0		Osc.	36" .36" x 30"	
Pautuxet (1864)	Wood	scr.	230.80			143' x 26' 6" x 11' 6"	Morgan	Osc.	52" x 96"	
Paysan (1856)	Wood	scr.		47	Ross	103' x 12' x —	Boyd	Cpd.	14" .28" x 28"	
Peiho (1858)	Wood	pad.	1113 18/95		Collyer	225' 9" x 32' x 16' 1"	Atlantic	V. B.	26" x 36"	
Peiho (1866)	Iron	scr.	137.12	70.31	Reiherstieg	95.0 x 17.0 x 11.6	Atlantic	Trunk	85 1/2" .85 1/2" x 54"	
Pembroke (1860)	Iron	scr.	241 16/95		Atlantic	113' 6" x 24' 8.4" x 9' 4.8"	Tod	D. A.	72" .72" x 45"	
Perusia (1857) ⁷²³	Iron	scr.	2017.79	1143.40	Tod	301.0 x 41.3 x 19.5	Rankin	Cpd.	57" .92" x 45"	
	L.69	NE69	3452.41	2203.09		352.6 x 41.5 x 19.15	Neafe	D. A.	36" x 34"	
						NE 74				
Pingon (1865)	Wood	scr.	549.76		Cramp	169.8 x 27.5 x 17.0				
	L73		806		Boyd	219.0 x 26.8 x 16.6				

Name (Year Built)	Material	Type	Tonnage		Builder	Hull Dimensions		Builder	Engine Dimensions	
			Gross	Net		Length	Breadth		Type	Dimensions
Pluto (1863)	Wood	scr.	202 42/95		Englis	97' x 20'8" x 11'		Dillon	D. A.	22" x 22"
Plymouth Rock (1863) 708	Wood	pad.	3017.32	2379.96	Westervelt	284.0 x 41.6 x 14.5		Allaire	V. B.	81" x 144"
Poyang (1861) 724	Wood	pad.	827 84/95		Roosevelt	233' x 31' x 11'10"		Allaire	V. B.	50" x 144"
Promise (1863)	Wood	pad.	590 42/95		van Deusen	156'6" x 30' x 13'6"		Dillon	D. A.	26", 26" x 26"
Rajah (1853) 728	Iron	scr.	537.08	419.04	Marc	163.6 x 24.0 x 16.7		Watt	T. C.	39", 39" x 27"
			506.57	364.02		169.6 x 25.8 x 16.9				
Relief	Iron	scr.	791.45							
River Bird (1854)	Wood	pad.	527 38/95		Snedden	174' x 30'8" x 10'6"		Fulton	V. B.	40" x 120"
Rocket (1865)	Iron	scr.	76.01	17.47	Hornby	85.6 x 17.0 x 9.2		Marshall	D. A.	18", 18" x 18"
Rona (1862) 726	Iron	pad.	1215.42	784.30	Denny	235.0 x 33.2 x 21.3		Denny & Co.	Diag.	46", 46" x 108"
Rover (1863)	Iron	tw. scr.	496.17			179.0 x 23.3 x 19.1			D. A.	(2) 26", 26" x 20"
Santa Cruz (1857) 727	Wood	scr.	349 87/95	759.32	Collyer	131'10" x 26' x 11'		Neptune	D. A.	26", 26" x 26"
Scotland (1856)	Iron	scr.		524.17	Oswald	210.7 x 32.9 x 19.8		Richardson	D. A.	42 1/2", 42 1/2" x 24"
Shaftesbury (1862)	Iron	scr.	{ 680.86	744 (after rebuilding)		200.0 x 28.7 x 16.8				
			{ 1031		Lawrence	206' x 32' x 16'				
Shanse (1862)	Wood	scr.	1006 71/95		Collyer	150' x 25' x 10 1/2"		Fletcher	C. B.	50", 50" x 72"
Shantung (1861) 728	Wood	pad.	361 16/95			216.8 x 39.2 x 16.4		Neptune	V. B.	36" x 120"
Shantung (1870)	Iron	scr.	1520.24	907.60	Englis	219.2 x 33.0 x 18.2		Englis	Cpd.	24", 45 1/2" x 30"
Shingking (1873)	Iron	pad.	1249.27	710.79	Englis	244.0 x 33.0 x 18.2		Englis	V. B.	56" x 144"
L and NE			1378	869				Laird	Cpd.	36", 62" x 39"
NE								Lees	T. E.	20", 32", 52" x 39"
Sir George Grey (1859)	Iron	scr.	506	506	Reiherstieg			Englis	Cpd.	(2) 27", 49" x 30"
Soochow (1858)	Iron	tw. scr.	447.45	318.18	Robinson	162 x 25 x 15		Howden	D. A.	34", 34" x 27"
	NE 74									
Soochow (1865) 729	Iron	scr.	504.01	354.62	Hedderwick	180.2 x 25.8 x 15.1		McDougal	Incl.	36", 36" x 72"
Spark (1850)	Wood	pad.	133.24	86.54		128.0 x 17.5 x 6.6		McDougal	Cross.	74 1/2", 74 1/2" x 72"
Spec (1862)	Comp.	pad.	130.45	89.23	McDougal	190.0 x 18.8 x 8.0		CaIRD	T. I.	42", 42" x 48"
Sultan (1847)	Iron	pad.	1090.33	728.76	Tod	224.2 x 29.1 x 17.8		Howden	Cpd.	30", 60" x 39"
L and NE, 1855			1124.7	808.3		231.0 x 32.0 x 17.8				
Sunfoo (1871)	Iron	scr.	1449.56	918.33	Stephen	264.1 x 33.1 x 24.3		Neptune	V. B.	76" x 144"
Surprise (1853)	Wood	pad.	456 50/95		Lawrence	181' x 27'9" x 9'6"		Essler	C. F.	50", 50" x 72"
Swonada (1864)	Wood	pad.	1802 44/95		Englis	258' x 38'2" x 21'2"		Neptune	V. B.	80" x 144"
Szechuen (1862) 730	Wood	scr.	1006 71/95	806	Lawrence	206' x 32' x 16'		Dickson	D. A.	36", 36" x 44"
Szechuen (1875)	Iron	pad.	1242		Elder	327' x 50' x 13'				
Takiang (1862) 731	Wood	scr.	609 43/95		Roosevelt	164'6" x 28' x 14'				
Ta Yung (1858)	Iron	pad.	124.70	49	Tod	109.4 x 18.6 x 9.3				
Tah Wah (1862)	Wood	pad.	590		Snedden					

Name (Year Built)	Material	Type	Tonnage	Gross	Net	Builder	Dimensions	Builder	Type	Dimensions
Tartar (1873)	Iron	scr.	2254.50	1467.77	Dobie	300.3 x 35.4 x 24.2	Howden	Cpd.	48", 90" x 48"	
Thales (1864)	Iron	scr.	1198.78	819.89	A. Denny	231.0 x 31.4 x 23.0	Denny & Co.	D. A.	56", 50" x 42"	
Thames (1862) 732	Engines compounded	by Hong Kong Dock Co., in 1880	644 77/95	Greenman	150" x 30'6" x 14'6"	Delamater	D. A.	30", 51" x 42"		
Tokei Maru (1852)	Wood	pad.	1433.44/95	Perine	235'6" x 35'8" x 22'	Allaire	S. L.	34" x 30"		
Toutia (1862) 732	Wood	scr.	379.43/95	Collyer	149'4" x 26'7" x 10'2"	Neptune	D. A.	66" x 132"		
Trafalgar (1871)	Iron	scr.	1513.90	973.60	Mitchell	248.3 x 32.3 x 24.6	Maudslay	Cpd.	26", 26" x 26"	
Tsatlee (1862)	Wood	pad.	80 23/95	Samuda	85' x 15'6" x 6'6"	Penn	Osc.	29", 56" x 33"		
Tunsin (1863)	Iron	pad.	773.51	610.94	Cramp	241.3 x 26.0 x 12.8	Sutton	Osc.	46", 46" x 50"	
Underwriter (1854)	Wood	scr.	433 66/95	Steele	135.4 x 27.0 x 12.8	Caird	S. L.	46" x 54"		
Unicorn (1836) 732	Wood	pad.	649	390	Steele	163 x 23 x 17		57", 57" x 66"		
Union (1854)	Comp. scr.	NE	786.21	593.13	Samuda	165.6 x 22.8 x 17.6	Farnham	Cpd.	20", 36 1/4" x 27"	
Union Star (1861)	Wood	scr.	307.44	204.88	Samuda	163.7 x 22.0 x 14.0	Mare	Osc.	56", 56" x 44"	
United Service (1857)	Iron	scr.	163 10/95	725.47	Liquori	112' x 24'6" x 6'6"	Henderson	Cpd.	54", 102" x 54"	
Vanconner (1874)	Iron	scr.	1128.00	955.50	Laing	218.1 x 31.0 x 18.2	Delamater	D. A.	36", 36" x 36"	
Varuna (1863)	Wood	scr.	1459	1987.62	Henderson	293.4 x 31.3 x 17.9	Henderson	Cpd.	54", 102" x 54"	
Vasco de Gama (1873)	Wood	scr.	2922.97	1987.62	Mallory	349.6 x 37.0 x 31.9	{Marc—designed by Harrington	Cpd.	54", 102" x 54"	
Venus (1862)	Iron	scr.	867.37	1980.45	Henderson	188.5 x 33.0 x 20.0	Dillon	D. A.	26" x 26"	
Vulcan (1865)	Iron	scr.	2912.43	677.44	Mare	261.6 x 31.3 x 21.1	West Street	Incl.	38" x 108"	
Washington (1844)	Wood	scr.	1022.63	928.724	Englis	250.0 x 31.2 x 27.5	Morgan	V. B.	25", 50" x 30"	
Washington (1854)	Wood	pad.	1373	85.85	Maxton	131'8" x 24'10" x 12'	Harlan	Osc.	38", 38" x 96"	
White Cloud (1859)	Rebuilt at Boston, 1864	Wood	366 26/95	85.85	Crawford	121.3 x 20.0 x 11.6	Secor	V. B.	52" x 132"	
Williamette (1849)	Wood	pad.	193.81	566.92	Collyer	136'4" x 32'2" x 11'	Neptune	V. B.	80" x 144"	
William Miller (1866)	Iron	scr.	618 3/95	566.92	Harlan	186' x 32' x 11'	Napier	P. D.	56 1/2", 56 1/2" x 36"	
Woosung (1864)	Wood	tw. scr.	520 51/95	1187	Elder	182' x 29'1" x 10'4"	Humphreys	Cpd.	30 1/2", 56" x 33"	
Yangtze (1857) 735	Iron	scr.	370 46/95	1003 10/95	Boole	155.6' x 28.2' x 9.0'				
Yangtze (1868)	Wood	pad.	888.64	973.16	Collyer	215.8 x 27.7 x 20.5				
Yesso (1864)	Wood	pad.	161 3/95	605.55	Batchelder	90.2 x 20.2 x 9.7				
Yung Hai An (1855) 736	Wood	pad.	1003 10/95	661.20	Simonson	205'6" x 32'2" x 16'1"				
Yungching (1872)	Iron	scr.	1187	1035.46	Napier	260' x — x —				
	Iron	scr.	605.55		Humphreys	200.0 x 36.0 x 21.0				
	Iron	scr.	1035.46			235.4 x 30.8 x 23.1				
	Iron	scr.	1035.46			230.7 x 30.0 x 16.15				

⁶⁹² Information has been taken from official documents, American or British, wherever possible, and material from these sources is characterized by the use of fractional tonnages. It has not been thought desirable to give all changes in tonnages or dimensions, since these changes are often slight, those data being preferred which are applicable as near as possible to the time when the steamer was in American service in China. When documents are not available, the source for dimensions, tonnages and builders is usually indicated, *Lloyd's Register* being preferred, the data there being probably as accurate as the official figures although not always based on the same rules. Information regarding machinery is not in general given in official documents of this period and has mostly been obtained from *Lloyd's Register* or *Underwriters' Register for Iron Vessels*. Some (but not necessarily all) other sources of information are given in footnotes.

⁶⁹³ See *Harper's Magazine*, LXV (1882), 232.

⁶⁹⁴ *Lloyd's Register*, 1876-1877.

⁶⁹⁵ *Lloyd's Universal Register*, 1886-1887.

⁶⁹⁶ See also *JFI*, XLVIII (1849), 332-333.

⁶⁹⁷ See also *JFI*, LXXV (1863), 380.

⁶⁹⁸ *BVRG*, 1872. See also T. J. Main and T. Brown, *The Marine Steam Engine* (Philadelphia, 1864).

⁶⁹⁹ *Lloyd's Register*, 1869-1870.

⁷⁰⁰ See also *JFI*, LVIII (1854), 139; *The Artizan*, XII (1854), 287.

⁷⁰¹ The dimensions are those of the new hull, constructed in Calcutta. The English frame of oak, which Mr. J. T. Robarts, the owner, had had sent to China early in 1822, but which—because of his poor health—he did not erect there, was, on its arrival in India, not considered sufficiently durable for use. See G. A. Prinsep, *An Account of Steam Vessels and of Proceedings connected with Steam Navigation in British India* (Calcutta, 1830), p. 3. This gives the tonnage as 132 92/94 g., 89 79/94 n.

⁷⁰² *NCH*, 12 July 1873.

⁷⁰³ See also *JFI*, LXXV (1863), 376.

⁷⁰⁴ See also *JFI*, LXXV (1863), 343.

⁷⁰⁵ Data taken from her British document, when she was registered at St. John.

⁷⁰⁶ See also *JFI*, LXXV (1863), 43-44.

⁷⁰⁷ See also *NYH*, 14 February 1864.

⁷⁰⁸ Data from Endicott lithograph.

⁷⁰⁹ See also *The Artizan*, IX (1851), 44.

⁷¹⁰ The diameter of the cylinder is also given as 52".

⁷¹¹ See also *The Artizan*, IX (1851), 237.

⁷¹² *Lloyd's Register*, 1914-1915.

⁷¹³ See also *JFI*, LXXV (1863), 176.

⁷¹⁴ See also *JFI*, LXXV (1863), 178.

⁷¹⁵ *Lloyd's Universal Register*, 1886-1887.

⁷¹⁶ The second set of tonnages and dimensions is taken from *Lloyd's Register*, 1893-1894, and probably reflects the addition of upper works.

⁷¹⁷ Designed by T. Harrington.

⁷¹⁸ See also Reany, Neafie & Co.'s Record Book, 1849-1864 (at Mariners' Museum).

⁷¹⁹ From information kindly supplied by Messrs. A. & J. Inglis.

⁷²⁰ From information and engine plans kindly supplied by Messrs. Wm. Denny & Bros.

⁷²¹ *Lloyd's Register*, 1869-1870, 1914-1915.

⁷²² Iron frames only. They were set up and planked by the S. S. N. Co. at Hongkew. Dimensions and tonnages are taken from *Lloyd's Register*, 1893-1894. The engine, which had come from *Chekiang*, was rebuilt by M. Coryell.

⁷²³ See also *Practical Mechanic's Journal*, 2nd Ser., II, 248.

⁷²⁴ See also *JFI*, LXXV (1863), 173.

⁷²⁵ The first set of dimensions and tonnages are as of 1853; the second as of 1865.

⁷²⁶ See also *The Artizan*, XX (1862), 93.

⁷²⁷ See also *The Artizan*, XIV (1856), 255.

⁷²⁸ See also *JFI*, LXXV (1863), 43.

729 See also *The Artizan*, XXIII (1865), 165.

730 See also *JFI*, LXXV (1863), 378.

731 See also *JFI*, LXXV (1863), 342.

732 See also *JFI*, LXXV (1863), 346.

733 See also H. P. Spratt, *Transatlantic Paddle Steamers* (Glasgow, 1951), pp. 37-38. The second set of data is from her registration at Sydney in 1854.

734 These figures are taken from *URIV*, 1874-1875. They probably correspond to the addition of upper works or deckhouses.

735 See also *JFI*, LXXI (1861), 167.

736 See also R. Murray, *Rudimentary Treatise on the Marine Engine and on Steam Vessels and the Screw* (London, 1858), Appendix.

Further comments on steamers in Appendix III: There is some indication that *Anna* may have had a stern wheel. *Laptek* was consigned occasionally, but not regularly, to A. Heard & Co.

Full names and locations of ship and engine builders

Aitken	Aitken & Mansel, Whiteinch
Allaire	Allaire Works, New York
Almond	W. & J. Almond, North Shields
Atlantic	Atlantic Works, East Boston
Backhouse	Backhouse & Dixon, Middlesbro'
Batchelder	J. M. Batchelder, Shanghai
Birely	Birely & Son, Philadelphia
Blackwood	Blackwood & Gordon, Port Glasgow
Blair	Blair & Co., Ltd., Stockton-on-Tees
Boole	G. & T. Boole, East Boston
Boulton	Boulton & Watt, Birmingham
Boyd	Boyd & Co., Shanghai
Brown	William H. Brown, New York
Caird	Caird & Co., Greenock
Clark	George Clark, Southwick (Sunderland)
Collyer	Thomas Collyer, New York
Collyer & L.	Chas. S. Collyer & A. G. Lambert, Yankin & Pootung
Coryell	Miers Coryell (Marine Supt. for S. S. N. Co.), Pootung
Cowper	J. C. Cowper, Whampoa
Cramp	William Cramp & Sons, Philadelphia
Crawford	John Crawford, Keyport, N. J.
Delamater	Delamater Iron Works, New York
Denny	Wm. Denny & Bros., Dumbarton
Denny & Co.	Denny & Co., Dumbarton
Denton	Denton, Gray & Co., West Hartlepool
Deptford	Deptford Dock Yard
Dickson	Dickson & Co., Scranton, Pa.
Dillon	John Dillon, Newburgh, New York
Dobie	Dobie & Co., Govan
Dunham	H. R. Dunham & Co., New York
Edwards	Edwards, ⁷⁸⁷ Niagara-on-the-Lake, Ontario
Elder	J. Elder & Co., Govan
Englis	John Englis & Son, New York
Essler	Henry Essler & Co., Brooklyn, New York
Etna	Etna Iron Works (John Roach & Son), New York
Farnham	S. C. Farnham & Co., Shanghai
Faron	T. H. & E. Faron, New York
Fletcher	Fletcher, Harrison & Co., Hoboken, New Jersey
Forrester	Geo. Forrester & Co., Vauxhall Foundry, Liverpool
Fossick	Fossick & Hackworth, Stockton-on-Tees
Gray	R. & J. B. Gray
Greenman	Geo. Greenman & Co., Mystic Bridge, Conn.
Greenock	Greenock Foundry Co., Greenock
Hall	Samuel Hall, East Boston
Hammond	William Hammond, Port Ludlow, Wash.
Harlan	Harlan & Hollingsworth, Wilmington, Delaware
Harman	H. W. Harman, Northfleet, Kent
Harrington	T. Harrington, London
Hawthorn	R. & W. Hawthorn, Newcastle-upon-Tyne
Hedderwick	Hedderwick & Co., Govan
Henderson	Henderson, Coulborn & Co., Renfrew

⁷⁸⁷ Possibly Captain David F. Edwards, who had worked in W. H. Webb's shipyard and was subsequently engaged in shipbuilding on the Great Lakes. See *The Great Lakes* (J. H. Beers & Co., Chicago and Logansport, 1899), II, 301. Edwards was the name of the master-builder, the steamer being probably built on the premises of the Niagara Harbour and Dock Co.

Hogg	Hogg & Delamater, New York
Hornby	W. B. Hornby, Newcastle-upon-Tyne
Howden	J. Howden & Co., Glasgow
Howrah	Howrah Dock Co., near Calcutta
Humphreys	Humphreys & Pearson, Hull
Inglis	A. & J. Inglis, Pointhouse, Glasgow
Irvine	R. Irvine & Co., Hartlepool
Jackson	Jackson & Blake, Northfleet
Jewett	James C. Jewett, Brooklyn, N. Y.
Joy	D. Joy & Co., Middlesbro'
Kyd	Kyd & Co., Kidderpore (near Calcutta)
Laing	James Laing, Deptford (Sunderland)
Laird	Laird Bros., Birkenhead
Lawrence	Lawrence & Foulkes, Williamsburg (Brooklyn), N. Y.
Lawrie	J. G. Lawrie, Whiteinch
Lees	Lees, Anderson & Co., Glasgow
Liquori	Sebastiano Liquori, Eden Landing, California
London & G.	London & Glasgow Shipbuilding & Engineering Co., Ltd., Govan
Loring	Harrison Loring, South Boston
McDougal	Hugh McDougal & Co., Hong Kong
McLeod	D. McLeod
Mallory	Charles Mallory, Mystic, Connecticut
Mare	C. J. Mare, Millwall, Middlesex
Marshall	R. J. Marshall, South Shields
Maudslay	Maudslay, Son & Field, Lambeth (London)
Maxton	J. B. Maxton, Leith
Miller	W. C. Miller & Co., Liverpool
Mitchell	C. Mitchell & Co., Low Walker (Newcastle-upon-Tyne)
Morgan	Morgan Iron Works, New York
Napier	Robert Napier & Sons, Govan
Neafie	Neafie & Levy, Philadelphia
Neptune	Neptune Iron Works (Boardman, Holbrook & Co.), New York
Novelty	Novelty Iron Works (Stillman, Allen & Co.), New York
Osbourne	Osbourne, Graham & Co., North Hylton (Sunderland)
Oswald	T. R. Oswald & Co., Pallion (Sunderland)
Owens	Henry Owens, San Francisco
Pearse	M. Pearse & Co., Stockton
Pease	Pease & Murphy (Fulton Iron Works), New York
Penn	John Penn & Sons, Greenwich
Perine	Perine, Patterson & Stack, Williamsburg, N. Y.
Pitcher	William Pitcher, Northfleet, Kent
Poillon	C. & R. Poillon, Brooklyn, N. Y.
Pusey	Pusey & Jones, Wilmington, Delaware
Rait	Rait & Lindsay, Glasgow
Rankin	Rankin & Blackmore, Greenock
Ravenhill	Miller, Ravenhill & Salkeld, Low Walker (Newcastle-upon-Tyne)
Reanie	Reanie, Neafie & Co., Philadelphia
Reiherstieg	Reiherstieg Schiffswerfte & Maschinenfabrik, Hamburg
Richardson	T. Richardson & Sons, Hartlepool
Rideout	J. R. Rideout, San Francisco
Robb	John A. Robb, Baltimore
Roberts	John P. Roberts, Shanghai
Robinson	George Robinson & Co., Cork
Rodman	Rodman & Co.
Rollo	D. Rollo & Sons, Liverpool
Roosevelt	Roosevelt & Joyce, New York
Ross	Ross, Hong Kong
Rowland	T. F. Rowland (Continental Iron Works), Greenpoint, L. I.

S. S. N.	Shanghai S. N. Co., Shanghai
Sampson	A. & G. T. Sampson, East Boston
Samuelson	M. Samuelson, Hull
Samuda	Samuda Bros., Poplar (London)
Secor	T. F. Secor, New York
Simonson	Jeremiah Simonson, Greenpoint, L. I.
Sneden	Samuel Sneden, Greenpoint, L. I.
Sneden & L.	Sneden & Lawrence, Greenpoint, L. I.
Steele	R. Steele & Co., Greenock
Steers	Henry Steers, Greenpoint, L. I.
Stephen	Alexander Stephen & Sons, Linthouse, Glasgow
Sutton	Jas. T. Sutton & Co., Philadelphia
Tennant	Tennant & Co., Leith
Thomson, J. & G.	J. & G. Thomson, Clydebank
Thomson, J. & J.	J. & J. Thomson, Finnieston (Glasgow)
Tobey	Tobey & Littlefield, Portsmouth, N. H.
Tod	Tod & MacGregor, Meadowside (Glasgow)
Tufts	Otis Tufts (Boston Steam Engine Co.), Boston
Tulloch	Tulloch & Denny, Dumbarton
van Deusen	J. B. & J. D. van Deusen, New York
Vernon	Thomas Vernon & Co., Liverpool
Watt	James Watt & Co., Birmingham
Webb	William H. Webb, New York
West Point	West Point Foundry, New York
West Street	West Street Foundry, New York
Westervelt	Jacob Westervelt & Son, New York
Whitlock	Elisha P. Whitlock, Greenpoint, L. I.
Williams	E. F. Williams, Greenpoint, L. I.

Abbreviations of terms in Appendix III

C. B.	Cross-beam	Pad.	Paddle (side-wheel)
Cpd.	Compound	S. L.	Side-lever
D. A.	Inverted direct-acting	S. T. G.	Single-trunk geared
Diag.	Diagonal	Scr.	Screw (propeller)
G. B.	Geared beam	St.	Steeple
Hor.	Horizontal	T. E.	Triple expansion
Incl.	Inclined	T. G.	Trunk geared
Osc.	Oscillating	Tr.	Trunk
P. D.	Plunger direct	V. B.	Vertical beam

OFFICIAL NUMBERS OF STEAMERS MENTIONED

Only one official number is given for each ship, the nationalities preferred being (1) American, (2) British, (3) other, in that order. In consequence, the official number may not correspond to the name given in this table. Changes of name can, however, be ascertained from the text. Many of the steamers treated had, of course, no official number at any time. Official numbers are British, unless otherwise indicated.

<i>Abbotsford</i>	62287	<i>Blythwoode</i>	63620
<i>Acaniha</i>	63653	<i>Cadiz</i>	31155
<i>Aegean</i>	62288	<i>Capron</i>	(Jap.) 278
<i>Albay</i>	63841	<i>Chieftain</i>	64145
<i>Alexander</i>	(U. S.) 1739	<i>Chihli (1867)</i>	56784
<i>Altona</i>	68359	<i>Chihli (1871)</i>	63879
<i>Ariel</i>	(U. S.) 797	<i>Chusan (1852)</i>	30713
<i>Arizona</i>	(U. S.) 800	<i>Chusan (1866)</i>	(U. S.) 26521
<i>Bellona</i>	(Jap.) 1002	<i>Chusan (1874)</i>	71670
<i>Bengal</i>	30709	<i>City of Exeter</i>	60301

<i>Consolation</i>	65784	<i>Oregonian</i>	(U. S.) 19219
<i>Costa Rica</i>	(U. S.) 4882	<i>Oriflamme</i>	(U. S.) 19201
<i>Craigforth</i>	62278	<i>Paohong</i>	72743
<i>Duna</i>	62300	<i>Paou Shun</i>	(U. S.) 18305
<i>Erl King</i>	52820	<i>Paouting</i>	68076
<i>Express</i>	43695	<i>Pawtuxet</i>	(U. S.) 20167
<i>Fah Kee</i>	(U. S.) 9442	<i>Peiho</i>	72738
<i>Fairy</i>	63295	<i>Perusia</i>	20478
<i>Feima</i>	32745	<i>Pingon</i>	(U. S.) 16385
<i>Fenella</i>	31973	<i>Plymouth Rock</i>	50503
<i>Fire Queen</i>	50504	<i>Poyang</i>	50661
<i>Fokelin</i>	48512	<i>Rajah</i>	25225
<i>Forbes</i>	40983	<i>Rocket</i>	62988
<i>Fuhle</i>	63559	<i>Rona</i>	44831
<i>Fung Shuey</i>	(U. S.) 24377	<i>Scotland</i>	17494
<i>Fusiyama (1862)</i>	45069	<i>Shaftesbury</i>	45002
<i>Fychow</i>	(U. S.) 18299	<i>Shantung (1870)</i>	63549
<i>Ganges</i>	31249	<i>Shingking</i>	68040
<i>Glendarroch</i>	63805	<i>Soochow (1858)</i>	48331
<i>Glengyle</i>	50009	<i>Soochow (1865)</i>	52747
<i>Golden Age</i>	(U. S.) 10519	<i>Spark</i>	64093
<i>Hangchow</i>	(U. S.) 26653	<i>Spec</i>	41236
<i>Hellespont</i>	31592	<i>Sultan</i>	15990
<i>Hong Kong</i>	32713	<i>Sunfoo</i>	65572
<i>Howquah</i>	(U. S.) 8554	<i>Ta Yung</i>	27234
<i>Hu'eh</i>	63755	<i>Tartar</i>	68466
<i>Kaga-no-kami</i>	(U. S.) 14116	<i>Thales</i>	52608
<i>Kiang Soo</i>	(U. S.) 6708	<i>Thames</i>	(U. S.) 24591
<i>Kiukiang</i>	50662	<i>Trafalgar</i>	65630
<i>Kiushiu</i>	44999	<i>Tunsin</i>	48646
<i>Kuroda</i>	(Jap.) 459	<i>Unicorn</i>	32708
<i>Kwangchow</i>	63868	<i>Union</i>	25117
<i>Lapteik</i>	68396	<i>United Service</i>	16840
<i>Lotus</i>	44850	<i>Vancouver</i>	68519
<i>Luzon</i>	48929	<i>Vasco de Gama</i>	68484
<i>Mars</i>	44863	<i>Venus</i>	44864
<i>Mecca</i>	62664	<i>Washington (1844)</i>	43220
<i>Meteor (1850)</i>	32597	<i>White Cloud</i>	50651
<i>Milbanke</i>	62487	<i>William Miller</i>	62274
<i>Millet</i>	60428	<i>Yesso</i>	48343
<i>Mona</i>	47391	<i>Yung Hai An</i>	68481
<i>Mongol</i>	68496	(as s.v. <i>Lancefield</i>)	
<i>Moutan</i>	(Jap.) 506	<i>Yungching</i>	65936
<i>New York</i>	(U. S.) 18301		

APPENDIX IV

A. REVISION OF NET PROFITS OF THE SHANGHAI S. N. CO.

From copies of the complete reports of the directors of the Shanghai S. N. Co. (for which I am indebted to Dr. K.-C. Liu) it appears that transfers to the Insurance and Depreciation Account were entered as debit items and/or credit items in the Profit and Loss Account, the latter sometimes appearing only implicitly in the calculation of net profits after such deductions. The calculations in the tables in Part II of the present paper for the years ending 31 December 1869-1872 and 1874-1876, inclusive, were obtained (following *NCH*) by adding the above debit items to the net profits after depreciation and insurance, whereas a more exact picture of the net profits from steamers and godowns before deductions for depreciation and insurance is obtained by adding the credit items, resulting in the following figures:

For 12 months ending 31 December 1869	Tls. 718,142.49
For 12 months ending 31 December 1870	781,139.60
For 12 months ending 31 December 1871	951,694.90
For 12 months ending 31 December 1872	674,122.31
For 12 months ending 31 December 1874	188,372.21
For 12 months ending 31 December 1875	196,000.65
For 12 months ending 31 December 1876	178,925.48

B. FINANCIAL DATA OF THE CHINA SEA, SAIGON & STRAITS S. S. CO.

Date	Paid-up capital	Total assets
31 December 1870	\$90,000.00	\$105,713.99
30 June 1871	90,000.00	130,635.04
31 January 1872	90,000.00	105,395.01
31 December 1872	90,000.00	100,280.86

Earnings of steamers

Period	Gross earnings	Expenses	Net earnings
10 mo. ending 31 December 1870	\$149,742.90	\$139,782.16	\$9,960.74
6 mo. ending 30 June 1871	78,040.16	69,471.67	8,568.49
6 mo. ending 31 December 1871	117,852.75	114,838.51	3,014.24
12 mo. ending 31 December 1872			
Profit on charter of <i>Sunfoo</i>		\$28,029.18	
Less loss on working of <i>Venus</i> , depreciation of <i>Venus</i> , and loss on charter of <i>Blythwoode</i>		<u>20,919.03</u>	
			7,110.15

Dividends and bonuses on freights contributed by shareholders

Period	Dividends	Bonuses
10 months ending 31 December 1870	\$9,000.00 (10%)	\$1,163.52 (10%)
6 months ending 30 June 1871	5,400.00 (6%)	762.60 (10%)

There were apparently no further dividends or bonuses paid.

C. FINANCIAL DATA OF THE UNION S. N. CO.

Date	Book value of steamers	Total assets
31 March 1869	Tls. 157,560.23	Tls. 284,825.03
31 March 1870	303,904.33	417,482.79 ⁷⁸⁸

⁷⁸⁸ The statements as printed in *NCH* do not balance, the liabilities exceeding the assets by Tls. 1.00, but the former item seems more likely to be correct.

AMERICAN STEAM NAVIGATION IN CHINA 81

30 September 1870	291,450.00	497,779.04
31 March 1871	291,450.00	449,452.53
30 September 1871	291,450.00	513,979.94
30 September 1872	213,620.00 ⁷³⁹	457,728.90
31 March 1873	29,630.32 ⁷⁴⁰	355,396.04
31 December 1873	100,371.79 ⁷⁴¹	309,911.81

Net profits from steamers, hulks and godowns (before allowance for depreciation)

For 12 months ending 31 March 1868	Tls. 93,054.35 ⁷⁴²
For 12 months ending 31 March 1869	65,026.94
For 6 months ending 30 September 1869	38,692.12 ⁷⁴³
For 6 months ending 31 March 1870	14,659.09
For 6 months ending 30 September 1870	25,574.24
For 6 months ending 31 March 1871	35,239.42
For 6 months ending 30 September 1871	52,957.93
For 6 months ending 31 March 1872	77,009.22
For 6 months ending 30 September 1872	20,350.45
For 6 months ending 31 March 1873	9,131.33 (loss)
For 6 months ending 31 December 1873	24,152.59 (loss)

Dividends paid and bonuses returned to shareholders on freights contributed

Date of report	Capital	Dividends	Bonuses
31 March 1869	Tls. 170,000.00	Tls. 31,762.50 (30%) ⁷⁴⁴	Tls. 14,748.93 (10%)
31 March 1870	204,000.00	12,240.00 (6%)	6,263.84 (5%)
30 September 1870	204,000.00	12,240.00 (6%)	5,760.00 (5%)
31 March 1871	204,000.00	—	4,032.47 (5%)
30 September 1871	204,000.00	—	7,846.79 (5%)
31 March 1872	204,000.00	12,240.00 (6%)	8,448.94 (5%)
30 September 1872	204,000.00 ⁷⁴⁵	12,240.00 (6%)	10,760.00 (5%)
31 March 1873	200,000.00 ⁷⁴⁶	12,240.00 (6%)	10,096.39
31 December 1873	200,000.00 ⁷⁴⁷	—	1,309.83

⁷³⁹ The book value of *Rona*, Tls. 75,000, had been reduced by Tls. 61,380 of insurance, in view of the steamer's loss.

⁷⁴⁰ This represents the suspense account of *Rona*, *Tunsin* and *Glengyle* had been sold.

⁷⁴¹ This item is composed of the book value (cost) of *Acantha*, Tls. 82,368.75, and the suspense account of *Rona*, which had been reduced by irrecoverable items to Tls. 18,003.04.

⁷⁴² This represents the 'balance in favor of the Company after paying all charges, including preliminary expenses.' No further information is available. Cf. *NCH*, 30 May 1868.

⁷⁴³ Net profit from all sources. Further details are not available. Cf. *NCH*, 29 December 1869.

⁷⁴⁴ First annual dividend, 30% on paid up capital of Tls. 105,875.00.

⁷⁴⁵ Tls. 5,000 (par value) of stock had been purchased by the Company and was held in the treasury. Tls. 1,000 of this was reissued the following year.

⁷⁴⁶ As of 31 March 1873, Tls. 9,100 of stock was held by the Company.

⁷⁴⁷ As of 31 December 1873, Tls. 9,400 of stock was held by the Company.

APPENDIX V

CAPTAINS OF AMERICAN STEAMERS IN CHINA, TOGETHER WITH SHIPS
TREATED IN THIS PAPER WHICH THEY ARE KNOWN OR
BELIEVED TO HAVE COMMANDED⁷⁴⁸

R. H. Abbott:	<i>Augusta</i>
Thomas Allen:	<i>Surprise</i>
William W. Allen:	<i>Kumsing</i>
Jos. D. Anatoyn:	<i>Ohen Maru</i>
George W. Andrews: ⁷⁴⁹	<i>Chusan (ex-Walrus), Fire Queen, Hangchow, Kiangloong, Kiangse, Nanking, Tahwah</i>
P. Armstrong:	<i>Fire Dart, Shantung (1861)</i>
A. Bain:	<i>Promise</i>
George Balchen:	<i>Union Star</i>
H. A. Ballard:	<i>Monitor, Scotland</i>
H. A. Barclay:	<i>Moneka (later-Pingon)</i>
R. Barcham:	<i>Governor General, Peiho (1859)</i>
*Thomas Bassett:	<i>Honan, Millet</i>
N. W. Beckwith:	<i>Peiho (1859)</i>
J. C. Bennett:	<i>John T. Wright, Santa Cruz</i>
P. Bennett:	<i>Mars</i>
A. A. Benning:	<i>Little Orphan</i>
*Gordon G. Berry:	<i>Kiangse</i>
C. Birch:	<i>Hyson (1872), Tsatlee</i>
A. Blanchard:	<i>Anna</i>
W. Blethen:	<i>Chusan (1852), Shaftesbury</i>
Brech:	<i>Min</i>
George Briggs:	<i>Moyune, Poyang</i>
Henry Brown:	<i>Kaga-no-kami</i>
J. F. Brown:	<i>Soochow (1865)</i>
Charles G. Bunker:	<i>Vulcan</i>
H. W. Burdett:	<i>Ariel, Golden Age</i>
T. F. Burr:	<i>Novelty, Tungting</i>
Daniel Cavanagh:	<i>Bunker Hill, D. Cavanagh</i>
Arthur Hamilton Clark:	<i>Manchu (ex-A. J. Ingersoll), Suwonada, Venus</i>
Jabez W. Clark:	<i>Titana</i>
W. B. Cobb:	<i>Golden Age</i>
Conner:	<i>Costa Rica</i>
Corning:	<i>Relief</i>
Coy:	<i>Golden Age, Nevada</i>
J. T. (J. F.) Crowell:	<i>Venus</i>
John A. Cunningham:	<i>Pembroke</i>
T. (?) Cunningham:	<i>Fenella</i>
William Curry:	<i>Enterprise, Willamette</i>
Samuel R. Curwin (Curwen)	<i>Shanse</i>
Christopher C. Dall:	<i>Cortes, St. Louis</i>

⁷⁴⁸ Since only the last name of the captain usually appears in newspaper shipping intelligence and since this is frequently the case in consular returns also, it has not been possible to make this list complete either as to captains or as to the ships they commanded. Variations appearing in the names of the captains are given in parentheses. The ships are listed under each individual in alphabetical order. The captains were supposed to be American as far as possible, but a few are known to have been British and are so indicated. An asterisk indicates that the master in question held a certificate (sometimes expired) from the American Shipmasters' Association.

⁷⁴⁹ 'Captain G. W. Andrews, until lately in charge of the *Kiangyung*, died at London a short time ago' (from *NCH*, 1st June 1883).

*Henry C. Dearborn:	<i>Nevada, Oregonian</i>
Thomas W. Dearborn:	<i>Confucius, Yangtze</i>
J. Derrick:	<i>Paokong</i>
W. U. Deville:	<i>Kiushiu, Pingon</i>
A. R. Dolle:	<i>Cricket, Mandarin</i>
C. B. Ellis:	<i>Kiushiu, Shaftesbury</i>
James Bridges Endicott:	<i>Spark</i>
Benjamin C. Fessenden:	<i>Moneka</i>
T. J. Filleul:	<i>Hellespont, Tayung</i>
Alphonso F. Friend:	<i>Fychow, Hirado, Honan, Kiangloong, Moyune, Shantung, Szechuen (1876)</i>
David S. Fuller:	<i>General Ward</i>
W. G. Furber:	<i>Costa Rica, New York</i>
C. L. Gardiner:	<i>Scotland</i>
Thomas F. Gilman:	<i>St. Louis</i>
R. M. Gilmore (Gilmor):	<i>Honan</i>
R. Glashoff:	<i>Maria</i>
N. Goodwin:	<i>Pawtuxet</i>
Horatio N. Gray:	<i>Fire Queen, Hirado, Plymouth Rock</i>
*Henry J. Green:	<i>Mars</i>
H. A. Hallett:	<i>Woosung</i>
Hammond:	<i>Plymouth Rock</i>
James Hardie (Hardy) (Br.):	<i>Fusiyama (1863), Hirado</i>
Joseph Harmon:	<i>Fusiyama (1863), Hupeh, Moyune</i>
Thomas A. Harris:	<i>Peiho (1859)</i>
C. A. Hawes:	<i>Shantung (1870)</i>
W. H. Heath:	<i>Honan</i>
*Jerome B. Hildreth:	<i>Fung Shuey</i>
L. B. Hodges:	<i>Nautilus (later-Fychow)</i>
A. Holmes:	<i>Meteor (A. Heard & Co.)</i>
R. W. Hutchison:	<i>St. Louis</i>
*Clement P. Jayne:	<i>Hupeh, Shanse, Suwonada</i>
B. R. Johnson:	<i>China</i>
George C. Johnson:	<i>Chusan (1874), Hupeh, Moyune</i>
Henry W. Johnson:	<i>Fire Cracker, Fire Dart, Fire Queen</i>
William O. (C.) Johnson:	<i>Fohkien</i>
Edmund Kemble:	<i>Meteor (1864), Rover</i>
Samuel Kennedy:	<i>Szechuen (1862)</i>
G. W. Kenney:	<i>Millet</i>
G. W. Lake:	<i>Flying Cloud</i>
*George E. Lane: ⁷⁵⁰	<i>New York, Oriflamme</i>
George W. Lewis:	<i>Edith</i>
Charles V. Lloyd:	<i>Fychow, Warrior (later-Hangchow)</i>
C. J. Lovett:	<i>Martin White, Tahwah, Taoutai</i>
A. C. Lowell:	<i>Cadiz, Pingon, Tsatlee, Viborg</i>
D. H. Lynch:	<i>Mariin White</i>
A. A. McCaslin:	<i>Fung Shuey, Mars</i>
C. H. McCaslin:	<i>Feebang, Honque, Monitor, Orphan</i>
R. J. McCaslin:	<i>Augusta</i>
McQueen (Br.):	<i>Cosmopolite, Governor General, Hirado</i>
Edward Mellus:	<i>Antelope</i>
J. Mooney:	<i>Express, Hellespont</i>
Henry Morrison:	<i>Yung Hai An</i>
A. H. Morse:	<i>Kiangloong, Kiangse, Manchu, Nanking, Walrus (later-Chusan)</i>

⁷⁵⁰ Captain George E. Lane was for many years agent of the Pacific Mail S. S. Co. at Yokohama.

E. M. Neal:	<i>Columbia</i>
W. E. Newcomb:	<i>Willamette</i>
Newell:	<i>Ariel</i>
Samuel Newton:	<i>White Cloud</i>
Benjamin Osborn:	<i>Contest, Surprise</i>
M. F. (M. T.) Patterson:	<i>Chihli (1867), Warrior (later-Hangchow)</i>
*Josiah W. Paul:	<i>Fire Queen, Fychow, Nanking, River Bird, White Cloud</i>
F. Pearson:	<i>Louisa</i>
William H. Peele:	<i>Kiangloong, Shantung (1861)</i>
J. O. Pendleton:	<i>Surprise</i>
J. A. Perkins:	<i>Pembroke, Willamette</i>
William Poor:	<i>Midas</i>
*John R. (E.) Potter:	<i>Kewanee</i>
A. P. Preble:	<i>Emperor, Yokohama Maru</i>
Isaac Preble:	<i>Pluto</i>
Charles Reed:	<i>John S. Williams</i>
Ricaby:	<i>Meelee, Spark</i>
James P. (John P.) Roberts:	<i>Huquang, Nautilus (later-Fychow)</i>
W. M. (W. R.) Robinet:	<i>St. Louis</i>
*Joseph Rowse:	<i>Ashuelot</i>
E. T. Sandford:	<i>Rose (A. Heard & Co.)</i>
John L. Sandford (Sanford):	<i>Takiang</i>
George U. Sands:	<i>Hankow, White Cloud</i>
J. C. Saunders:	<i>Rose (J. B. Endicott)</i>
William B. Seabury:	<i>Arizona</i>
C. E. Simmons:	<i>Honan, Nautilus (later-Fychow), Plymouth Rock</i>
J. A. Smith:	<i>Novelty</i>
W. Smith:	<i>Tah-yue-fong</i>
D. R. Spedding:	<i>Tungting</i>
Spencer:	<i>Szechuen (1862)</i>
F. A. Strandberg:	<i>Yangtze (1868)</i>
John Sweeney:	<i>Toutia</i>
S. N. Taylor:	<i>Kiukiang</i>
E. Thebaud:	<i>Fung Shuey</i>
*Edwin D. Wadsworth:	<i>Chekiang</i>
Henry G. Walcott (Wolcott):	<i>Hankow</i>
J. S. Watson:	<i>Fung Shuey, Meteor (1864)</i>
C. H. Wells:	<i>Millet, Paouting, Shantung</i>
W. A. West:	<i>Fusiyama (1863), Fychow, Hangchow, Hirado, Kiangloong, Plymouth Rock</i>
Comfort Whiting:	<i>Varuna, Yung Hai An</i>
Frank Williams:	<i>Costa Rica, Nevada</i>
*Alexander Winsor, Jr.:	<i>Orloff (later-Tokei Maru)</i>
Wise:	<i>Golden Age</i>
M. L. Woodward:	<i>Meteor (A. Heard & Co.)</i>
S. C. Wood:	<i>Pet</i>
Samuel Yeaton:	<i>Kankakee</i>
L. F. Zimmerman:	<i>Ariel</i>

ADDENDA AND CORRIGENDA

(References are to the AMERICAN NEPTUNE)

- XVI, 159 Footnote 5. See also footnote 701.
- XVI, 164 The *Confucius* of 1853 was in fact the steamer of that name wrecked on the Yangtze in 1870. Cf. *Shanghai News Letter*, 11 February 1870.
- XVI, 168 *Willamette* was operated in California under the name of *Thomas Hunt*, but resumed her original name when she went to China. See *Democratic State Journal* (Sacramento), 17 December 1852; *Sacramento Union*, 7 May 1855; and *San Francisco Evening News* of about the latter date. I am indebted to Colonel Fred B. Rogers of San Francisco for these references.
- XVI, 243 While owned by the Prince of Chosiu, *Lancefield* (then named *Koshin Maru*), had been disabled and probably sunk in shallow water in the Straits of Shimonoséki by U.S.S. *Wyoming*, 16 July 1863. See F. O. Adams, op. cit., pp. 295-296; S. Mossman, *New Japan* (London, 1873), p. 175. Line 7, 'Carver' should probably be 'Curwin.'
- XVI, 649 In a letter to W. H. Forbes dated 16 October 1873, F. B. Forbes says, 'You will be sorry to hear that the *Chusan* is done up. The state of her timber and planking is dreadful—the more so, as it was unsuspected. Only seven months ago she was bored and found to be quite sound!' (I am indebted to Dr. K.-C. Liu for this quotation.)
- XVI, 259 Messrs. A. & J. Inglis have kindly pointed out that *Millet* was set up at Glasgow, not at Shanghai. On her way out, she left Glasgow on 12 June 1869, carrying 275 tons of coal. See also *HMD* 31, II, 231. The statement of W. S. Fitz, *ibid.*, I, 884, is evidently not correct.
- XVI, 262 *Haean*, originally *Shingking*, was scuttled as a blockship in the Whangpoo River, October 1937, and cut up for scrap later (from information furnished by the Central Record of the World Ship Society).
- XVI, 262 *Paouting* was laid down as *Mikado*.
- XVI, 268 For revision of the net profits of the S. S. N. Co., see Appendix IV-A.
- XVI, 269 The figure for the total assets of the S. S. N. Co. as of 31 December 1867 should be Tls. 1,951,762.23.
- XVII, 61 There is some evidence to indicate that *Little Orphan* was later re-named *Orphan*, owned as of May 1867 by T. F. Benning (see *CRS*, Nagasaki), and that this was the *Orphan* burned, 11 January 1872, on her way from Hiogo to Nagasaki with the loss of two lives (see *NCH*, 1 February 1872). Her owners at the time were Boyd & Co., who replaced her by a new tug of the same name built later in the year.
- XVII, 62 *Ashuelot* and *Kankakee* were probably screw steamers, not side-wheel.
- XVII, 138 Footnote 427. *Fushimi Maru*, originally *Thales*, was broken up in Japan in 1911 (from information kindly furnished by the Central Record of the World Ship Society).
- XVII, 149 Plate 14. For '*Kin Kiang*,' read '*Kiukiang*.'
- XVII, 309 *Rocket* was sold for scrap in 1938 and *Fuhle* broken up at Shanghai in 1941 (from information furnished by the Central Record of the World Ship Society).
- XVII, 312 For '15 February' in footnote 666 read '14 February.'

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