

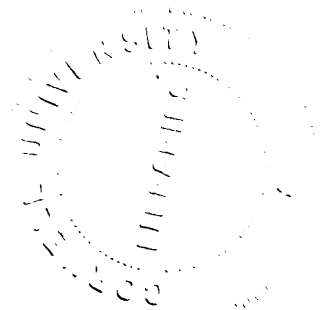
ANNUAL REPORT

OF THE

SECRETARY OF THE NAVY

FOR

THE YEAR 1887.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1887.

H.—Tables of vessels

ARMORED

DOUBLE.

Name of vessel.	Type.	Keel laid.	Where built.	Condition.	Length between perpendiculars.	Breadth.	Mean draught.	Displacement.	Max. indicated horse-power.
Puritan	Double-turreted monitor.	1875	Roach's yard, Chester, Pa.	Awaiting completion.	Ft. 280	Ft. 60	Ft. In. 18 2	Tons 6000	3500
Miantonomoh	do	1874	do	do	250	55½	14 1½	3815	428
Amphitrite	do	1874	Harlan & Hollingsworth, Wilmington, Del.	do	250	55½	14 1½	3815	1000
Monadnock	do	1874	U. S. navy-yard, San Francisco.	do	250	55½	14 1½	3815	1000
Terror	do	1874	Cramp's, Philadelphia, Pa.	do	250	55½	14 1½	3815	1000
Armored battleship.	Belted		U. S. navy-yard, Norfolk, Va.	Preparing ways.	200	64½	22 0	6300	8000
Armored cruiser.	do		U. S. navy-yard, New York.	do	310	57	21 0	6648	8750

SINGLE-TURRET

Ajax	Single-turreted monitor.	1862	Snowdens & Mason, Pittsburg, Pa.	In ordinary.	225	43½	13 0	2100	840
Camacho	do	1862	Donahue, Ryan & Secor, Jersey City, N. J.	do	200	40	11 0	1875	840
Canonius	do	1862	Harrison Loring, Boston, Mass.	do	225	43½	13 0	2100	840
Catskill	do	1863	John Ericsson, Brooklyn, N. Y.	do	200	40	11 0	1875	840
Jason	do	1862	John Ericsson, Chester, Pa.	do	200	40	11 0	1875	840
Lough	do	1863	John Ericsson, Chester, Pa.	do	200	40	11 0	1875	840
Mahopac	do	1862	Z. & F. Secor, Jersey City, N. J.	do	225	43½	13 0	2100	840
Manhattan	do	1862	Forlin, Secor & Co., Jersey City, N. J.	do	225	43½	13 0	2100	840
Montauk	do	1862	John Ericsson, Brooklyn, N. Y.	do	200	40	11 0	1875	840
Nahant	do	1863	Harrison Loring, Boston, Mass.	do	200	40	11 0	1875	840
Nauduckot	do	1863	A. Atlantic Works, Boston, Mass.	do	200	40	11 0	1875	840
Pasquo	do	1862	John Ericsson, Brooklyn, N. Y.	do	200	40	11 0	1875	840
Wyandotta	do	1862	Milton Greenwood, Cincinnati, Ohio.	do	225	43½	13 0	2100	840

of the U. S. Navy.

VESSELS.

TURRETED.

Type of engines.	Speed in knots.	Batteries.		Armor.		Cost of hull and machinery.	Date of act authorizing building.
		Main.	Secondary.	Sides.	Turrets and barbatties.		
Twin-screw horizontal compound.	13	4 10" B. L. R.	2 0-pdrs. R. F., 2 8-pdrs. R. F., 2 37mm R. C., 2 Gat-lings.	12"	11½"	To complete \$3,178,046.	Mar. 3d, '85, Aug. 3d, '86, Mar. 3d, '87.
Twin-screw inclined compound.	10.5	do	2 0-pdrs. R. F., 2 37mm R. C., 2 Gat-lings.	7"	11½"		Mar. 3d, '85, Aug. 3d, '86, Mar. 3d, '87.
do	12	do	do	7"	11½"		Mar. 3d, '85, Aug. 3d, '86, Mar. 3d, '87.
do	12	do	do	7"	11½"		Mar. 3d, '85, Aug. 3d, '86, Mar. 3d, '87.
do	12	do	do	7"	11½"		Mar. 3d, '85, Aug. 3d, '86, Mar. 3d, '87.
Twin-screw vertical triple expansion.	17	2 12" B. L. R. 6 0" B. L. R.	4 0-pdrs., 4 8-pdrs., 2 1-pdrs., 4 47mm R. C., 4 37mm R. C., 4 Gat-lings.	12"	12"	\$2,370,000	August 3, 1886.
do	17	4 10" B. L. R. 6 0" B. L. R.	4 0-pdrs., 4 8-pdrs., 4 47mm R. C., 4 37mm R. C., 4 Gat-lings.	11"	10½"	2,481,503	Do.

ED MONITORS.

Single-screw grass-hopper.	5.0	2 15" S. B.	None	5"	10"	626,582.24	April 17, 1862.
do	5.0	do	do	5"	11"	618,104.08	Do.
do	0	do	do	5"	10"	622,603.22	Do.
do	0	do	do	5"	11"	427,766.78	Do.
do	5.0	do	do	5"	11"	422,766.73	Do.
do	5.0	do	do	5"	11"	422,720.28	Do.
do	0	do	do	5"	10"	635,374.55	Do.
do	0	do	do	5"	10"	628,870.27	Do.
do	5.0	do	do	5"	11"	423,027.40	Do.
do	5.0	do	do	5"	11"	418,515.14	Do.
do	5.7	do	do	5"	11"	408,091.37	Do.
do	5.0	do	do	5"	11"	423,171.00	Do.
do	0	do	do	5"	10"	633,327.84	Do.

H.—Table of vessels of the
UNARMORED STEEL

Name.	Type.	Keel laid.	Where built.	Condition.	Dimensions.			Displacement.	Max. indicated horse-power.
					Length between perpendiculars.	Beam.	Mean draught.		
					Feet.	Feet.	Feet.	Tons.	*0,000
Chicago	Protected cruiser.	1883	Roach's	Commissioned.	815	48½	10	4,500	*0,000
Boston	do	1882	do	do	270	42	17	3,189	3,780
Atlanta	do	1882	do	do	270	42	17	3,189	3,511
Dolphin	Dispatch vessel.	1882	do	do	240	32	14½	1,485	2,240
Newark	Protected cruiser.		Cramp's	Building	310	49½	18½	4,063	*8,500
Charleston	do	1887	Union Iron Works.	Building	300	46	18½	3,730	*7,500
Baltimore	do	1887	Cramp's	do	315	48½	19½	4,413	*10,500
Cruiser No. 4	do		do	Building	315	48½	19½	4,413	*10,500
Cruiser No. 5	do		Union Iron Works.	do	310	49½	18½	4,063	*10,500
Gun-boat No 1	Cruiser	1887	Cramp's	Building	230	36	14	1,700	*3,400
Gun-boat No. 2	do	1887	Columbian Iron Works, Baltimore.	do	175	31	11½	800	*1,800
Gun-boat No. 3	do		N. F. Palmer Jr., & Co., Chester, Pa.	Building	230	36	14	1,700	13,400
Gun-boat No. 4	do		do	do	230	36	14	1,700	13,400
Dynamite cruiser	do	1887	Cramp's	Building	240½	36½	9	725	*3,200
1st-class torpedo boat.				Bids received.	185	15	8½	100	

*Estimated.

†Guaranteed.

U. S. Navy—Continued.

AND IRON VESSELS.

Type of engines.	Speed in knots.	Batteries.		Total contract cost of hull and machinery.	Date of act authorizing building.	Contract signed.	Time to complete from date of contract.
		Main.	Secondary.				
Twin screw compound, overhead beam.	14.0	4 8" B. L. R. 3 6" B. L. R. 2 5" B. L. R.	2 6-pdrs. 4 47mm R. Co 2 37mm R. O. 2 1-pdrs. 2 Gatlings.	\$689,000	Aug. 5, 1882 Mar. 8, 1883	July 20, 1883	Mos.
Single screw horizontal compound.	14.0	2 8" B. L. R. 6 0" B. L. R.	2 Gatlings. 2 6-pdrs. 2 3-pdrs. 2 47mm R. O. 2 37mm R. O. 2 1-pdrs.	619,000	Same as Chicago.	July 23, 1883	.....
do	10.88	Same as Boston.	Same as Boston.	617,000	do	do	.....
Single screw vertical compound.	15.5	1 6" B. L. R.	4 47mm R. O. 2 6-pdrs. 2 Gatlings.	815,000	do	do	.....
Twin screw horizontal, triple expansion.	18.0	12 6" B. L. R.	4 6-pdrs. 4 37mm R. O. 1 1-pdr. 2 3-pdrs. 2 Gatlings.	1,243,000	Mar. 3, 1885 Mar. 3, 1886	Oct. 27, 1887	24
Twin screw horizontal compound.	18.0	2 8" B. L. R. 6 0" B. L. R.	4 6-pdrs. 4 R. O. 2 3-pdrs. 1 1-pdr. 2 Gatlings.	1,017,000	Mar. 3, 1885	Dec. 28, 1886	18
Twin screw horizontal, triple expansion.	19.0	4 8" B. L. R. 6 0" B. L. R.	2 Gatlings. 4 6-pdrs. 2 3-pdrs. 1 1-pdr. 4 37mm R. O.	1,325,000	Aug. 3, 1886	Dec. 17, 1886	18
do	19.0	12 6" B. L. R.	Same as Baltimore.	1,350,000	Mar. 3, 1887	Oct. 27, 1887	24
do	19.0	do	do	1,428,000	do	Oct. 20, 1887	24
do	16.0	6 6" B. L. R.	2 Gatlings. 2 6-pdrs. 2 3-pdrs. 1 1-pdr. 2 37mm R. O.	455,000	Mar. 3, 1885	Jan. 31, 1887	12
Single screw horizontal compound.	13.0	4 6" B. L. R.	2 Gatlings. 2 3-pdrs. 1 1-pdr. 2 37mm R. O.	247,600	do	Dec. 22, 1886	12
Twin screw horizontal, triple expansion.	16.0	Same as No. 1.	Same as No. 1.	490,000	Mar. 3, 1887	Nov. 15, 1887	18
do	16.0	do	do	490,000	do	Nov. 15, 1887	18
Twin screw vertical, triple expansion.	20.0	3 dynamite guns 10½" caliber.	2 3-pdrs. 1 1-pdr. 2 R. O. 2 Gatlings.	*350,000	Aug. 3, 1880	Feb. 11, 1887	12
do	22.0	3 automobile torpedoes.	2 3-pdrs.	90,000	do	do	.....

*Including dynamite guns, etc.

H.—Tables of vessels of the
UNARMORED STEEL AND

Name.	Built.			Condition.	Rig.
	When.	Where.	By whom.		
Ranger	1873-1876	Wilmington, Del.	Haffan & Hollingsworth.	Surveying North Pacific.	Dark
Alert	1873-1875	Chester, Pa.	John Ronch	Pacific Station	do
Monocacy	1863	Baltimore, Md..	A. and W. Demmead & Son.	Asiatic Station	Schooner ..
Michigan	1844	Erie, Pa	United States	Northwest'n Lakes.	Darkontino ..
Palos	1865	Boston	James Tottow	Asiatic Station	Schooner ..
Pinta	1865	Chester, Pa	Renney, Son & Archbold.	Pacific Station	do
Intrepid	1874	Boston	United States	Undergoing alterations, navy yard, New York; work suspended.	Brig
Alarm	1874	New York	United States	In ordinary, New York.	.....

*Anthracite.

U. S. Navy—Continued.
IRON VESSELS—Continued.

Length between perpendiculars.	Dimensions.			Indicated horse-power.	Speed in knots.	Batteries.		Coal capacity in tons.	Complement.		
	Breadth.	Mean draught.	Displacement in tons.			Main.	Secondary.		Officers.	Men.	
Feet. 176	Ft. In. 82 0	Feet. 12½	1,020	805	10.0	1 60-pdr. Parrott.....	.....	*120	21	127
175	82 0	12½	1,020	800	10.0	1 X1" S. B. 2 1X" S. B. 1 60-pdr. B. L. R.	1 8" rifle	*133	21	127	
255	85 0	9	1,370	850	11.2	4 8" Dahlgren	2 20-pdr. how. R. 1 45 Gat. 2 12-pdr. how. 2 24" howitzers.	2 87 ^{mm} R. O. 2 20-pdr. how. R. 1 45 Gat. 2 12-pdr. how. 2 87 ^{mm} R. O.	1224	12	114
163½	27 1½	9	985	805	10.5	4 30-pdr. B. L. R.	3 8" rifles	*135	.....	.....
137	20 0	9½	420	240	10.85	4 24-pdr. J. A. D. 2 20-pdr. howitzers.	1 45 Gatling	*102	9	46	
187	26 0	11	806	100	8.5	1 12-pdr. howitzer. 2 12-pdr. howitzers.	2 87 ^{mm} H. K. O. 2 Gatlings	1 Gatling	*111	8	37
170	35 8½	11	1,160	1,812	10.0	.....	.....	*180	.....	.....
168½	28 0	10½	800	600	10.0	1 XV" S. B. ....	.....	*40.6	.....	.....

†Bituminous.

H.—Tables of vessels of the

WOODEN STEAM

Name.	Built.			Condition.	Rig.
	When.	Where.	By whom.		
Alliance.....	1873-1870	Norfolk.....	United States.....	South Atlantic station	Bark.....
Easox.....	1874-1870	Kittery and Boston.	Donald McKay and United States.	Asiatic station.....	do.....
Enterprise.....	1873-1870	Kittery.....	John W. Griffiths and United States.	Repairing at navy yard, New York.	do.....
Nipsic.....	1873-1879	Washington.....	United States.....	Asiatic station.....	Bark.....
Tallapoosa.....	1874	Baltimore.....	C. W. Booz & Bro..	South Atlantic station	Schooner..
Yantic.....	1864	Philadelphia.....	United States.....	North Atlantic station	Bark.....
Despatch.....	1874	.....	Purchased from Henry C. Smith, N. Y.	Special service.....	Schooner..
Franklin.....	1855-1865	Kittery.....	United States.....	Receiving ship, Norfolk, Va.	Ship.....
Wabash.....	1854	Philadelphia.....	do.....	Receiving ship, Boston.	do.....
Minnesota.....	1835	Washington.....	do.....	Receiving ship for boys, New York.	do.....

U. S. Navy—Continued.

VESSELS—Continued.

Length between perpendiculars.	Dimensions.			Indicated horse-power.	Speed in knots.	Batteries.		Coal capacity.	Complement.	
	Breadth.	Mean draught.	Displacement in tons.			Main.	Secondary.		Officers.	Men.
Ft. In. 185 0	Ft. 35	Ft. In. 14 3	1,375	068	9.08	1 00-pdr. B. L. R..... 1 8" M. L. R..... 4 1X" S. B. Dn..... 4 1X" S. B..... 1 8" M. L. R..... 1 00-pdr. B. L. R..... 4 1X" S. B. Dn..... 1 8" B. L. R..... 1 00-pdr. B. L. R..... 1 8" M. L. R..... 4 1X" S. B..... 1 00-pdr. B. L. R..... 1 8" rifle..... 5 60-pdr. M. L. R.....	1 8" B. L. R..... 1 M. L. Howitzer. 1 45 long Gatling. 1 8" B. L. Howitzer. 1 12-pdr. Howitzer. 1 short Gatling. 1 8" B. L. R..... 2 12-pdrs. S. B. How. 1 45 short Gatling. 1 8" rifle..... 1 12-pounder. 1 Short Gatling. 4 12-pdrs. R. H..... 1 8" B. L. II. 1 45 Gatling. 1 12-pdr. light.	*150	18	160
185 0	35	14 3	1,375	505	10.4	4 1X" S. B..... 1 8" M. L. R..... 1 00-pdr. B. L. R..... 4 1X" S. B. Dn..... 1 8" B. L. R..... 1 00-pdr. B. L. R..... 1 8" M. L. R..... 4 1X" S. B..... 1 00-pdr. B. L. R..... 1 8" rifle..... 5 60-pdr. M. L. R.....	1 8" B. L. Howitzer. 1 12-pdr. Howitzer. 1 12-pdr. Howitzer. 1 8" B. L. R..... 2 12-pdrs. S. B. How. 1 45 short Gatling. 1 8" rifle..... 1 12-pounder. 1 Short Gatling. 4 12-pdrs. R. H..... 1 8" B. L. II. 1 45 Gatling. 1 12-pdr. light.	†130	15	179
185 0	35	14 3	1,375	790	11.4	1 8" M. L. R..... 1 00-pdr. B. L. R..... 1 8" B. L. R..... 1 00-pdr. B. L. R..... 1 8" M. L. R..... 4 1X" S. B..... 1 00-pdr. B. L. R..... 1 8" rifle..... 5 60-pdr. M. L. R.....	1 12-pdr. Howitzer. 1 short Gatling. 1 8" B. L. R..... 2 12-pdrs. S. B. How. 1 45 short Gatling. 1 8" rifle..... 1 12-pounder. 1 Short Gatling. 4 12-pdrs. R. H..... 1 8" B. L. II. 1 45 Gatling. 1 12-pdr. light.	†130	18	164
185 0	35	14 3	1,375	830	10.7	1 8" M. L. R..... 1 00-pdr. B. L. R..... 1 8" B. L. R..... 1 00-pdr. B. L. R..... 1 8" M. L. R..... 4 1X" S. B..... 1 00-pdr. B. L. R..... 1 8" rifle..... 5 60-pdr. M. L. R.....	1 8" rifle..... 1 12-pounder. 1 Short Gatling. 4 12-pdrs. R. H..... 1 8" B. L. II. 1 45 Gatling. 1 12-pdr. light.	*132	23	161
240 0	35	10 0	1,270	372	12.1	1 8" M. L. R..... 1 00-pdr. B. L. R..... 1 8" rifle..... 5 60-pdr. M. L. R.....	1 12-pounder. 1 Short Gatling. 4 12-pdrs. R. H..... 1 8" B. L. II. 1 45 Gatling. 1 12-pdr. light.	*201	13	143
180 0	30	12 2	900	225	8.3	2 1X" Dn..... 1 8" M. L. R..... 1 00-pdr. B. L. R..... 1 8" B. L. R.....	1 8" B. L. II..... 1 45 Gatling. 1 12-pdr. Howitzer. 2 20-pdrs. B. L. R.....	*117	20	134
174 0	25½	12 4	560	618	12.0	1 8" B. L. R.....	2 20-pdrs. B. L. R.....	6	76	
205 0	54½	24 3	5,170	1,050	9	22 1X" S. B.....	6 12-pdrs. Howitzer..			
262 7	61½	23 0	4,650	950	9.15	18 1X" S. B..... 2 20-pdrs. B. L. R. P. 18 1X" S. B..... 1 00-pdr. B. L. R. 2 20-pdrs. B. L. R. P.	1 long Gatling.....			
264 8½	61½	23 0	4,700	1,000	9.25	18 1X" S. B..... 1 00-pdr. B. L. R. 2 20-pdrs. B. L. R. P.	2 8" rifles..... 1 12-pdr. Howitzer. 1 short Gatling.			

* Anthracite.

† Bituminous.

H.—Tables of vessels of

WOODEN SAIL

Name.	Built.			Rig.
	When.	Where.	By whom.	
Constellation.....	1854	Gosport.....	U. S.....	Ship.....
Constitution.....	1787	Boston.....	U. S.....	do.....
Independence.....	1837	do.....	U. S.....	do.....
Monongahela.....	1862	Philadelphia..	U. S.....	Bark.....
Portsmouth.....	1843	Kittory.....	U. S.....	Ship.....
Jamestown.....	1845	Gosport.....	U. S.....	do.....
Saratoga.....	1842	Kittory.....	U. S.....	do.....
St. Louis.....	1828	Washington..	U. S.....	do.....
St. Mary's.....	1844	do.....	U. S.....	do.....
Dale.....	1839	Philadelphia..	U. S.....	do.....

IRON AND WOOD

Name.	Built.			Material.
	When.	Where.	By whom.	
Catalpa.....	1804		Purchased.....	Wood.....
Gohasset.....	1861		do.....	do.....
Fortuno.....	1805	Boston.....	James Tetlow.....	Iron.....
Leydon.....	1868	do.....	do.....	do.....
Mayflower.....	1866	do.....	do.....	do.....
Montroy.....	1803		Purchased.....	Wood.....
Nina.....	1805	Chester, Pa..	Reaney Son & Archbold.....	Iron.....
Resono.....	1801		Purchased.....	do.....
Rocket.....	1803		do.....	Wood.....
Speedwell.....	1805	Boston.....	James Tetlow.....	Iron.....
Standish.....	1805	do.....	do.....	do.....
Triana.....	1804	New York.....	William Fortino.....	do.....

the U. S. Navy—Continued.

ING VESSELS.

Condition.	Dimensions.				Batteries.		Complement.	
	Length between perpendiculars.	Breadth.	Mean draught.	Displacement in tons.	Main.	Secondary.	Officers.	Men.
Practice ship, Naval Academy.	176	42	20	1,180	10 VIII" S. B.....	2 20-pdrs..... 2 12-pdrs.....	15	203
Portsmouth, N. H.	175½	45	20	2,200	4 32-pounders S. B.....	1 12-pdr.....		
Receiving ship, Marco Island.	189	51½	21½	3,270	6 32-pounders.....	1 Gatling..... 1 60-pounder rifle.....		
Store ship, Pacific station.	225	38	10½	2,100	2 VIII" S. B.....	1 12-pdr. howitzer.....		
Apprentice training ship.	153	38½	10½	1,125	11 VIII" S. B.....	2 20-pdr. Parrotts..... 1 Gatling..... 1 3" B. L. H.....	15	210
do.....	103½	36	10	1,150	12 VIII" S. B.....	2 20-pdr. B. L. R..... 1 Gatling..... 1 3" rifle.....	17	247
do.....	147½	36½	16	1,025	11 VIII" S. B.....	2 20-pdrs..... 1 3" rifle..... 1 Gatling.....	18	275
Receiving ship, League Island.	120½	34½	15½	830	None.....	None.....		
Public marine school, New York.	150	37½	15½	1,025	8 VIII" S. B.....	None.....		
Receiving ship, Washington, D. C.	117½	32½	14½	675	8 32-pounders.....	None.....		

STEAM TUG BOATS.

Rig.	Indicated horse-power.	Dimensions.				Speed in knots.	Coal supply.
		Length between perp's.	Breadth.	Mean draught.	Displacement in tons.		
		Fl.	Fl.	Fl.			
Schooner.....	340	137	20	8½	188	10.	80
do.....	340	137	20	9½	450	10.	80
do.....	338	137	20	9½	450	10.6	80
do.....	340					8.5	
Schooner.....	340	137	20	8½	357	10.	80
do.....		84½	18	8	190		
do.....	147	86½	18½	7	187	8.5	
Schooner.....	340	137	20	9½	450	10.	80
do.....	340	137	20	9½	450	10.	80
do.....	340	137	20	9½	450	10.	80