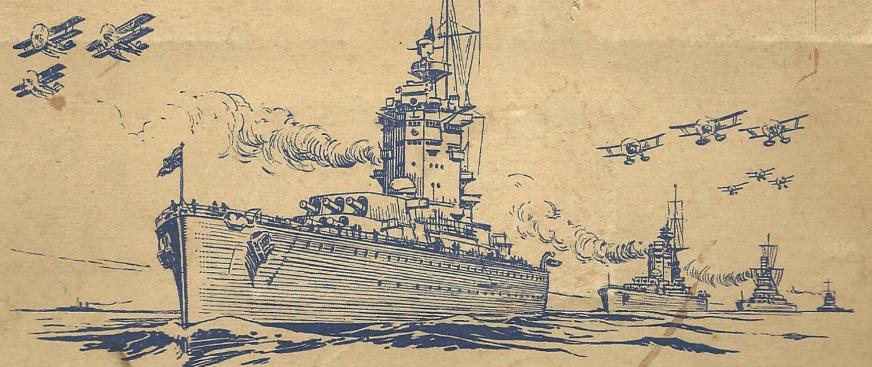
An Album of

MODERN NAVAL CRAFT



ISSUED BY

JOHN PLAYER & SONS

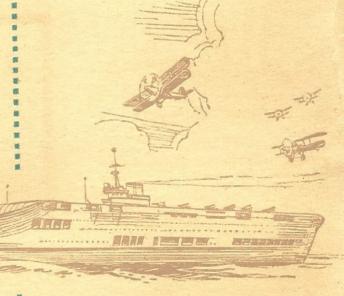
PRICE ONE PENNY

BRANCH OF THE IMPERIAL TOBACCO CO. OF GREAT BRITAIN & IRELAND), LTD.

CONTENTS

		PAG	E
GREAT BRITAIN			
H.M.S. "NELSON"		-	3
H.M.S. "WARSPITE"			3
HIM.S. "REVENGE"			3
H.M.S. "HOOD"	-		4
H.M.S. "REPULSE"		-	4
H.M.S. "EXETER"	-		A
H.M.S. "NORFOLK"		-	5
H.M.S. "SOUTHAMPTON	4 **	-	5
H.M.S. "CURLEW"	-		8
H.M.S. "ADVENTURE"		-	6
H.M.S. "GRENVILLE"	1	-	6
H.M.S. "AFRIDI"		-	6
H.M.S. "SEVERN"	-		7
H.M.S. "NARWHAL"	*		7
H.M.S. "SUNFISH "	*		7
H.M.S. "ARK ROYAL"		*	9
H.M. TORPEDO BOAT 1	02		8
FRANCE			
"DUNKERQUE" -		-	B
"ALGERIE"	-		9
"LA GALISSONNIÈRE"		-	9
"MOGADOR" -		-	9
" SURCOUF " -		-	10
"BEARN".	-		10
GERMANY			
"ADMIRAL GRAF SPEE"			10
"NÜRNBERG"		-	11
"GEORG THIELE"	##		11
SUBMARINE U-16			11
TTALY			
"CONTE DI CAVOUR"			12
		-	125
"BOLZANO" "		. 7	12
(日本日本の日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本			

			PI	AGE
IYALY-contd.				
"LIBECCIO"		-		13
"GIUSEPPE FINZI	**	-	-	13
JAPAN				
"NAGATO"		-		13
" ISE " -	-		-	14
"ATAGO"				14
"KUMANO"	-	-		14
"SAMIDARE"	-	+	-	15
SUBMARINE 1-21		- 11	-	15
" AKAGI "	-	-	-	15
U.S.A.				
"CALIFORNIA"	200		-	16
"COLORADO"				16
" QUINCY"			- 5	16
"BROOKLYN"	ALTERNA.	- 100	*	17
"GRIDLEY"	-		437 101	17
"PERCH"		-		17
"OAHU" -	+	-	-01	.18
"ENTERPRISE"			-	18
"SARATOGA"			-	18
U.S.S.R.				
"LENINGRAD"		45	+ 1	19
"REVOLUTIONER	4 4	-	-	19







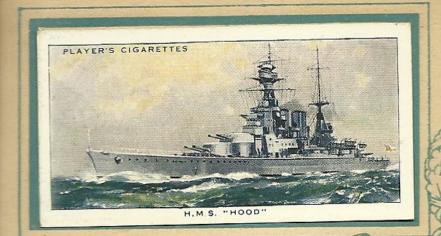
PLAYER'S CIGARETTES

H.M.S. "WARSPITE"

"NELSON," British Battle-. skip. This ship and the Rodney. were designed to Treaty limits and were completed in 1927. They have certain peculiar features which place them in a class by themselves. The straight high freeboard and exceptionally long fore deck ensure good seaworthiness and allow the main armament and most vulnerable parts to be well protected. The builders were Armstrongs (Nelson) and Cammell Laird (Rodney). The displacements are respectively 33,950 and 33,500 tons; each has a speed of 23 knots, and a complement of over 1,300. The main armament consists of nine 16-inch guns in three turrets, with many smaller guns. The cost exceeded 47,500,000 each. (No. 1)

M.S. "WARSPITE," British Buttleship. First built under the 1912 estimates as a unit of the Queen Elizabeth class of five ships, the Warspite was completed at Devonport in March 1915, and was in action at Jutland. Four of these ships have been, or are in process of being, modernized at a cost approximately equal to the original contract price of £2,500,000 each. New features embodied in the reconstruction include additional armour protection against aerial attack, high trajectory gun-fire, and an augmented anti-aircraft armament. With displacements ranging from 30,600 to 31,100 tons, they are over 600 feet long, with a speed 25 knots and a complement

ITM.S. "REVENGE," British Battle 1 . ship, "Royal Sovereign" Class. Five ships of this class were projected under the 1913-14 estimates, and were all completed and commissioned during the Great Wara at an average cost of £2,500,000. The Revenge was built by Vickers. The armament consists of eight 15-inch guns, with an adequate number of subsidiary weapons. and 21-inch torpedo tubes. She has a displacement of 29,150 tons and a speed of 22 knots. Some of her sister ships include aircraft in their equipment. Bulges of improved type as a protection from underwater attack were fitted after the War. rather wet in heavy weather. (No. 3)







HM.S. "HOOD," British Battle Cruiser.
Begun under the Emergency War Programme in 1916, H.M.S. Hood was built by John Brown & Co., Clydebank, and cost about £6,000,000. She has a speed of 31 knots, a displacement of 42,100 tons and carries a complement of 1,341. Her armament consists of eight 15-inch guns, twelve 5.5-inch guns, four 4-inch anti-aircraft guns and subsidiary weapons, besides six 21-inch torpedo tubes. Aircraft are to be added in 1939. She is fitted with outside bulges as protection against under-water attack, and has specially thickened side armour and conning tower. The Hood, although over 18 years old, is still reckoned as a first-class fighting unit. (No. 4)



HM.S. "REPULSE," British Battle Cruiser, "Renown" Class. Provided for by the 1914-15 Navy estimates, the two ships of this class were both built on the Clyde, at a cost of about £3,000,000 each. Both have been extensively reconstructed. The armament consists of six 15-inch and twelve 4-inch guns with numbers of subsidiary weapons, including 21-inch torpedo tubes. Four aircraft with catapult are in the equipment as reconstructed. The two ships each have a displacement of 32,000 tons, a speed of 28-29 knots and carry a complement of about 1,200. Owing to the additional armour protection which has been provided, the speed has been reduced from the original 31 knots. (No. 5)

MM.S. "EXETER," British Cruiser, " York" Class. This class, numbering two ships, is a modification of the three-funnelled Dorsetshire type which preceded it, being 1,585 tons lighter. Originally it was intended that there should be three funnels, but the necessity of saving space decided that the two forward uptakes should be trunked into a single casing. Built at Devonport Dockyard, the Exeter has a displacement of 8,390 tons. Her complement is 600 and her speed 32 knots with 80,000 h.p. Her armament is exceptionally heavy, consisting of six 8-inch guns, with adequate subsidiary weapons, including 21-inch torpedo tubes. She carries two aircraft with catapults. (No. 6)





H. "NORFOLK," British Cruiser, "Dorsetshire" Class. This design is unquestionably that of a powerful warship, possessing fine seagoing qualities and especially useful for the protection of ocean trade, the armament being extremely powerful. Built on the Clyde, the Norfolk has a displacement of 9,975 tons. Her complement is 650 and her speed over 32 knots on 80,000 h.p. Her guns include eight 8-inch, eight 4-inch high-angle and twenty subsidiary weapons, with eight quadrupled tubes for 21-inch torpedoes, She has one aircraft, with catapult. This class was projected under the 1926-27 estimates, and the Norfolk was completed in June 1930. (No. 7)

PLAYER'S CIGARETTES

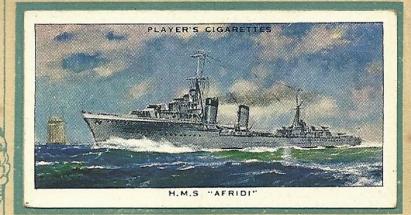
H.M.S. "SOUTHAMPTON"

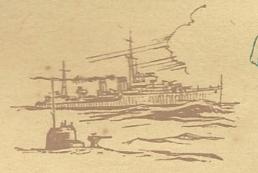
IMS. "SOUTHAMPTON," British Cruiser, "Southampton" Class. This ship gives her name to one of the latest of the cruiser classes, numbering ten ships. Their displacement varies from 9,100 tons to 10,000 tons. Somewhat unusual in appearance, they are very smart and rakish-looking vessels, and were the first ships to mount 6-inch guns in triple turrets. The armament consists of twelve 6-inch guns, six forward and six aft. With a speed of 32-33 knots, their heavy volume of rapid gun-fire should render these vessels very effective fighting units. All ten ships were launched during 1936-38. The subsidiary armament includes six 21-inch tripled torpedo tubes. (No. 8)



This vessel was built under the Emergency War Programme in 1916 and completed in 1917, by Vickers, as a light cruiser. This ship and the Coventry were reconstructed and re-armed in 1935 to fit them for the special duties of anti-aircraft vessels. Thus their armament consists of a large number of rapid fire anti-aircraft guns, including ten 4-inch guns on high-angle mountings supported by multiple machine guns and a number of other weapons. H.M.S. Curley has a speed of 29 knots on 40,000 h.p., a displacement of 4,290 tons, and carries a crew of 400. Six other vessels of similar type are to undergo conversion to anti-aircraft cruisers. (No. 9)







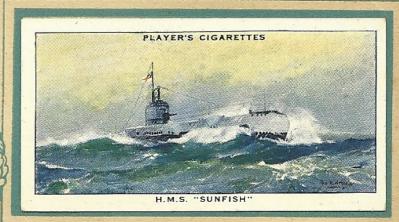


TIM.S. "ADVENTURE," British .. Cruiser-minelayer. This ship, the only vessel of her type, was completed in 1927. During the Great War the more extensive minelaying operations were carried out by large converted merchant ships and liners, and even old warships. The Adventure has been specially constructed for this particular work. In addition to her equipment of mines, she mounts four 4.7inch anti-aircraft guns and a number of smaller calibre. The mines, of which 340 are carried, are stored below, mounted on their sinkers on special racks which permit of them being dropped through the "doors" in the stern of the vessel. Her tonnage is 6,740, with a speed of nearly 28 knots with 40,000 h.p. (No. 10)

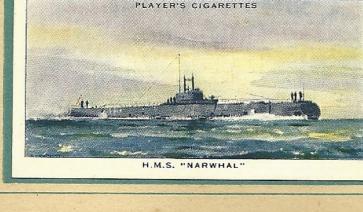
H.S. "GRENVILLE," British Flotilla Leader, Admiralty Type. Flotilla Leaders are somewhat larger than the normal destroyer of contemporary design and, apart from certain internal features, have definite funnel markings which serve to distinguish them as well as being an indication of their station in the disposition of the ships of the Navy. Provision is made for the additional flotilla staff carried in leaders. The armament of this ship consists of five 4-7-inch guns, with a number of smaller weapons. Eight 21-inch torpedo tubes are carried. The speed is 36 knots on 38,000 h.p. The cost of this type of vessel varies, but is roughly about £350,000. The Grenville was built by Messrs. Yarrow & Co. (No. 11)

HM.S. "AFRIDI," British Destroyer, "Tribal" Class. The new vessels of this class differ entirely from the pre-War "Tribals," and represent the very latest in destroyer design. Sixteen vessels are included in this class. The Afridi will be fitted as a Flotilla Leader, though not officially classed as one. Vessels of this class displace 1,870 tons, and mount eight 4.7-inch guns in twin turrets, besides smaller weapons, but carry only four torpedo tubes. Gun power thus exceeds the torpedo armament. With their high speed of 36.5 knots on 44,000 h.p., it would seem that they are intended to engage enemy destroyers rather than to pursue normal destroyer tactics with the torpedo. (No. 12)









HM.S. "SEVERN," British Submarine,
"Thames" Class, An ocean-going " Thames" Class. An ocean-going type of submarine, the three ships of the Thames class are the fastest submarines afloat. Their 10,000 h.p. Diesel engines. with electric motors for under-water service, give speeds on surface and below of 22.5 knots and 10 knots respectively. Their complement is 60 officers and men. They carry one 4-inch gun and two machine guns, with six torpedo tubes for 21-inch weapons. The tonnage of the Severn is 1,850 on surface and 2,710 when submerged. These ships are our largest submarines since the scrapping of the experimental "M" and "X" types, the former of which mounted one 12-inch gun, (No. 13)

M.S. "NARWHAL," British Submarine, "Porpoise" Class. The six ships of the Porpoise class, one of our biggest and most modern types of submarine, have proved to be extremely satisfactory. Fitted for minelaying service, they are also equipped for torpedo attack. The surface speed of the Narwhal is 16 knots with Diesel engines of 3,300 h.p. Submerged, her speed is just under 9 knots on electric motors. Her armament consists of six 21-inch bow torpedo tubes, one 4-inch gun and two machine guns. The surface tomage is 1,520 and when submerged rises to 2,140 tons. A crew of 55 is carried. The Narwhal was built by Vickers-Armstrongs, Ltd., and the cost of the six in the class averages nearly \$600,000 each. (No. 14)

M.S. "SUNFISH," British Submarine, "Shark" Class. This class, numbering eight ships, consists of a useful but smaller type of submarine. The Sunfish is one of the latest additions, having been completed in 1937. Her armament consists of one 3-inch gun and six torpedo tubes for 21-inch weapons. She can dive with great rapidity, an advantage when patrolling in coastal waters. Her tonnage is 670 on the surface and 960 when submerged, with respective speeds of 15 and 10 kmots, corresponding with horse powers of 1,900 and 1,300. She was built at Chatham

Dockyard. (No. 15)







MS. "ARK ROYAL," British Aira craft Carrier. Projected under the 1934 estimates, H.M.S. Ark Royal was laid down in 1935 by Cammell Laird and roleted in October 1938 at a cost of £3,000,000. Two series of hangars accommodate seventy-two planes, which are hoisted to the flight deck, 800 feet long, by an equipment of three special lifts. Boats are stowed in the embrasures in the ship's sides, the cranes for handling them being on sponsons. The main armament consists of sixteen 4.5-inch guns on highangle mountings. She has a speed of 31 knots with 100,000 h.p., and a displacement of 22,000 tons. Up-to-date accommodation is provided for the personnel, totalling 1,600. (No. 16)



M. MOTOR TORPEDO BOAT No. 102, to give her name in full, is the fastest vessel in the Royal Navy to-day. She was built in 1937 by Vosper, Ltd., of Portsmouth, and is the design from which the new torpedo boats of the 1938 programme have been developed. Her displacement is 28 tons, with a length of 68 feet. She is armed with two 21-inch torpedo tubes, and two 20-mm. guns. Three Isotta-Fraschim engines, with a total horse power of 3,000, give a speed of 43.7 knots fully loaded, or 47.8 knots in a light condition. Her complement is 10 officers and men. (No. 17)



UNKERQUE," French Battleship. This vessel and her sister ship, the Strasbourg, represent the most modern type of capital ship in the French Navy, and in appearance resemble our battleships of the Nelson class, the main armament being concentrated forward. The Dunkerque, completed in 1937, has a displacement of 26,500 tons, a speed of over 30 knots and a complement of 1,380 officers and men. Her armament consists of eight 13-inch guns, in widely spaced quadruple turrets on the upper deck forward. Three sets of twin turrets, mounting twelve 5-1-inch guns, are placed aft, with four more 5-1-inch abeam. Four aircraft are carried, with a catapult on the quarterdeck. (No. 18)









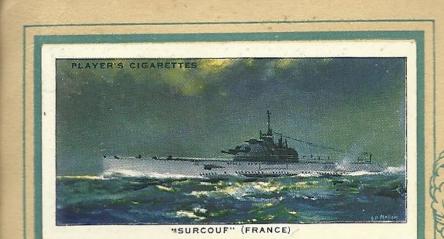
" ALGERIE," French Heavy Cruiser. This handsome vessel, completed in 1934, is of 10,000 tons displacement, with a designed speed of 31 knots, which was considerably exceeded on trials. Eight 8-inch guns, in twin turrets, are mounted: in addition there are twelve 3.9-inch antiaircraft weapons, twenty-four lighter guns of various calibres, and six 21-7-inch torpedo tubes. She carries three aircraft, with two catapults, and is exceptionally well protected. The anti-torpedo and mine bulges are inside the hull, and the total weight of armour is 2,000 tons. She has geared turbines of 84,000 h.p., and is manned by 605 officers and men. (No. 19)

"IA GALISSONNIÈRE," French Light Cruiser. This is a very interesting type of modern light cruiser, of which a notable feature is the spacious quarter-deck for the speedy handling of aircraft. Four of these are carried, with a catapult. Attention is directed to the square transom stern, from which a special mat can be towed astern to facilitate the recovery of the vessel's seaplanes. La Galissonnière, which was built at Brest and completed in 1935, has a tonnage of 7,600 and a horse power of 84,000, giving a normal speed of 31-5 knots. The armament consists of nine 6-inch guns, eight 3-5-inch anti-aircraft guns, sundry smaller guns, and four torpedo tubes. (No. 20)

MOGADOR," French Destroyer. This new destroyer for the French Navy was designed for a speed of 38 knots, which was exceeded on trials in 1938. Her displacement is 2,884 tons, so that under the terms of the Naval Treaty she counts as a cruiser. She has engines of 90,000 h.p., and mounts the very powerful armament, for a destroyer, of eight 5-5-inch guns, which have a range of 25,000 yards. This renders her a very formidable craft, able to hunt down smaller and less powerfully armed destroyers. In addition,

mounted, and she is equipped with ten torpedo tubes in twin and triple groups. (No. 21)

a number of smaller anti-aircraft guns are





"CURCOUF," French Submarine. France was one of the pioneers in submarine construction. In this vessel, which is the largest submarine in the world, is concentrated the experience gained with many experimental types, to which this nation has devoted so much attention. The Surcouf is practically a submersible cruiser, being armed with two 8-inch guns, as well as anti-aircraft and machine guns, and ten tubes for the discharging of torpedoes, of which twenty-two are carried. The craft is propelled on the surface by Diesel engines of 7,600 h.p. and is capable of a speed of 18 knots. Her speed submerged is derived from electric motors of 3,400 h.p. Her tonnage is 2,880 and she carries

a crew of 150. (No. 22)



BÉARN," French Aircraft Carrier. This vessel was originally a battleship, laid down before the Great War. In 1923-27 she was converted into an aircraft carrier—the only one of her kind in the French Navy, though two more are being built. The displacement is 22,146 tons. The flight deck is 600 feet long, and forty aircraft are carried. The ship is propelled by combined sets of turbines and reciprocating engines, with a total horse power of 37,200, equal to a speed of 21 knots. The armament consists of eight 6·1-inch guns, fourteen smaller guns on high-angle mountings and twelve machine guns. The vessel was extensively refitted and brought up to date in 1935. (No. 23)

" A DMIRAL GRAF SPEE," German Battleship. Officially classed as an "armoured ship," the Admiral Graf Spee and her two sisters are virtually powerful armoured cruisers. Much publicity was given to the ships of this class under the caption of "pocket battleships" when they were first commissioned in 1933-36. Her armament is exceptionally powerful for her displacement of 10,000 tons, consisting of six 11-inch and eight 5-9-inch guns. Two aircraft, with catapult, are carried and eight torpedo tubes. The hull is electrically welded, and the main engines of 54,000 total h.p. are Diesels of the M.A.N. type. Speed is 26 knots and the cost £3,750,000. (No. 24)









NTÜRNBERG," German Light Cruiser. An interesting feature of the German light cruisers is the dual system of propulsion. In the Nurnberg, oil-fired boilers are used to drive geared turbines of 60,000 h.p., with Diesel engines of 12,000 h.p. for cruising at a lower speed. Full speed is normally 32 knots. With this arrangement three propeller shafts are used, the centre one being for the Diesel drive. The main armament consists of nine 5.9-inch guns in triple turrets, with a secondary armament of sixteen anti-aircraft guns and four machine guns. Twelve 21-inch torpedo tubes and two aircraft, with catapult, are also carried. The Nurnberg, which has a displacement of 6,000 tons. was completed in 1935. (No. 25)



BORG THIELE," German Destroyer. The sixteen destroyers of the Maass class, of which the Georg Thiele is an example, are amongst the more recent additions to the German Navy, and are very smart looking craft, bearing little resemblance to the German destroyers whose operations during the Great War brought them within close proximity to our south-east coast. But they do not differ greatly in outward appearance from earlier types of post-War German torpedo craft. With a displacement of 1,625 tons, they are heavily armed with five 5-inch guns, together with anti-aircraft weapons and eight 21-inch torpedo tubes in two quadruple sets. The Georg Thiele has a speed of 36 knots with 40,000 k.p. (No. 26)

T-16, German Submarine, Coastal Type. There is no striking difference between the general appearance of the later German submarines and those whose activities we have such good reason to remember in the Great War. The coastal type, small handy craft displacing 250 tons (330 submerged) with a surface speed of 13 knots, is designed for service in the Baltic and Heligoland Bight. Though experiments have been conducted with a novel type of engine to serve the dual purpose of running both on . the surface and when submerged, these have so far proved disappointing. The armament comprises three tubes for 21inch torpedoes and one 1-pounder gun.

(No. 27)





ONTE DI CAVOUR." Italian Battleship. Though she was launched three years before the Great War began, the Cavour has been entirely rebuilt during the period 1933-37. In general the ship bears no resemblance whatever to her original appearance, an entirely new bow of different shape having been built on, the disposition of funnels altered and the former gun turret amidships replaced by two catapults. Her armament now consists of ten 12.6-inch guns, disposed in triple and twin turrets, twelve 4.7-inch guns and twenty-eight smaller anti-aircraft guns. Torpedo tubes have been removed, but four aircraft are carried. The displacement is 23.622 tons, and new engines of 75,000

h.p. give a speed of 27 knots. (No. 28)



"BOLZANO," Italian Heavy Cruiser. On a displacement of 10,000 tons, this ship mounts an armament of eight 8-inch guns and sixteen 3-9-inch guns, with sixteen smaller anti-aircraft weapons. Eight torpedo tubes and two aircraft, with a catapult, are also included in her equipment. Her protection includes a 2-inch armoured deck and a partial belt nearly 400 feet in length and 2\frac{3}{2} inches thick. The Bolzano, which was built in 1932, has a horse power of 150,000, giving a nominal speed of 36 knots. (No. 29)

"GIUSEPPE GARIBALDI," Italian general appearance of this class is very pleasing, the beautifully framed stem and compact arrangement of the superstructure being in accordance with the most modern practice. This vessel is of 7,874 tons displacement, and her engines of 100,000 h.p. give her a speed of 35 knots. The armament consists of ten 6-inch guns, disposed in triple and twin turrets, eight 3-9-inch guns and sixteen smaller antiaircraft guns. There are six 21-inch torpedo tubes, four aircraft and two catapults. The vessel is also equipped for minelaying.







TIBECCIO," Italian Destroyer. Combleted in 1934, this vessel of the Grecale class has a very handsome appearance. Her displacement is 1,449 tons and her turbine engines of 44,000 h.p. give a speed of 38 knots. A large percentage of the ships of the Italian Navy, including many of its numerous destroyers, are equipped with geared turbines of the Parsons type. The armament comprises four 4-7-inch and eight smaller anti-aircraft guns, and six 21-inch torpedo tubes in triple mountings. She is fitted for minelaying. (No. 31)

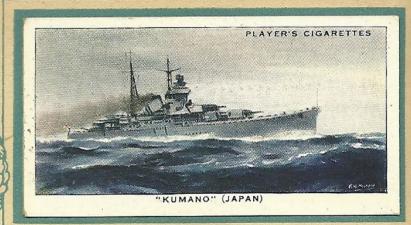


JIUSEPPE FINZI," Italian Submarine. This vessel, a unit of the largest ocean-going type of Italian submarine, was completed in 1935. She is heavily armed. In addition to mounting two 4.7-inch guns, she carries four smaller anti-aircraft guns and eight torpedo tubes for 21-inch weapons. The surface displacement is 1,332 tons, and surface propulsion is effected by means of Fiat Diesel engines of 4,400 h.p. giving a speed of 17 knots. Electric motors of 1,800 h.p. provide a submerged speed of about 8 knots. (No. 32)



"NTAGATO," Japanese Battleship. This been so extensively reconstructed as to render her a modern and powerful warship. The displacement is 32,720 tons, with a complement of 1,332 officers and men. Her original speed was 23 knots with steam turbines of 80,000 h.p., but this is reported to have been increased by re-engining. She has a main armament of eight 16-inch guns mounted in four turrets, while there is a secondary battery of twenty 5.5-inch guns and fifteen smaller anti-aircraft and machine guns. The Nagato carries three aircraft, with one or more catapults, and six submerged torpedo tubes, and is fitted with external bulges against under-water attack. (No. 33)









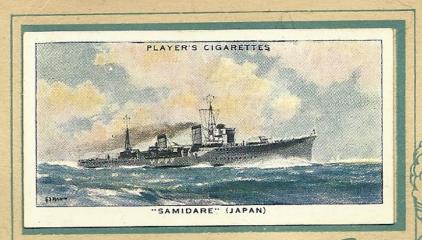
"TSE," Japanese Battleship. This vessel A was completed in 1917, but has since undergone considerable alteration. She now has a single funnel instead of the original two and a new and very massive pagoda-like bridge structure, typically Japanese. The main armament remains the same, i.e. twelve 14-inch guns, but the secondary battery is now eighteen 5.5-inch guns instead of twenty. There are fifteen anti-aircraft and machine guns; eight of these, however, are 5-inch as against those of 3-inch calibre formerly fitted. Four 21-inch torpedo tubes and three aircraft are carried. The Ise has a displacement of 29,990 tons and a speed of 23 knots with 45,000 h.p.; her com-

plement is 1,360. (No. 34)

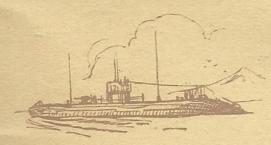
"ATAGO," Japanese Heavy Cruiser. Completed in 1932, this vessel has a very unusual appearance. The extreme rake of the foremost funnel enables this class to be recognized at once. The hull is of tripled construction, giving the maximum defence against mine and torpedo. The displacement is 9,850 tons with a complement of 692. Machinery of the geared turbine type gives a speed of 33 knots with 100,000 h.p. The armament consists of ten 8-inch, four 4-7-inch anti-aircraft, and four machine guns, together with eight 21-inch deck torpedo tubes. There are four aircraft with two catapults. (No. 35)

"KUMANO," Japanese Light Cruiser. Laid down in 1934 and completed in 1937, this vessel is of unusual appearance, with a curious twin funnel trunked into a single casing and given a considerable rake aft. Her displacement is 8,500 tons, and she has engines of 90,000 h.p. giving a speed of 33 knots. Fifteen 6·1-inch guns are mounted in triple turrets, three forward, two aft. Eight 5-inch anti-aircraft guns are also carried with six smaller weapons, making up an exceptionally heavy armament for a vessel of this size. In addition, she is equipped with twelve deck torpedo tubes for 21-inch weapons, and four air-

craft with two catapults. (No. 36)







"CAMIDARE," Japanese Desiroyer. This vessel, completed in 1937, representsan average type of destroyer of 1,368 tons. Perhaps the most notable feature is the high angle to which the guns can be elevated, reported to be nearly 90 degrees. The Samidare mounts five 5-inch guns, four of which are arranged in pairs and one singly. Relying on the high angle mounting of this primary armament, no special anti-aircraft weapons are provided other than machine guns. There are eight 21-inch torpedo tubes in quadruple deck mountings. The speed is 34 knots with engines of 38,000 h.p., while a complement of 180 is carried. (No. 37)

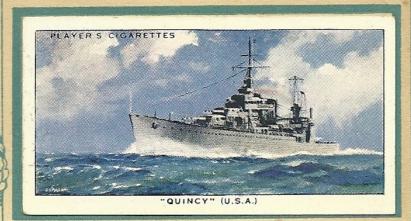


15

I-21, Japanese Submarine. A mine-laying submarine capable of carrying over 40 mines, the I-21 is armed with one 5-5-inch gun and four 21-inch torpedo tubes. Her displacement is 1,142 tons on the surface and 1,470 tons submerged. Diesel engines of 2,400 h.p. give the vessel a surface speed of 14 knots, while electric motors of 1,200 h.p. are capable of propelling her at 9.5 knots in submerged trim. (No. 38)

" A KAGI," Japanese Aircraft Carrier. Like the British aircraft carriers Courageous and Glorious, this vessel was not originally designed for her present duties. She was laid down in 1920 as a battle cruiser of 42,000 tons to rival H.M.S. Hood. In 1927 she was completed as an aircraft carrier, and can accommodate fifty planes. The funnel arrangement is very curious. One is curved downward and outboard just below the flight deck, the other protruding upwards abaft the first. The armament consists of ten 8-inch guns, twelve 4-7-inch anti-aircraft guns and twenty-two machine guns. The Akagi, which burns coal or oil, has a speed of over 28 knots on 131,200 h.p.









"ALIFORNIA," U.S.A. Buttleship. The California and her sister ship the Tennessee were laid down during the Great War and completed in 1920-21. The California displaces 32,600 tons, and has turbo-electric engines giving her a speed of 21 knots. She is armed with twelve 14-inch, twenty 5-inch and nineteen smaller guns. Though her torpedo tubes have been removed, she is equipped with three aircraft and two catapults. These ships will be completely reconstructed in the near future, when new machinery will be installed and the antiquated lattice masts replaced. These masts were once to be found in nearly all American warships. but they are now regarded as obsolete.

"COLORADO," U.S.A. Baitleship. The Colorado, with her sister ships completed in 1921-23. With a displacement of 32,500 tons, the Colorado mounts eight 16-inch, twenty 5-inch and nineteen smaller guns. Originally she was fitted with submerged torpedo tubes, but these have been removed. Three aircraft are carried, and two catapults, one on the quarter-deck and one on the top of "X" turret. The Colorado's engines are turbo-electric, and give her a speed of 21 knots with 37,000 h.p. All three ships of this class will be taken in hand for reconstruction in 1939, when their old-fashioned lattice masts will doubtless be replaced. (No. 41)

Cuincy," U.S.A. Heavy Cruiser. The class of eight ships to which the Quincy belongs is a very smart and efficient type, with many unique features. In the Wichita, the latest ship of the class, the aircraft are stowed in the stern. The Quincy was completed in 1936; her displacement is 9,375 tons, and her speed is 32 knots with geared turbines of 107,000 h.p. The armament consists of nine 8-inch guns in triple turrets, eight 5-inch anti-aircraft guns and twelve smaller weapons. Four aircraft are carried, with two catapults, but no torpedo armament is fitted. The complement is 551 officers and men,

(No. 42)





- 3 months

"BROOKLYN," U.S.A. Light Cruiser.
A peculiar feature of this ship and others of the same class completed in 1937-38 is the installation of the aircraft hangar in the stern immediately under the quarter-deck. Seen from aft they have a somewhat ugly appearance, but this new departure provides accommodation for eight aircraft, and therefore has much in its favour. Fifteen 6-inch guns are mounted in triple turrets and there are in addition 5-inch anti-aircraft and sundry smaller guns. Geared steam turbines of 100,000

h.p. give a speed of 32-5 knots. The dis-

placement of this ship is 10,000 tons and

the complement is 868. (No. 43)



"GRIDLEY," U.S.A. Destroyer. In this vessel, which was completed in 1937, the large single funnel, with its prominent base casing only partially masked by the boats in davits, is a notable departure from the appearance of previous American destroyers. The displacement is 1,500 tons and the complement 172 officers and men. Engines of 42,800 h.p. give a speed of 36.5 knots. The armament consists of four 5-inch guns, five machine guns and sixteen 21-inch torpedo tubes in quadruple sets. (No. 44)



"PERCH," U.S.A. Submarine. Completed in 1937, the Perch is a submarine of 1,330 tons surface displacement and 1,998 tons submerged. One 3-inch gun is mounted so that it can be used for both anti-aircraft and normal purposes. The armament in addition comprises six tubes for 21-inch torpedoes. The Perch carries a complement of 50 officers and men, and is fitted with Diesel engines of the Winton type, giving her a surface speed of 20 knots. (No. 45)









18

MAHU," U.S.A. River Gunboat. This vessel is a sister ship of the Panay, whose destruction by Japanese aircraft in the course of operations against the Chinese on the River Yangtse in December 1937 created such a sensation. Completed in 1927, the Oahu is a vessel of 450 tons displacement with a crew of 65. She has triple expansion engines of 2,250 h.p., giving a speed of 15 knots. The armament consists of two 3-inch guns of the antiaircraft type and ten machine guns. Of light draft, these vessels are essentially warships for rivers and shallow waterways.

ENTERPRISE," U.S.A. Aircraft Carrier. The general appearance of this ship follows the current modern practice in the design of aircraft carriers. Owing to various causes, the vessel was delayed beyond the proposed date of completion in 1937, and was not finished until the following year. One hundred aircraft are carried, and the vessel is armed with eight 5-inch antiaircraft guns. The displacement is 19,900 tons and the complement 2,072, including the flying personnel. Her speed is 34 knots with geared turbines of 120,000 h.p. (No. 47)

"CARATOGA," U.S.A. Aircraft Carrier. This vessel is unusual even for an aircraft carrier, as she and her sister ship Lexington were originally planned as battle cruisers of over 35,000 tons as far back as 1916. After various alterations, she emerged in 1927 as an aircraft carrier, capable of handling seventy-nine planes. The vessel is heavily armed with eight 8-inch guns in twin turrets. Twelve 5-inch anti-aircraft pieces and twelve smaller guns are also mounted. Turbine engines of 180,000 h.p. give a speed of 33 knots, while the displacement is now 33,000 tons and the complement 1,899. Both ships

are to be modernized. (No. 48)

(No. 46)





LENINGRAD" (U.S.S.R.)



TENINGRAD," U.S.S.R. Destroyer. This smartlooking destroyer of the Soviet-Navy was launched in 1935, having been built in Leningrad. The armament is five 5-inch guns and eight of smaller calibre, with six 21inch torpedo tubes in triple sets. Mines are also carried. With engines of 90,000 h.p. a speed of 38 knots is obtained. The displacement of 2,900 tons places her amongst the world's largest destroyers, and for practical purposes vessels of this class may be regarded as small cruisers. (No. 49)



REVOLUTIONER." U.S.S.R. Submarine.

This vessel, built in 1931, is one of the larger class of Russian submarines, with a surface displacement of 959 tons. Diesel engines of 2,500 h.p. give her a surface speed of 15 knots, while electric motors drive her at 8 knots when submerged. Eight 21inch torpedo tubes are fitted. with one 4-inch anti-aircraft

gun. (No. 50)



