DEFENCE.

IN each of the Colonies a small permanent military force is Military and Defence Forces of maintained, consisting for the most part of artillery and Australasia. submarine miners. There has always been manifested by the colonists of Australasia an objection to the maintenance of a standing army, and a disposition to rely mainly upon the patriotism and valour of the citizens for their own defence. But each Colony possesses a more or less complete system of fortifications, armed with expensive ordnance, which requires a more regular and constant attendance than could well be bestowed by those who only devote a portion of their time to military affairs. Hence it has been found advisable to institute the small permanent forces alluded to, whose chief duty it is to man the fortifications and keep the valuable armaments therein in a state of efficiency, so as to be ready for any emergency. At the same time it is expected that they would form a steady nucleus around which to form an effective defence force if ever hostilities should unfortunately occur. The greater portion of the Colonial forces is, however, comprised of volunteers under a system of partial-payment, which affords a cheap and effective defence force without the disadvantages and expense of a standing army. The men receive a fixed amount of pay, in order to compensate them for loss of wages during the time they are away from their employment for the purposes of military instruction. In New South Wales and Victoria the remuneration amounts to £12 per annum to each man, and in Queensland and South Australia to about half that sum. It is computed on the basis of a certain number of whole or half-day parades or night drills at the rate of 10s. per day in the first two Colonies named, 6s. a day in Queensland, and 5s. a day in South Australia. In addition to the remuneration the

Purely volunteer system unsatisfactory. partially-paid, in common with all the other military forces, receive free rations when in camp or on active service. There has been a marked tendency in all the Colonies to discourage the services of the purely volunteers, as the system was found to work unsatisfactorily, especially in the country districts. In New Zealand alone is the volunteer system the mainstay of defence. The following is the strength of the forces maintained by each province in 1890:—

Defence Forces of Australasia.

	Total Forces.	Paid.	Partially Paid.	Unpaid.
New South Wales	9,285 7,314 4,497 2,202 688 2,038 7,824	538 406 134 64 2 32 204	4,146 4,343 2,787 1,361 686 521	4,601 2,565 1,576 777 1,485 7,620
Total, Australasia	33,848	1,380	13,844	18,624

Rifle clubs.

Among the Volunteers in New South Wales, Queensland, South Australia, and Tasmania are included the rifle clubs or companies of a strength of 4,601, 1,485, 466, and 1,497 men respectively. By means of a liberal extension of these clubs it is expected that there will be a large number of men, trained to the use of the rifle and not unaccustomed to drill, who in time of need may be available to fill the ranks of the regular forces.

Total military strength. The relative strength of the various arms in the Colonies may be summarized as follows:—

Staff, Medical Staff, Instructors, Ambulance Corps, &c	738
Artillery (Garrison, field and horse)	4,117
Engineers	753
Cavalry	995
Mounted Infantry and Mounted Rifles	4,060
Infantry	12,919
Rifle Companies	10,266

or, a total strength of 33,848 men.

In addition to the forces enumerated above, all the Colonies, Marine Forces. with the exception of Western Australia, have small corps of Naval Volunteer Artillery, or a partially paid force of a similar character, capable of being employed either as a light artillery land force, or to serve on board the local war vessels. In Victoria there is a permanent naval force of 236 men. The marine forces are as follow: -

Colony.	Strength.
New South Wales	633
Victoria	. 615
Queensland	428
South Australia	. 170
Tasmania	. 68
New Zealand	. 1,192
Total	3,106

Thus the combined forces of all the Australasian Colonies on Combined their present footing are 36,954 strong; and of these 25,000 Australasian Defence Forces. could be mobilised in either of the Colonies of Queensland, New South Wales, Victoria, or South Australia.

NAVAL DEFENCE.

The boundaries of the Australian Naval Station have been Australasian defined as follows:-From 95° E. long by the parallel of 10° S. naval station. lat. to 130° E. long.; thence north to 12° N. lat., and along that parallel to 160° W. long., and on the south by the Antarctic Circle, including the numerous groups of islands situated within those limits.

The defence of the Australasian coast is mainly in the hands of Imperial navy on the Austrathe British ships on the Australian Station, and of the Australasian lasian station. Auxiliary Squadron. Sydney, the head quarters of the fleet, ranks as a first class naval station; and extensive repairing yards and store-houses have been provided for the accommodation of the ships of war. There were stationed in the Australasian waters at the close of 1891 nine Imperial vessels whose armament, &c., are as follows :---

Imperial	War	Vessels	on	Station

	· · · · · · · · · · · · · · · · · · ·												
			int.	er.	'ater				Armament.			Co endu	rance.
Name.	Class.	Material of hull.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armour.	Guns.	Torpedo tubes.	Speed.	Coal that can be carried in bunkers.	Distance that can be steamed at 10 knots' speed.
Orlando	Twin-screw cruiser, 1st class, armoured.	Steel	tons. 5,600	8,500	ft. in. 24 2	ft. in. 300 0	ft. in. 56 0	Armoured belt at water- line, 10 in.; armoured deck, 3 in.; conning	10 6-in. 5-ton B.L.R. 16 Q.F. Hotchkiss,	2	knots. 18·5		knots. 7,000
Curaçoa	Screw cruiser, 3rd class.	Steel and iron sheathed with wood.	2,380	2,540	18 10	225 0	44 6	tower, 12 in.	7 M., 3 L. 4 6-in. 5-ton B.L.R. 8 5-in. 2-ton B.L.R. 1 Q.F. Hotchkiss 9 M., 2 L.	2	13.0	470	3,800
Cordelia*	Screw cruiser, 3rd class.		2,380	2,420	18 8	225 0	44 6	•••••	10 6-in .41-ton B.L.R. 10 M., 2 L.	2	13.0	470	3,800
Rapid	Screw cruiser, 3rd class.	Composite.	1,420	1,400	15 9	200 0	38 0	•••••	2 6-in. 4-ton B.L.R., 10 5-in. 38-cwt. B.L.R., 4 M., 1 L.		13.1	425	6,600
Royalist	Screw cruiser, 3rd class.	do	1,420	1,510	15 9	200 0	38 0	••••••	2 6-in. 4-ton B.L.R., 10 5-in. 38-cwt. B.L.R., 4 M., 1 L.	• • • •	13.1	425	6,600
Lizard	Screw gun- boat, 1st class.	do	715	1,000	13 6	165 0	29 0	······································	64-in.25-cwt. B.L.R, 4 M.		12.7	105	2,500
Goldfinch	Screw gun- boat, 1st	do	805	1,200	12 8	165 0	30 0	•••••	64-in. 26-ewt.B. L.R., 2 Q.F. Hotchkiss,		13.0	105	
Ringdove	class. Screw gun- boat, 1st	do ∙	805	1,200	12 8	165 0	30 0		2 M, 64 in.26 ewt. B.L.R., 2 Q.F. Hotchkiss,		13.0	105	
Dartt	class. Screw yacht	do	470	200	12 11	133 0	25 2	****************	2 M. 2 L		8.8	64	

^{*} Left the Australian Station early in 1892. † Surveying service. M.L.R., Muzzle-loading rifled guns; Q.F., Quick-firing guns; M., Machine guns; L., Light guns under 15 cwt.; B.L.R., Breech-loading rifled guns.

An undertaking has been entered into by all the Colonies for Special the payment of a pro rata subsidy for the maintenance of an Australasian Australasian auxiliary fleet. The total subvention to be paid by all the Colonies amounts to £91,000 per annum, the contributions of each being determined on the basis of population. The amounts estimated as payable by each Colony for the year 1891 were :-

Contribution of each Colony for Naval Defence.

	£
New South Wales	27.430
Victoria	27,280
Queensland	9,380
South Australia	7,470
Western Australia	1,210
Tasmania	3,470
New Zealand	14,760
Australasia	£01 000

The fleet consists of five fast cruisers, and two torpedo gunboats of the "Archer" (improved type) and "Rattlesnake" classes of the British Navy; of these three cruisers and one gunboat will be continuously kept in commission, the remainder being held in reserve in Australasian ports, but ready for commission whenever circumstances may require their use. The agreement is for a Agreement with period of ten years, and shall then, or at the end of any subsequent ment. vear, be terminable, provided two years' notice has been given. The vessels have been built by the British Government, but the Australasian Colonies pay the interest on their prime cost at the rate of 5 per cent., provided such payment does not exceed £35,000. The Colonies are also to pay the actual charge for maintenance as mentioned above. On the termination of the agreement these vessels will remain the property of the Imperial Government. The strength of the fleet already in Australian waters will be maintained. The vessels specified in the agreement between Great Britain and the Colonies are to be in addition to these. The Australasian squadron is commanded by the Admiral on the Australian Station, whose headquarters are in Sydney, where a residence is provided for him by the Colony. The squadron, which arrived in Port Jackson on 5th September, 1891, consists of the following vessels:-

Australian Auxiliary Squadron.

			ant.	i er.	vater				Armament.			Co	
Name.	Class.	Material of hull.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armour.	Guns.	Torpedo tubes.	Special.	Coal that can be carried in bunkers.	Distance that can be steamed at 10 knots' speed.
Katoomba	Screw cruiser, 3rd_class.	Steel	tons. 2,575	7,500	ft. in 16 6	ft. in. 265 0	ft. in. 41 0	Deck armour over machinery space, 2 in. and 1 in.; conning tower, 3 in.	pr. Q.F. guns, 17- pr. M.L.R. gun (boat and field), 4:45 in, 5		knots. 16 5	tons. 300	knots. 6,000
Ringarooma	Screw cruiser, 3rd class.	do	2,575	7,500	16 6	265 0	41 0	do	barrel Nordenfeldt. do	4	16.5	300	6,000
Mildura	Screw cruiser, 3rd class.	do	2,575	7,500	16 6	265 0	41 0	do	do	4	16.2	300	6,000
Wallaroo	Screw cruiser, 3rd class.	do	2,575	7,500	16 6	265 0	41 0	. do	do	4	16.5	300	6,000
Tauranga	Screw cruiser, 3rd class.	do	2,575	7,500	16 6	265 0	41 0	do .	do	4	16·5	300	6,000
Boomerang	Torpedo gun- boat.	do	735	4,500	10 6	230 0	27 0	Conning tower, 1 in	2 4·7 in. Q.F. guns, 4 3-pr. Q.F. guns.	5	*18 75	160	2,500
Karrakatta	Torpedo gun- boat.	do	735	4,500	10 6	230 0	27 0	do	do	5	*18·75	160	2,500

^{*} This speed can be increased until, under favourable conditions, for a short period, a maximum of 21 knots can be obtained. Q.F.—Quick-firing guns.

New South Wales has no navy of its own, with the exception The "Wolverene." of the corvette "Wolverene," sixteen 64-pounder M.L. rifled guns, and two small torpedo steam-launches, the "Acheron" and the "Avernus."

Victoria has a navy of its own for harbour defence, consisting Victorian navy. of the following vessels:—

Name.	Class.	Displacement.	Armament.
Nelson	Wooden frigate	Tons. 2,730	27-in. M.L.R., 2064-pdrs., 2 Gatlings.
Cerberus	Armoured turret	3,413	4 10-in. M.L.R., 4 1-in. Nordenfeldts, 4 barrels.
Victoria	Steel gunboat	530	1 10-in. R.B.L., 1 6-in. R.B.L., 213-pdr. R.B.L. 2 1-in. Nordenfeldts, 4 barrels.
Albert	do	350	1 8-in. R.B.L., 1 6-in. R.B.L., 2 1-in. Norden feldts, 4 barrels.
Childers	First-class steel torpedo boat.	63	2 37-M.M. Hotchkiss guns 4 13-in. Fiume, 4 14-in. Fiume torpedoes.
Nepean	Second-class steel torpedo boat.	12	5 14-in. R.L., also fitted for spar torpedoes.
Lonsdale	do	12 .	do do
Gordon	Wooden torpedo boat "Turn- about."	12	1 1-in. Nordenfeldt, 2 bar rels, 5 14-in. Fiume.
Batman	Armed steamer	387	1 6-in. R.B.L., 21-in. Nor- denfeldts, 2 barrels.
Fawkner	do	387	1 6-in. R.B.L., 2 Gatlings.
Gannet		347	1 6-in. R.B.L., 2 1-in. Nordenfeldts, 2 barrels.
Lady Loch	Customs steamer (steel).	300	. do do
Commissioner	Wooden steam launch:	40	4 14-in. Fiume, also fitted for spar torpedoes.
Customs No. 1	do	30	do do

The two dredges ("Batman" and "Fawkner") and the tug ("Gannet") mentioned above have been specially built to carry heavy guns, and provision is also made by which some of the fast steamers belonging to the port could be fitted as cruisers at very short notice. Guns are kept in readiness in Melbourne in case it should be deemed necessary to put these vessels into commission. A new torpedo boat, of the most improved type, is being built for the Victorian Government.

Queensland

Queensland has two gunboats, one of which, the "Palumah," is employed on survey service at the joint expense of the Queensland and Imperial Governments. The following are the particulars of the vessels available for the defence of Queensland ports:—

Name.	Class.	Displacement.	Armament.
Gayundah	Steel gunboat (twin screw).	Tons. 360	1 8-in. B.L. Armstrong, 1 6-in. B.L. Armstrong, 4
Palumah	do	360	M. 1 S-in, B.L. Armstrong, 1 6-in, B.L. Armstrong, 2 M.
Otter	Tender (twin screw).	120	2 guns.
Bonito	Barge (twin screw).	450	I gun.
Stingaree	do	450	1 gun.

There is also one torpedo boat at Brisbane, and South Australia maintains one twin-screw steel cruiser, the "Protector," of 920 tons. Her armament consists of 1 8-in. 11½ ton B.L., 5 6-in. 4 ton B.L., and 5 machine guns. Tasmania owns one torpedo boat, and Western Australia one schooner, the "Meda," of 150 tons, employed on survey service at the joint expense of the Imperial and Colonial Governments.

FORTIFICATIONS.

Expenditure of the Australasian colonies for defence purposes Most of the Colonies have spent considerable sums in works of defence, and the principal ports are well protected by extensive fortifications, erected by the various Governments at great cost. The total expenditure from Consolidated Revenue for defence purposes during 1890-91 was as follows:—

Colony.	Amount.	Per head of Population
New South Wales Victoria Queensland South Australia Western Australia Tasmania New Zealand	£ 280,780 149,381 66,013 47,797 4,013 16,836 75,852	s. d. 4 11 2 8 3 5 3 0 1 9 2 4 2 5

Or a total expenditure for Australasia of £793,750, at the rate of 4s. 3d. for each inhabitant.

In all the Colonies with the exception of Western Australia a Expenditure certain amount of money has been spent out of loans on works of defence defence. Victoria, however, for several years has discontinued the expenditure of loan moneys for this service. The amounts thus spent during 1890–91 were as follows:—

	£
New South Wales	89,391
Queensland	11,487
South Australia	1,410
Tasmania	5,200
New Zealand	2,477
Total	£ $109,965$

*Inclusive of £42,409 for naval station, Port Jackson.

The total debt incurred by each Colony for defence purposes to Debt for defence purposes. the end of 1890-91 was as follows:—

	Amount.	Per head of Population.
New South Wales Victoria Queensland South Australia Tasmania New Zealand	£ *1,018,679 98,299 151,584 250,645 116,591 †429,719	s. d. 17 10 1 9 7 10 15 8 16 3 13 10
Australasia	2,065,517	10 10

This does not represent the whole cost of the fortifications, as large sums have from time to time been expended from the general revenues of the colonies in the construction of works of defence; the amount of such payments, however, it is now impossible to determine.

Military Defence Commission.

A military commission was appointed in 1890 by the Imperial and the different Colonial Governments, to take evidence and report on the fortification of King George's Sound, Hobart, Thursday Island, and Port Darwin, at the joint expense of the various Governments. The commission visited the points mentioned during 1891, and as a result of the evidence taken it may be anticipated that before long these four important strategical points will no longer be left at the mercy of any hostile cruiser that might choose to make a descent upon them. At King George's Sound and Thursday Island the construction of the works determined on is now in full progress, and both places were stated early in 1892 to be nearly ready to receive their armaments and garrisons.