#### MUNICIPAL STATISTICS.

Amongst the various enactments which became law for Early legislation. Victoria on its separation from New South Wales, was a provision in the Imperial Act authorizing the Governor to incorporate the inhabitants of every county, to form districts for the purpose of local government, and to establish elective District Councils. with power to frame by-laws for making and maintaining roads, establishing schools, levying local tolls and rates. &c. Many of the provisions of the Act were found to be unworkable and expensive in the details, and the District Councils therefore discontinued their meetings and practical working under the Act. Improved legislation being required, an Act was passed in 1853, establishing a central Road Board for the whole Colony, with an Inspector-General and staff, and also providing for the creation of local Road Districts under the management of Road Boards. This Act made provision chiefly for local government in country districts, and the greater part of it remained in force until 1863, when it was repealed, and replaced by the Roads Districts and Shires Act. In the meanwhile suburban districts and towns were growing up, and in 1859 an Act was passed for the establishment of municipal institutions in Victoria. This Act also continued in force till 1863, when its chief provisions were merged into the Municipal Corporations Act. Further improvements and extensions have been made from time to time in the Acts dealing with local government, and it is now practically universal throughout Victoria, the whole area of the State (except French Island) being divided into urban or rural The former are called cities, towns, and boroughs, municipal districts. and the latter shires.

The laws relating to local government were amended and consolidated by the *Local Government Act* 1903, passed on 24th December, 1903. The councils of municipalities have power to levy rates, which, together with licence-fees, subsidies received from the State, market dues, rents, and sanitary charges, form their chief sources of income. Their principal functions are to make, maintain, and control streets, roads, bridges, ferries, culverts, sewers, drains, water-courses, and jetties within their respective boundaries; and, under proper by-laws,

to control the traffic and regulate the markets, pounds, abattoirs, baths, and places of recreation; also to make arrangements for sewerage, lighting, water supply, and carrying on of noxious trades, and to act as local Boards of Health.

Any portion of Victoria, not exceeding in area nine square miles, and having no point in such area distant more Gittes, towns, boroughs, and than six miles from any other point therein, which contains at least 500 inhabitant householders, and rateable property capable of yielding £300 per annum upon a rate of one shilling in the pound, may be constituted a borough. Any borough having during the preceding financial year a revenue of £10,000 may be declared a town; or, having a revenue of £20,000, may be declared a city. Any portion of Victoria containing rateable property capable of yielding £1,500 on a rate of one shilling in the pound may be constituted a shire. There are 61 cities, towns, and boroughs in Victoria, and 147 shires. The Governor in Council may unite any two or more boroughs which form one contiguous area so as to form one borough, notwithstanding that the area would exceed the limits above specified: may unite any number of municipalities, one of which is a shire, which form one contiguous area, so as to form one shire; and may sever any portion of a municipal district and attach it to another, annex an outlying district, subdivide any municipal district into any number of divisions not exceeding eight, alter the boundaries, or abolish the subdivisions.

On petition by twenty-five ratepayers resident in any portion, not exceeding three square miles in extent, of any shire, and distant more than ten miles from the City of Melbourne, the Governor in Council may proclaim such portion a township.

Each municipality existing at the commencement of the Munici pai original Act, 29th December, 1854—now incorporated in the Act of 1903—is allowed the number of councillors then assigned to it; but in other cases the number must be some multiple of three, not less than six nor more than 24. The number is usually nine. If the district is subdivided, the number of councillors is three for each subdivision. If at any time in any municipality there is no council or there are not enough councillors to form a quorum, a commissioner may be appointed by the Governor in Council to exercise the powers of the council. Male persons liable to be rated in respect of property in the municipal district of the rateable annual value of £20 at least, whether consisting of one or more tenements, are qualified to hold the office of councillor. The election of councillors takes place One-third of the councillors retire each year by rotation, but retiring councillors may be re-elected. The councillors elect their own chairman; who, in the case of cities, towns, and boroughs, is called the mayor; in the case of shires, the president.

Every person (male or female) 21 years of age or upwards, liable to be rated in respect of property within a municipal district, in respect of which all rates, made before 10th March of the year, have been paid, shall be entitled to be enrolled as a voter. Plurality of votes is allowed upon the following scale:—

### IN CITIES, TOWNS, AND BOROUGHS.

. :	Propertie	8 I	ated	at ar	annual	value c	of under £50	*.*	•••	One vote.
	,,		"	. 9:	, ,,	,	£50 to £100		••	Two votes.
	••		39	9:		,	£100 and upw	ards	••	Three votes.

#### IN SHIRES.

Pr	pertie	s rated a	t an an	nual value	of under £25	•		One vote.
	<b>&gt;)</b>	,,	**	,,	£25 to £75			Two votes.
•	••	,,,,	,,	,,	£75 and upwa	rds	••	Three votes.

No person may be enrolled in respect of property rated under £5 a year, unless there is a house on the property, and he resides there. The occupier and the owner are not to be both enrolled in respect of the same property, the former having the prior right to enrolment. Corporations liable to be rated may nominate not more than three persons to be enrolled in their stead, and joint occupiers and owners, not exceeding three, are each entitled to be enrolled. If there be more than three, then the three standing first on the last rate valuation or return are so entitled. The Voting by Post Act 1900 may be made applicable to the elections for any municipality on the petition of the councillors.

All land situated in a municipal district is rateable Rateable property except the following: -Crown lands; land used property. exclusively for commons, mines, public worship, mechanics' institutes, public libraries, cemeteries, primary free schools, and charitable purposes; land vested in or held by or in trust for any municipality, local governing body, or commissioners under the Water Acts; and land vested in fee in the Railways Commissioners, Minister of Public Instruction, Board of Land and Works, Harbor Trust Commissioners, and Melbourne and Metropolitan Board of Works. The expression "land" includes, of course, all buildings and improvements thereon. For the purpose of rating the valuation of property is computed at its net annual value, that is to say, at the rent at which the same might reasonably be expected to let from year to year, free of all usual tenants' rates and taxes, and deducting therefrom the probable annual average cost of insurance and other expenses (if any) necessary to maintain the property in a state to command such rent: provided that no rateable property shall be computed

as of an annual value of less than £5 per centum upon the fair capital value of the fee-simple thereof. In the case of certain Crown lands, held for pastoral purposes only, the provision that the annual value must not be less than 5 per cent. on the capital value does not apply, but the occupier is rated on the actual net annual value of the property.

Rates levied in municipal districts are of three kinds. viz.:-General, extra, and separate rates. General rates general, separate. &c. are levied at least once in each year by the council of every municipality, and shall not exceed in any one year 2s. 6d. in the pound of the net annual value, or be less than 6d. in the pound of such value. Every general rate is made and levied on the occupier of the property rated, or, if there be no occupier, or the occupier be the Crown or a public or local body, then upon the owner of the property. Extra rates may be levied in any one or more subdivisions of a district, on requisition by not less than two-thirds of the councillors for the subdivision, provided that both rates together in any subdivision do not exceed 2s. 6d. in the pound. Extra rates are levied on all properties alike in the subdivision; but, where any works or undertakings are for the special benefit of any particular portion of the municipal district, "a separate rate" may be levied, with the consent of a majority of the occupiers, and of one-third at least of the owners of the properties affected. The rates to be levied may be differential, according to the benefits to be received by different properties, and the amount of the rate must be such as will, in the opinion of the council, suffice to provide for the payment of interest, and periodical repayments of, or sinking fund for, the loan raised on the security of such rate.

Where under any Act a council is empowered to execute any work at the cost of the owners, or to require such owners to do so, a special improvement charge may be made on the properties affected, on the security of which money may be borrowed for the carrying out of such work.

Melbourne and Geelong—the latter of which for many years ranked next in importance to the metropolis—having been incorporated under special statutes prior to the establishment of municipal government on a large scale throughout the State, are not subject to the Local Government Acts, except in a few comparatively unimportant particulars. Melbourne was incorporated as a town in 1842, and was ordained a city in 1847. Geelong was incorporated as a town in 1849, and proclaimed a city in 1910.

Municipalities:
1910-11 to
1914-15. The total number of municipalities throughout the State
in which local government was being administered at the
end of the year 1914 was 208. Of these, 18 ranked
as cities, 7 as towns, 36 as boroughs, and the remainder (147)
as shires. The following is a summary of the estimated population,
number of ratepayers, estimated number of dwellings (inhabited and

uninhabited), total and annual value of rateable property, and annual revenue of cities, towns, boroughs, and shires in each of the five years ended 1914-15.

#### MUNICIPALITIES: 1910-11 TO 1914-15.

Year.	Popula-	Number of	Estimated of Dwell		Estimate oi Rateable I		Total Revenue.
	tion.	Rate- payers.	In- habited.	Unin- habited.	Total.	Annual.	———
Cities, Towns, and Boroughs—					£	£	£
1910-11 1911-12	742,070*	187,562 194,391	158,611 154,083*	3,878 4,682*	114,113,507 119,400,893	6,508,534	1,056,575 1,149,044
1912–13	777,696	200,679	1 1		127,743,501	7,270,972	1 259,569
1913-14	802,479	203,773	173,646	2,895	137,649,219	7,790,654 8,218,040	1,320,545
1914-15 Shires—	825,078	209,276	180,410	3,725	147,205,224	0,210,040	••
1910-11	568,494*	£163,916	123,729	3,222	150,970,220	7,716,815	761,853
1911-12		168,229	118,552*	6,549*	155,677,624	7,969,963	796,472
1912-13	583,909	173,271	152,654	3,748	160,128,933 164,268,467	8,152,473 8,255,505	840,080 854,483
1913-14 1914-15	600,431 608,828	175,637 181,480	134,349	3,530	167,405,523	8,517 938	034,400
Total—							
1910-11	1,310,564*	∫351,478		7,100	265,083,727	14,225,349	1,818,428
1911-12		1862,620		11,231*	275,078,517	14,774,660	1,945,516
1912-13	1,361,605	373,950 379,410		6.643	287,872,434 301,917,686	15,423,445 16,046,159	2,099,649 2,175,028
1913-14 1914-15	1,402,910 1,433,906	390,756		7,255	314,610,747	16,735,978	2,1.0,020

<sup>\*</sup> Census figures.

increases in value of rateable properties and municipal

It will be observed from the following figures that there has been a very substantial increase in the estimated value of rateable property and in the revenue of municipalities during the period covered by the foregoing table:—

# INCREASE IN VALUE OF PROPERTIES AND IN MUNICIPAL REVENUE.

				7	Increase.	1
			-	1914–15 over	1910-11.	1913-14 over 1910-11.
			-	Estimated Rateable P		Revenue
				Total.	Annual,	from all sources.
Cities, Towns, an	J Danaugha			£ 33,091,717	£ 1,709,506	£ 263,970
Shires		•••	•••	16,435,303	801,123	92,630
Tot	al Increase	•••	•••	49,527,020	2,510,629	356,600

The number of ratepayers returned for 1914-15 was 390,756, and the total capital value of rateable property £314,610,747, which is equivalent to about 18<sup>3</sup>/<sub>4</sub> years' purchase on the basis of the annual value of £16,735,978.

Properties rated in municipalities.

The properties upon which the municipalities have levied rates during the past five years have steadily increased, as is shown in the following statement:—

#### NUMBER OF PROPERTIES RATED IN MUNICIPALITIES, 1910-11 TO 1914-15.

				Properties Rated.	
	Year.		In Cities, Towns, and Boroughs.	In Shires.	Total.
1910-11 1911-12	•••• ••••		219,723 227,327	216,571 222,348	436,294 449,675
1912-13 1918-14 1914-15	•••	•••	233,939 240,077 247,802	231,904 241,923 249,434	465,843 482,000 497,236

The following is a statement of the estimated population, number of ratepayers, total and annual value of rateable property, annual endowment payable by the Government, total revenue, and amount of rate levied in the £1 in each city, town, and borough in Victoria. The information relates to the municipal year, 1914–15, except as regards the item "revenue," which is for 1913–14:—

# CITIES, TOWNS, AND BOROUGHS, 1914-15.

Name,	Estimated Popula-	OI	Amount of General Rate	Estimated Bateable P	Value of roperty.	Total Bevenue	Annual Endow- ment pay- able by the
	tion.	Rate- payers.	levied in the £1.	Total.	Annual.	1913-14.	Govern- ment under Act No. 2562,
CITIES.			s. d.	£	£	£	£
Ballarat Bendigo Brunswick Camberwell Caulfield Collingwood Essendon Fitzzoy Footscray Geelong Hawthorn Malvern Melbourne Northcote Prahran Richmond South Melbourne St. Kilda	21,524 28,000 38,230 16,670 21,500 21,500 28,660 16,130 28,250 22,500 107,090 23,160 48,200 41,800 48,500 30,160	5,856 6,384 8,513 4,922 8,619 8,000 8,875 7,689 4,307 6,230 6,955 28,475 6,400 11,620 9,169 10,464 6,763	2 3 0 4 0 2 2 0 0 8 4 2 2 0 3 2 2 3 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,153,300 4,226,050 2,809,380 5,583,540 5,456,480 42,493,940 3,175,100	173,673 212,618 254,541 187,371 249,626 264,793 228,756 341,850 211,303 140,469 279,177 272,824 1,124,697 158,755 593,631 323,310 466,000 354,345	35,407 40,518 39,417 28,020 32,918 31,599 29,956 32,883 34,248 25,405 37,125 439,139 26,390 62,286 89,503 63,359 38,829	
Towns.						00,022	
Ballarat East Brighton Coburg Kew Port Melbourne Warrnambool Williamstown	16,284 16,000 12,900 12,980 13,760 7,400 17,400	3,928 3,416 6,300 2,997 2,900 1,648 6,200	2 0 2 3 2 3 2 3 2 3 2 3 2 3 2 3	1,288 800 1,927,185 1,177,200 1,206,120	84.615 167,084 85,920 128,479 98,100 60,306 129,768	14,755 22,250 17,346 16,902 4,199 20,237 16,400	

CITIES, TOWNS, AND BOROUGHS-continued.

Name.	Estimated Popula- tion.	Number of Rate- payers.	Amount of General Rate levied in the	Estimated Rateable I		Total Revenue 1913–14.	Annual Endow- ment pay- able by the Govern- ment under Act No.
			£1				2562.
Boroughs.		# 0 <b>#</b> 0	s. d.	£ 268,400	£ 26,840	9,386	£ 50
Ararat	4,500	1,060	2 6	31,130	2,707	404	25
Browns and Scarsdale		225		120,400	6,020	952	50
Buninyong	1,102	853		49,600		558	50
Carisbrook	866	219		450.012	36 481	6.348	50
Castlemaine	5,550	1,890		37,304		793	50
Chewton	950	246		64,827		2.004	75
Clunes	1,800	557		04,021		2,404	75
Creswick	2,230	602	1 9	84,620		4,005	60
Daylesford	3,920	823	2 3	287,070		1.149	50
Dunolly	1,200	350	1 6	60,410	34.151	7,378	50
Eaglehawk	7,766	2,000	2 0	409,812		7.067	50
Echuca	4,000	1,073	2 0 2 0	306,775		6,357	50
Geelong West	8,759	1,918	2 0	825,741	48,578		50
Hamilton	5,000	1,147	2 3	735,720	36,786	7,394	100
Horsham	3,500	788	2 6	456,059		5,667	50
Inglewood	1,375	380	1 6	79,152	6,596	2,043	50
Koroit	2,420	405	2 0	321,580	16,679	3,499	30
Majorca	680	178	1 0	24,728		336	50
Malmsbury	800	232	1 6	39,630		740	
Maryborough	5,300	1,100	1 6	276,300		4,713	50
Newtown and Chilwel	6,800	1,514	2 0	841,820		4,747	50
Oakleigh	4,250	1,814	2 0	797,440	39,872	5,892	100
Portland	2,240	600	2 0	374.240	18,712	16,065	50
Port Fairy	2,000	514	2 0 2 0 2 0	289,200	14,460	4,630	50
Queenscliff	1.610	543	2 0	244,540		2,429	100
Raywood	475	144	1 6	44,415		352	20
Rutherglen	1.500	384	1 3	126,930	12,693	2,472	80
Sale	3,492	899	1 9	395,640	19,782	8,224	50
Sebastopol	2,420	520	1 6	87,420	7,285	1,163	80
Smythesdale	430	138	1 0	18,340	1,834	270	
Stawell	4,550	982	2 3	198,180		7,511	50
St. Arnaud	4,020	810	1 6	219,430		3,701	
Talbot	1,040	294	1 0	48,500	4,850	1,273	
Tarnagulla	905	214	1 0	105,080		629	
Wangaratta	4.030	899	1 9	593,360		4,590	50
Wonthaggi	3,550	963	2 0	248,400	20,700	3,314	• • •
Total	825,078	209,276		147,205,224	8,218,040	1,320,545	1,905

Shires, 1914-15. The next table gives a list of the shires, and similar particulars to those shown for the cities, towns, and boroughs:—

SHIRES, 1914-15.

Name.	Estimated	Number of	Amount of General	Estimated Rateable I		Total Revenue	Annual Endow- ment pay- able by the
Name	Popula- tion	Rate- payers	Rate levied in the £1.	Total.	Annual.	1913-14.	Govern- ment under Act No. 2562.
Alberton Alexandra Arapiles Ararat Avoca Avon Bacchus Marsh Bairnsdale Ballan Ballan Bannockburn Barrarbool Beechworth Belfast	3,030 8,450 4,125 4,330 1,950 2,010	1,317 827 757 2,040 1,479 741 695 1,940 950 924 450 475 1,500 684	s. d. 1 3 1 0 1 0 1 0 1 0 1 0 1 0 1 3 1 0 1 3 1 0 1 3 1 4	£ 1 669,180 928,400 834,760 3,228,060 787,560 584,430 1,906,230 727,460 1,213 020 755,340 376,668 1,050,120	46,420 41,738 161,403 40,614 39,378 41,745 95,316 36,373 60,651 39,000 37,767 31,389	£ 8,632 5,157 2,825 11,545 3,867 4,020 9,650 4,070 4,368 2,345 3,323 7,574 4,707	£ 1,500 750 304 1,300 1,300 885 576 385 1,440 575 575 526 426 426 650

# Shires—continued.

Name.	Estimated	Number	Amount of General	Estimated Rateable		Total	Annual Endow- ment pay-
	Popula- tion,	Rate- payers.	Rate levied in the £1.	Total.	Annual.	Revenue 1913-14.	able by the Govern- ment under Act No. 2562.
Bellarine	4,800	1,908	s. d. 1 3	£ 1,034,420	£ 51,721	£ 4,197	£ 485
Benalla Berwick	8.300	2,200	1 0	2,426,280	121,314	10,634	1,450
Bet Bet	7,350 3,750	2,455 870	$\begin{array}{ccc} 1 & 6 \\ 1 & 0 \end{array}$	1,619,660	80,983 95,075	7,997	1,000
Birchip	1,900	509	1 0	519,500 1,039,400 2,519,180	25,975 51,970	2,020 3,759	375 400
Borung	6,000 2,850	1,330 2,140	$\begin{array}{c c}1&0\\1&6\end{array}$	2,519,180 954,260	125,959	9,269	1,080
Bright	5,600	1,440	1 3	675,520	47,713 33,776	4,862 5,342	320 750
Broadford Broadmeadows	2,130 2,210	564 1,231	$\begin{array}{cccc} 1 & 0 \\ 1 & 3 \end{array}$	305,840	15,292	1,781	300
Bulla	2,646	395	1 3 1	735,680 617.060	36,784 30,853	2,664 3,528	365 350
Buln Buln Bungaree	4,800 4,900	1,389 1,022	1 3 1 9	617,060 1,065,180	30,853 53,259	5,547 4,293	1,250
Buninyong	5,650	1.740	1 3	648,340 1,151,480	32,417 57,574	4,293 4,662	800 550
Charlton Chiltern	3,350	825 762	1 0	1,053,420	52.671	4,469	550
Colac	2,600 14,500	3,190	1 0	223,180 5,244,840	22,318 262,242	2,552 24,920	230 1,200
Corio Cranbourne	3,100	894	1 6	1,220,520	262,242 61,026 56,890	7,200 5,266	500
Creswick	4,390 5,000	1,279 1,118	1 6	1,137,800 1,108,620	56,890 55,431	5,266 4,255	700
Dandenong Deakin	5,820	4,162	1 9	1,367,600	68,380	10,318	775 525
Dimboola	3,300 6,350	1,144 1,284	$\begin{array}{cccc} 1 & 0 \\ 1 & 0 \end{array}$	1,110,080 1,709,200	55,504	3,861	446
Donald	3,261	766	1 0	855,960 287,380	85,460 42,798 14,369	8,116 5,073	618 575
Doncaster Dundas	1,200 3,575	343 1,114	1 6 1 3	287,380 2,552,360	14,369   127,618	1,461 9,023	216
Dunmunkle	5,050 1,700	1,014	1 0	1,712,080	85,604	6,356	1,050 1,200
East Loddon Eltham	1,700 3,550	475 1,375	1 3 1 6	911,900	45,595	4,029	550
Epping	1,320	500	1 3	757,940 388,600	37,897 19,430	2,733 1,688	450 225
Euroa Ferntree Gully	5,500	1,354	1 6	1,125,620	19,430 56,281	6,886	750
Flinders	5,000 3,600	2,100 2,044	$\begin{bmatrix} 2 & 0 \\ 1 & 3 \end{bmatrix}$	861,120 806,380	43,056 40,319	5,638 3,918	900 260
Frankston and Hastings	9 600						
Gisborne	3,600 2,517	1,886 665	$\begin{array}{c c}1&6\\1&0\end{array}$	658,880 596,300	32,944 29,815	3,976 2,340	425 340
Glenelg	5,900	1,590	10	596,300 <b>2,427,980</b>	121,399	9,926	1,200
Gordon	2,700 4,000	468 870	1 3 1	165,570 1,030,660	16,557 51,533	2,085 4,410	250
Goulburn	3,000	560	1 0	674,100	33,705	3,208	740 350
Grenville Hampden	4,700 9,850	1,300 2,312	1 3 1	672,870 5,530,420	44,858 276,521	4,407 30 279	560
Healesville	1,950	803	2 0	324,520	16,226	3,503 27,932	750 450
Heidelberg Heytesbury	10,134 5,000	4,200 1,400	1 6	2,131,680 1,697,820	106,584 84,891	27,932	500
Howqua	1,400	312	1 6	81,200	4,060	8,564 945	1,160 200
Huntly Kara Kara	3,500 4,200	1,019 1,373	1 0	902,320	45,116	3,295	400
Karkarooc	5,500	1,070	1 0	1,180,080 2,318,320	59,004 115,916	5,798 10,183	676 950
Keiler Kerang	1,025 9,250	520 2.243	1 3 1 0	2,318,320 420,740	21,037	1,597	100
Kilmore	2,000	556		2,988,060 204,640	149,403 20,464	14,672 2,435	1,000 275
Korong Kowree	6,400	1,350	1 3	814.710	54,314	5,435	650
Kyneton	3,800 7,020	1,326 1,896	1 6 1 3 1 0 1 0 1 0	1,339,200 1,320,640	83,700 66,032	5,787 8,989	870 685
Lancefield	1,000	269	1 0	262 420 544,200	13,121 36,280	1,019	151
Lawloit Leigh	3,300 1,634	619 617	1 3 1 3	544,200 1,019.600	36,280 50,980	3,226 4,143	396 550
Lexton	1,900	602	1 0	804,620	40,231	2,842	550 400
Lillydale Lowan	6,550 4,100	2,466 1,300	1 9	1.332.720	66,636	7.828	800
Maffra	4,250	1,090	1 0	812,040 1,431,960	40,602 71,598 37,520	4,760 7,647	000 1,000
Maldon Mansfield	4,400 3,550	1,370 987	1 0	750,400		3,135	375
Marong	6,652	2,215	1 3	1,173,880 1,740,760	58,694 87,038	5,668 6,866	900 900
Melton Meredith	1,520 1,200	327 350	1 0	433,590	28,906	2,160	236
Merriang	1.050	295	1 0	425.840 360,000	21,292 18,000	1,943 1,757	190 176
Metcalfe	2,600	756	10	373,935	24,929	1,907	278

# Municipal Statistics.

# Shires—continued.

		DILL	1110 00	to ore to co.			<del></del> '
Name.	Estimated Popula-	Number of Rate-	Amount of General Rate	Estimated Rateable I		Total Revenue	Annual Endow- ment pay- able by the Govern-
•	tion.	payers.	levied in the £1.	Total.	Annual.	1913-14.	ment under Act No. 2562.
			8. d.	£	£	£	*
Mildura	6,350 2,000	1,975 561	$egin{array}{ccc} 1 & 9 \\ 1 & 0 \end{array}$	1,329,420 1,301,360	66,471 65,068	10.633 5,753	476 650
Mirboo	1,450	300	1 6	400,000	20,000	2,526	700
Moorabbin	15,202	6,200	2 0	3,026,960	151,348	29,036	600
Mornington Mortlake	1,820 3,175	575 700	$\begin{array}{ccc} 1 & 9 \\ 1 & 3 \end{array}$	389,340 2,209,900	19,467	3,121 9,023	230 700
Mortiake	3,175	869	1 3	919,300	110,495 45,965	5,099	900
Mount Alexander	1,835	504	1 0	919,300 122,100	9,768	1,085	126
Mount Franklin	2,700	792	1 3	159,990	15,999	1,749	204 400
Mount Rouse Mulgrave	2,470 2,744	700 860	1 0 2 0	1,564,580 511,040	78,229 25,552	5,694 3,709	450
McIvor	4.125	1.145	1 0	749,960	37,498	3,631	450
Narracan	5,600	1,418	16	1,218,580	60,929	6,690	1,400
Newham and Woodend	9 500	547	1 3	445,440	99 979	3,125	300
Newstead	2,500 2,000	559	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		17 117	1,590	210
North Ovens	2,600	805	1 0	342,340 657,180	32,859 122,383 80,720	2,412	296
Numurkah	1 6.890	1,720	1 0	2,447,660	122,383	9,873	1,200 950
Nunawading Omeo	8,954	3,325 1,534	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,614,400	42,724	$10,661 \\ 6,114$	1,700
Orbost	8,954 3,700 3,000	679	1 6	854,480 716,320	35,816	4,741	1,100
Oxley	4,610	1,064	1 0	1,086,400	54,320	4,068	750
Phillip Island and	9.00	0.000	1 6	1 100 100	58 450	A 991	1,100
Woolamai Poowong and Jeetho	3,867	2,282 1,591	1 6 1 3	1,129,180 1,823,960 1,724,660	56,459 91,198	6,881 10,754	2,000
Portland	5,300	1,811	1 0	1,724,660	91,198 86,233	8,342	1,000
Preston	7,050	2,824	2 0	1,073,400	53,670	8,166	650
Pyalong	1,150	350 1,350	1 0 1 3	335,280	10,704	1,492 7,715	229 450
Ripon	4,385 5,038	1,522	1 0 1 3 1 0 1 0 1 3	1,749,080 1,229,760	61,488	5,015	500
Rodney	6,718	1,611	ī ŏ	1,229,760 2,032,300 482,900	101,615	7,885	875
Romsey	2,000	478	1 3	482,900	24,145	2,426	274 1,000
Rosedale Rutheglen	4,000 4,800	1,096 1,069	1 0	1,440,000 780,920	72,000 39,046	5,511 3,723	450
Seymour	4,050	1.104	1 0	822,420	41,121	4.951	850
Shepparton	8.300	1 695	1 0	2,112,000	106,000	10,221 3,579	850
South Barwon South Gippsland	2,850	1,302	1 9 1 6	550,800	27,540	6.033	277 1,050
Springfield	4,125 700	1,029 188	1 6	983,180 269,400	13 470	1,621	189
Stawell	3,698	1,229	1 3	1,454,640	72,732	5,825	624
Strathfieldsaye	3,798	1,084	1 3 1 3 1 0	439,180	21,959	2,162	278 550
Swan Hill Talbot	6,800 1,100	2,500 392	$\begin{array}{c c} 1 & 0 \\ 1 & 0 \end{array}$	2,151,380	107,569	8,539 1,302	221
Tambo	3,000	1.002	1 0 1 6	382,120 617,205	19,106 33,000	5,154	895
Templestowe	950	421	1 3	307,380	15,369	1,397	177
Towong	7,420	1,605	1 0	1,903,620	95,181	9,360	1,800 893
Traralgon Tullaroop	3,250 3,007	856 823	1 3 1 0	901,120 392,130	45,056 26,142	6,065 2,141	337
Tungamah	5,568	1,562	1 0	392,130 1,768,700 437,900	88,435	6,584	900
Upper Yarra	3,485	851	1 6	437,900	21,895	3,302	450 450
Violet Town Walhalla	3,000 2,300	757 484	1 0 2 0	765.840 64,200		3,128 1,660	570
Walpeup	3,075	1,450	1 0	1.342.360	67.118	2,496	1
Wannon	2,700	734	1 0	1,972,020 1,655,760	98,601 82,788	7,052	862
Waranga	4,670	1,793	1 0	1,655,760	82,788 5 58,048	6,027 7,116	750 1,800
Warragul Warrnambool	4,000 8,700	1,072 1,951	1 0	1,094,985 3,888,740	194.437	17,497	1,380
Werribee	4.320	3,778	1 0	1,721,800	0 86,090	7,465	600
Whittlesea	1,950	500	1 3	583,200	29,160	2,006	235 733
Wimmera Winchelsea	4,250 4,250	1,021 1,352	1 0 1 3	1,636,060	81,803 72,548	5,931 6,632	850
Wincheisea Wodonga	2,100	633	1 0	1,450,960 497,020	24,851	2,637	288
Woorayl	4,457	1,220	1 9	1,328,800	66,440	9,865	2,000
Wycheproof	4,306	1,111	1 0	1.310.346	0 65.517	5,876	66 <b>5</b> 933
Yackandandah Yarrawonga	4,000 3,310	974 800	1 9 1 0 1 0 1 0 1 3	754.79	37.736	4,409 5,589	570
Yea	2,509	694	1 3	752,920 754,720 877,760	37,646 37,736 43,888	4,465	800
m-A-1	608,828	181,480	<del> </del>		38,517,938	854,483	96,539
10681	1 000,828	101,450	• • •	1101,400,52	910,011,898	. 002,400	

Ratings in The following is the number of cities, towns, and boroughs, municipalities, and the number of shires in which rates were struck in each of the last five years at the amounts set down in the first column:—

RATINGS IN MUNICIPALITIES, 1910-11 TO 1914-15.

	Numb	er of Citie	s, Towns,	and Bor	oughs.	1	Nun	ber of	Shires.	
Amount levied in the £1.	1910-11	1911–12.	1912-13.	1913-14.	1914–15.	1910-11.	1911-12.	1912-13.	1913-14.	1914–15.
s. d. 9 9 1 1 1 2 2 1 1 4 6 1 7 7 1 1 8 9 1 1 10 1 1 2 2 2 2 2 4 6	 8  11 11 .2 9 3  18		6 1 2 11  2 6  19 2		.6 .1 10 .2 3  .22 1	1 77  33 3 21  5	1 72  38 3 20  5 	68  38 2 26  7	60  39 8 81  8	67  39 2 25  7
2 4 2 6 1 0 1 5 1 8	2  1	1 2	8	 8 2 3	2 2	i	i	i 	i	
1 8 Total	60	61	61	61	61	146	146	147	147	147

These amounts refer to Melbourne City. The rating for the North Melbourne and Flemington and Kensington portions of Hopetoun Ward was different from that for the rest of the city.

These figures give an average rating of 1s. 10d. in the £1 in cities, towns, and boroughs, and of 1s. 3d. in shires. The rating in the urban districts is thus shown to be 7d. in the £1 more than in the rural districts. It will be observed that no municipality during the last five years imposed the minimum rate allowed by law, viz., 6d., but that several reached the maximum of 2s. 6d. in the £1.

Properties of properties at the different rateable values at three dates. It will be values, seen that there was very little alteration in the eight years and 1909-19. intervening between the first and last dates:—

PROPORTION OF PROPERTIES AT DIFFERENT RATEABLE VALUES, 1901-2, 1905-6, AND 1909-10.

			Number (	of Proper	rties in e	very 100	Rated.			
Rateable Values,	In Cities, Towns, and Boroughs.			]	In Shires.			In Victoria,		
	1901-2.	1905-6.	1909-10.	1901-2.	1905-6.	1909-10.	1901-2.	1905-6.	1909-10	
Under £25 £25 to £50 £50 " £75 £75 " £100 £100 " £200 £200 " £300	72·6 18·3 4·2 1·7 2·0	72·9 18·0 4·2 1·8 2·0	70·1 20·3 4·9 1·5 2·0 ·5	63·1 23·4 5·6 3·5 3·1	64·6 20·6 6·2 3·5 3·6	63·9 18·8 7·3 3·5 4·6 1·0	67·8 20·9 4·9 2·6 2·5	68·8 19·3 5·2 2·6 2·8	67·0 19·5 6·1 2·5 3·3	
£300 " £400 £400 " £500 £500 and upwards	·2 ·1 ·3	2 1 3	·2 ·1 ·4	·2 ·1 ·4	3 1 4	·3 ·2 ·4	·2 ·1 ·4	·2 ·1 ·4	3 1 4	

Municipal revenue and expenditure. The ordinary revenue and expenditure for each of the last three financial years was as follows:—

### REVENUE AND EXPENDITURE OF MUNICIPALITIES, 1912 TO 1914.

8	ources of Revenue.			1912	1913.	1914.
				£	£	£
Taxation —			f	1,103,210	1.199.874	1,251,649
Rates	. • • • • • • •	***		102.297	103,528	108.106
Licences	***	•••	• • • •	20,438	21,483	21,807
Dog Fees		•••	• •		160,949	144.374
Government E	indowment and Gr	ants	•••	161,513	59.172	63.260
Contributions	for Streets, Footpo	aths, &c		64,646	71,937	70,620
	Veighbridge Dues	•••		74.029		83.982
Sanitary Char	ges			74,058	80,194	76,803
Rents	***	444 1		81,725	78,016	
Other Sources	•			263,600	324,496	354,427
Tota	ai			1,945,516	2,099,649	2,175,028
	Heads of Expenditure.					
Salaries, &c.		•••		176,489	187,180	192,066
Sanitary Wor	k, Street Cleansin	g, &c.		198,006	203.757	206.271
Lighting				84,410	87,395	89.926
Contributions	to Fire Brigades		• • •	25,946	27,101	28,361
Public Works				335,717	339,158	315,480
Construction	and the first term of the firs	•••	• ••	736,457	753,083	814,459
Maintenan		•••	•••	66,735	56,600	70.465
Formation of	Private Streets, &	c.	•••	61,782	70,506	80.576
Redemption	of Loans	•• /	•••	217,933	224,479	239.737
Interest on L	oans	••.	•••	18,441	16,429	18.026
Charities	***	•••	•••	129,190	126,376	151,613
Other Expen	diture	•••	•••	129,190	120,370	
Tota	<b></b>	***		2,051,106	2,092,064	2,206,980

As compared with 1913, the revenue of 1914 increased by £75,379, as follows:—Rates increased by £51,775, sanitary charges by £3,788, dog fees by £324, licences by £4,578, contributions for streets, footpaths, &c., by £4,088, and "other sources" by £29,931. The revenue from market and weighbridge dues decreased by £1,317, Government endowment and grants by £16,575, and rents by £1,213. The expenditure was in excess of the amount for the previous year by £114,916. The following items showed increases:—Salaries, £4,886; sanitary work and street cleaning, £2,514; public works maintenance, £61,376; interest on loans, £15,258; lighting, £2,531; redemption of loans, £10,070; formation of private streets, £13,865; contributions to Fire Brigades, £1,260; charities, £1,597, and other expenditure £25,237. There was a decrease under the heading of public works construction of £23,678.

Fifty-seven per cent. of municipal revenue in 1914 was proportion of municipal revenue and derived from rates, 5 per cent. from licences of all kinds, 3 per cent. from market and weighbridge dues, 1 per cent. from dog fees, 7 per cent. from Government endowments and grants, 3 per cent. from contributions for streets, footpaths, &c., 4 per cent from sanitary charges, 4 per cent. from rents, and 16 per cent. from all "other sources."

Salaries. In 1914 the salaries of the municipal officers amounted to £192,066, or 9 per cent. of the entire revenue.

A sum of £18,026, or less than 1 per cent. of the revenue. was devoted to the local charities; the greater part of this disbursement was in aid of hospitals, benevolent asylums and associations, and orphan asylums.

The assets of the municipalities are shown under three heads—(1) Municipal Fund, (2) Loan Fund, (3) Property; and the liabilities under two heads—(1) Municipal Fund, (2) Loan Fund.

# MUNICIPAL ASSETS AND LIABILITIES, 1912 TO 1914.

Assets.	1912.	1913.	1914.
Municipal Fund—			
Uncollected Rates	£	£	£
Other Assets	111,405	108,686	120,260
Loan Funds—	. 522,911	582,451	652,530
Sinking Funds—			
Amount at Credit	896,185	924,952	D#0 900
Arrears Due	1 ==0	438	878,322
Unexpended Balances	007 000	167,952	1,327 351,923
Property—	20.,202	101,002	331,323
Halls, Buildings, Markets, &c.	3,365,638	3,534,691	3,799,038
Waterworks	100 005	184.842	180,485
Gasworks	06 070	96,963	103,435
Total Assets	5,404,807	5,600,975	6,087,260
Liabilities.	1912.	1913.	1914.
Municipal Fund—			
Due on Current Contracts	73,768	£	_ £
Arrears due to Sinking Funds	1.759	74,770 438	74,451
Overdue Interest	15,619		1,327
Bank Overdrafts	234,154	18,005	19,771
Other Liabilities	288,368	201,142	206,694
Loan Funds—	400,000	364,287	356,884
Loans Outstanding	5,011,950	5,259,138	5,617,056
Due on Loan Contracts	102,135	128,051	69,181
Total Liabilities	5,727,753	6.045.831	6,345,364

Municipal assets and liabilities compared. The total assets of municipalities in 1914 amounted to £6,087,260, and the total liabilities to £6,345,364. The aggregate of the current liabilities (Municipal Fund) was £659,127, against which there were assets amounting to

£772,730. The gross liability on account of loan expenditure for works completed and in progress was £5,686,237, which, after deducting sinking funds and unexpended balances, was reduced to £4,454,665. If credit were taken for the value of municipal properties in markets, halls, buildings, gasworks, waterworks, &c. (£4,082,958), the net burden on account of loan moneys would be £371,707.

The valuation of municipal properties is probably an underestimate as the particulars furnished under this heading were not

in every case complete.

An annual endowment to municipalities of £310,000 Endowment of was authorized by the Local Government Act 1874, and it ceased to be payable in 1879. A subsidy, however, in lieu of such endowment, amounting to £310,000, was voted by Parliament annually, and this vote was gradually increased until Under the Local £450,000 was reached in 1889-90 and 1890-91. Government Act 1891, £450,000 was provided as an annual endowment for the municipalities. This amount was reduced to £405,000 per annum from 1st January, 1893; to £310,000 from 1st July, 1893; to £100,000 from 1st July, 1894; and to £50,000 from 1st July, 1902. Under Act No. 2025 it was increased to £75,000 for the year 1906-7, and from the 1st July, 1907, it was increased under Act No. 2129 to £100,000. Payments were made on the basis of this amount to 30th June, 1915, under the authority of Act No. 2562, assented to on 30th December, 1914. The endowment is payable in equal moieties in March and September of each year, and no city or town is entitled to receive any part of it. The distribution amongst the boroughs and shires is based on the amount of general and extra rates received in the twelve months ended on the last day of September next preceding the financial year 1907-8, according to the following scale:-

ery borough or first-class shire	3s. in	the £1
second-class shire	5s.	,,
	6s.	,,
	8s.	,,
	10s.	,,
	third-class shire fourth-class shire fifth-class	second-class shire

# RATING ON UNIMPROVED VALUES BY MUNICIPALITIES.

An Act was passed by the State Parliament on 3rd February, 1914, to provide for optional rating by municipalities on the basis of the unimproved values of rateable property. This measure does not come into operation until proclaimed by the Governor in Council, which proclamation may be made when the values of land made by assessors in the various parts of the State under the Land Act 1910 are available for adoption.

Any municipality may adopt the method of rating set forth in the Act, but two months before doing so must publish in the Government Gazette and twice in some newspaper circulating in the district a notice of its intention to take such course. If one-tenth of the ratepayers in writing demand a poll the proposal must be submitted by the council to the ratepayers, and it shall not be deemed to be carried unless affirmed by a majority of the valid votes recorded, and unless the number of valid votes recorded forms at least one-third of the number of persons on the roll. Where a council of a municipality has not published a notice that it intends to adopt the Act one-tenth of the ratepayers may demand a poll. If a proposal is adopted or rescinded it cannot be again submitted to the ratepayers for three years. properties such as railways, tramways, waterworks, hydraulic works, electric light and power works, gas works, and any undertaking extending continuously beyond the boundaries of any municipal district which is subject to more than one separate valuation, although there is no actual separation of the different parts of the property, are not rateable on unimproved values.

#### WORKERS' DWELLINGS.

Workers' An Act to enable municipal councils to provide workers' dwellings was passed by the State Parliament in February, 1914.

The houses are to be leased to persons who are not owners of dwelling houses in Victoria or elsewhere and who are not in receipt of incomes of more than £200 a year. Sub-letting by tenants is not permitted. In fixing rents of dwelling houses account is to be taken of interest, depreciation, rates, repairs, and insurance. Before constructing new houses plans showing the classes of houses to be built are to be submitted for the approval of the Governor in Council. The amount that may be borrowed for the purposes of the Act by any one municipality is not to exceed £50,000. Power is given to increase the general rate to recoup advances from the municipal fund, but so far as practicable all advances are to be repaid out of the profits accruing from transactions under the Act. Once in every year a balance-sheet has to be prepared showing receipts and expenditure and assets and liabilities relating to all operations undertaken during the previous year.

## COUNTRY ROADS BOARD.

With the object of improving the main roads of the State an Act (No. 2415) was passed on 23rd December, 1912, which empowers the Governor in Council to appoint a board to consist of three members. The chairman is to be paid an annual salary not exceeding £800, and each of the other members a salary not exceeding £600.

The duties of the board are to ascertain by survey and investigation what roads are main roads; the nature and extent of the resources of Victoria in metals, minerals, and materials suitable for the purposes of road-making and maintenance, and the most effective and economical methods of dealing with the same, and of supplying and utilizing the material in any part of Victoria; the

most effective methods of road construction and maintenance; what deviations (if any) in existing roads or what new roads should be made so as to facilitate communication and improve the conditions of traffic; and to record, publish, and make available for general information the results of all such surveys and investigations. The duty of furnishing information that may be required is imposed on the municipal authorities.

The construction of permanent works and the maintenance of main roads are likewise to be carried out by the municipalities to the satisfaction of the board. The total cost of the works, in the first instance, is to be paid by the Treasury, but subsequently half the amount expended on permanent works and maintenance

is to be refunded by the municipalities affected.

For the purpose of making permanent works, power is given to the Governor in Council to issue stock or debentures to the amount of £400,000 a year for five years, and the principal and interest are a charge upon the Consolidated Revenue of the State. The money so raised is to be placed to the credit of an account to be called "the Country Roads Board Loan Account," which will be debited with all payments made by the Treasurer towards the cost of permanent works. A sinking fund of 1 per cent. per annum on half the amount borrowed is authorized to be paid out of the Consolidated Revenue until half the amount borrowed is redeemed. An annual payment to the Treasurer of 6 per cent. on the amount due by each municipality in respect of permanent works is provided for, and the cost of maintenance, allocated to each municipality, must be paid before the 1st July in each year. A special rate not to exceed 6d. in the £1 on the net annual value of rateable property to meet the cost of permanent works and maintenance may be levied in any ward or riding of a municipality as the council may direct. In the event of default of payment by a municipality the board may levy a rate to meet the amount owing. fees and fines paid under the Motor Car Act, all moneys standing to the credit of the Municipal Fees and Fines Trust Fund, all fees paid on the registration or renewal of the registration of traction engines, and all fees received by the Crown after the 30th June, 1912, under the Unused Roads and Water Frontages Act 1903, are to be credited to the Country Roads Board Fund.

Since the appointment of the Board in March, 1913, the members have inspected the principal highways throughout the State. Every Shire Council and Borough Council, with which the Board is likely to have dealings relating to the construction or maintenance of roads declared main roads under the Act, has been interviewed and the

provisions of the Act have been explained to it.

In a majority of municipalities permanent works are in progress, contracts amounting to £595,059 having been let, while many more important proposals of this nature are under consideration.

A system for the continuous maintenance of all main roads is also gradually being evolved, by which it is hoped that those that are now being constructed or reconstructed will be kept in good condition, while those that are in a fair state of efficiency will be kept up to that standard.

As soon as practicable after the termination of each year the board must present a report to the Minister setting forth its proceedings, the permanent works constructed, the mileage of the roads maintained, and an account of all moneys received and expended under the provisions of the Act.

The rates of fees on registration or renewal of registration of motor cars, motor cycles, and traction engines have been altered. The owners of motor cycles must pay an annual registration fee of 5s.; of traction engines, £3 3s.; and of motor cars, £1 1s. to £6 6s., according to the horse-power of the vehicles.

ordinary receipts and expenditure during 1913-14 of the fund established under sections 38 and 39 of the Country Roads Act:—

## COUNTRY ROADS BOARD FUND.

STATEMENT OF REVENUE AND EXPENDITURE FOR THE YEAR ENDED 30TH JUNE, 1914.

30th Ju	NE, 1914.
Revenue.	Expenditure.
$\pounds$ s. d. $\pounds$ s. d.	$\mathfrak{L}$ s. d.
Balance 30th June, 1913 43,669 1 6	Maintenance of Main Roads 9,490 0 10
Motor Car	Purchase of Plant 4,232 11 2
Act No.	Salaries 3,877 10 4
2237—	Wages 296 7 0
Regis-	Travelling Expenses 638 12 1
tration	Horse and Vehicle Hire 184 18 3
Fees 26,010 15 9	Printing and Stationery 508 13 5
Licence	Sundries 19 6 9
Fees 1,800 3 3	Petty Cash 31 0 0
Fines 1,142 18 6	Motor Car Equipment . 84 19 6
<b>—————————————————————————————————————</b>	Motor Car Expenses . 254 19 4
Unused Roads and Water	Postage 42 7 6
Frontages Act No.	Office Furniture 24 19 5
1894—	Surveying Instruments 418 9 6
Licence Fees 19,193 1 11	Plans 109 16 2
Country Roads Act No.	Advertising 30 6 3
2415—	Oil, Fuel, &c 32 1 0
Registration Fees—	Office Telephone 31 0 2
Traction Engines 1,127 14 0	Camp Equipment 157 11 6
Fine 1 0 0	Purchase of Motor Cycle 80 10 6
Sale of Plans 3 7 0	Balance 72,402 19 0
Repayment 0 17 9	
ta de la cita de la comp <del>resionada</del> (	
92,948 19 8	92,948 19 8

The expenditure out of loan money on the construction of permanent works for the year ended 30th June, 1914, is shown below:—

## COUNTRY ROADS BOARD LOAN ACCOUNT.

Receipts.				Expenditure.				
By proceeds of Government 3½ per cent. Stock	£ 26,550	s. 0	d. 0	To Permanent Works Balance	£ 24,439 2,110	$\begin{array}{c} s.\\17\\2\end{array}$	<i>d</i> . 8 4	
	26,550	0	0	er og forstalle er en skalende forstalle. Det er en skalende forstalle er en skalende forstalle er en skalende forstalle er en skalende forstalle er en	26,550	0	0	

#### LICENSING FUND.

The following is a statement of the receipts and expenditure of the Licensing Fund for the year ended 30th June, 1914:—

# LICENSING FUND.—RECEIPTS AND EXPENDITURE, 1913-1914.

	$\mathbf{R}$	ECEIPTS	3.			EXPENDITUE	tE.		
			£	8.	d.		£	8.	d.
Licences			90,952	0	0	Expenses of officers			
Fees			2,858	10	6	carrying out the			
$\mathbf{Fines}$	•••		2,505	17	0	Licensing Act	7,296	18	6
Sale of	confis	cated				Equivalent to munici-			
liquor			12	3	6	palities (see previous			
Club cert	ificates	and				table)	79,161	0	0
percent	age fee	s	1,367	15	3	Cost of taking poll of			
Permits			2,140	0	0	electors	163	9	0
Expenses	of ho	lding				Transferred to Police			
extende	ed a	nnual				Superannuation			
sitting	of cour	t	30	7	6	Fund under section			
Compe	nsat	ion				108 of Act No. 2068	22,290	3	4
assessm		•••	9,044	17	1				
		£	108,911	10	10		£108,911	10	10

In addition to the endowment of £100,000 the municipalities received from the Government in 1913-14 a sum of £79,161 out of the Licensing Fund, under Act No. 2068, Section 108, this being the equivalent for (1) fees for licences; (2) fees for the registration of brewers and spirit merchants; and (3) fines, penalties, and forfeitures incurred under *The Licensing Act* 1876. The particulars of this payment are as follows:—

## EQUIVALENT FOR LICENCE FEES, ETC., 1913-14.

THE CT I THE TOTAL	· HICHII	· · · ·	. ومسد	<b>LLC., LC.</b>	10	T T .
				£	8.	d.
Paid to Cities				33,199	0	0
,, Towns				5,333	0	0
,, Boroughs	•••	• • •		11,122	0	0
" Shires—				*.		
1st Class				288	0	0
2nd ,,				12,189	0	0
3rd ,,				10,301	0	0
· 4th ,,				825	.0	0
5th ,,				3,452	0	0
6th ,,				1,519	0	0
Total			N	£78,228	0	0
Deduct unpaid accounts of	f 1913-14	£884	0 0	.,0,0	•	ŭ
Add payments on account			0 0			•
r.y				933	0	Ó
Amount	£79,161	0	0			

#### MUNICIPAL LOANS.

In connexion with loans raised by municipalities, Section 375 of the Local Government Act 1903 provides that, when any municipality incurs a loan and the debentures are payable in different years, the Council shall obtain from the Auditor-General a certificate, in writing, that the amounts proposed to be provided in each year will be sufficient

to pay all principal moneys and interest as they fall due. The repayments of principal have to be so provided for, that each year of the currency of the lean shall bear its full share towards liquidation.

Councils may borrow for not more than 40 years upon the credit of the municipality for permanent works or undertakings or to liquidate

moneys owing on account of any previous loan.

The amount of money borrowed by any municipality is not to exceed ten times the average income of the municipality for the previous three years from general rates not exceeding 1s. 6d. in the £1. But in addition, loans having a currency of not more than 30 years may be raised upon the security of certain income and not upon the credit of the municipality by the issue of debentures or by mortgage. These loans are not to exceed five times the average amount of such income.

Municipal indebtedness of the municipalities at the end of their financial year was £5,617,056, due to the Government and the public respectively as follows:—

#### MUNICIPAL INDEBTEDNESS, 1914.

	Due to the Government.	Due to the Public.	
Cities, Towns, and Boroughs Shires	£ 107,076 67,212	£ 4,670,483 772,285	
	174,288	5,442,768	
Total	5,617,056		

Municipal loan receipts and receipts and expenditure:—

## MUNICIPAL LOAN RECEIPTS AND EXPENDITURE, 1914.

		Cities, Towns, and Boroughs.	Shires.	Total.
Receipts during the year Balance unexpended from previous year Expenditure during the year Balance unexpended at the end of 1914	• • • • • • • • • • • • • • • • • • • •	£ 487,196 144,485 270,470 299,528	£ 86,095 44,774 78,191 52,678	£ 573,291 189,259 348,661 352,206

of "Receipts during the year" £61,683 was expended in repayment of an overdraft carried forward from 1913.

Municipal loan expenditure of loan moneys during the year 1914 amounted to £348,661, of which £270,470 was spent by cities, towns, and boroughs, and £78,191 by shires.

# MUNICIPAL LOAN RECEIPTS AND EXPENDITURE: RETURN FOR FIVE YEARS.

Year.		 Receipts.			Expenditure.
1910		 <b>396.</b> 335		•	155,607
1911		 101,918			191,538
1912	***	 284.234	•••		311,956
1913		 276,544	•••		407,477
1914		573,291			348,661

Loans Traised by municipalities, 1914. The loan receipts for the year amounted to £573,291, of which £1,000 was obtained from the Government. The following are the particulars:—

### LOAN RECEIPTS BY MUNICIPALITIES, 1914.

Loans from the Public-				Amount.
Cities, Towns, and Bo	rough	1S		£
Bendigo				23,203
Brunswick				11,500
Caulfield				20,000
Collingwood				12,000
Footscray				12,000
Hawthorn				15,000
Kew			• •	20,500
Melbourne				300,147
Northcote				10,273
Prahran				32,573
South Melbourne				15,000
St. Kilda				9,000
Wonthaggi		a e Hare		5,000
., o.,				
Total		• •	• •	486,196
Shires-				
Borung	• •	••		1,600
Braybrook				1,000
Buninyong				1,500
Colac				1,000
Corio		1111		3,200
Dandenong	- 25 T	127		9,500
Ferntree Gully				945
Goulburn				600
Heidelberg				20,000
Keilor				1,000
Lilydale				4,600
Mansfield				1,500
Mildura			• • •	2,100
Numurkah				5,000
Nunawading				1,100
Preston	••			8,000
Rutherglen	•			1,150
Swan Hill	•••	•		3,000
Tungamah		•	• •	3,000
Upper Yarra	••	••	•	100
Walpeup	<b></b>		••	7,000
Waranga		•••	• •	3,700
Wycheproof	• •	••	• •	5,000
Yarrawonga	•••	•		500
101101101190				
Total				86,095
Loans from Government	rate. Late.			
. —		.~		- 44 E.
Cities, Towns, and Bo	rougn	18		
Dunolly	• • •		• •	1,000
Grand T	Cotal			573,291

Loan moneys to the credit of municipalities, 1914. At the end of the year 1913-14 the amount of loan money in hand was £352,206—£299,528 to the credit of cities, towns, and boroughs, and £52,678 to the credit of shires.

The following return shows the municipalities having such credits, and the amounts thereof:—

## LOANS UNEXPENDED IN MUNICIPALITIES, 1914.

CITIES, TOWNS, AND BOROT	ons—	Shires-		
	£			£
Ballarat	. 932	Beechworth .		162
Bendigo	. 21,569	Buninyong		574
Brighton	. 2,539	Colac	•	4,671
Brunswick	. 5,530	Corio		1,020
Camberwell	. 4,228	Dandenong .	• • • • • •	6,494
Caulfield	. 8,079	Ferntree Gully		170
Coburg	110	Healesville .		149
Collingwood	. 10,848	Heidelberg .		13,861
Dunolly	. 66	Huntly		1,026
Essendon	. 6,702	Keilor	• • •	27
Fitzroy	. 876	Leigh		265
Footscray	. 6,246	Lillydale .		3,002
Geelong West	. 2,046	Mansfield .	• • •	220
Hawthorn	. 8,856	Melton	• • •	209
Kew	19,406	Mildura .	•	2,222
Malvern	. 8,427	Minhamite .		35
Maryborough	. 365	Mulgrave .		74
Melbourne	. 133,022	Numurkah .	•	6,136
Newtown and Chilwell .	. 39	Nunawading	• •	1,506
Port Fairy	. 12	Phillip Island and	Woolamai	190
Portland	. 2,350	Preston		2,094
Port Melbourne	. 3,928	Rutherglen		985
Prahran	. 33,755	Shepparton		283
Queenscliff	. 130	South Barwon		154
South Melbourne	. 10,763	Tungamah .	• • • •	163
St. Kilda	7,065	Upper Yarra		560
Williamstown	477	Walpeup .		6,152
Wonthaggi	1,162	Wycheproof .		274
:				
Total Cities, &c.	. 299,528	Total Shires		52,678
		Grand Total		352,206

# RECEIPTS AND EXPENDITURE OF THE CITIES OF MELBOURNE, BALLARAT, AND BENDIGO.

Particulars of the receipts and expenditure for 1914 of the City of Melbourne and of the principal cities in the country—Ballarat and Bendigo—are given in the following statements:—

Of the total revenue of the City of Melbourne in 1914,

City of Melbourne about 32 per cent. was derived from rates, 35 per cent. revenue and expenditure under various of city property—chiefly markets, and shops—9 per cent. from market and weighbridge fees, 4 per cent. from

from market and weighbridge fees, 4 per cent. from licences, and 8 per cent. from other sources. For public works maintenance, such as roads and bridges, markets, abattoirs, &c., about 29 per cent. of the total expenditure was incurred; for interest on loans and expenses, 19 per cent.; for payments to sinking funds and repayment of loans, 6 per cent.; for electric supply—depreciation and renewals fund, &c.—23 per cent.; for lighting, 5 per cent.; for street cleansing, 8 per cent.; for salaries, allowances, and commissions, 5 per cent.; and for miscellaneous expenditure, 5 per cent.

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1914.

<u> </u>		1011.				- N
	Heads of I	Revenue.				Amount.
			·.'	7	- I	
Rates—					.	£
General	••			• •		122,653
Lighting						17,683
Licences—					- 1	
Publicans'—Equive	alent for-Fro	m Licensii	o Act	F 2		12,316
Abattoirs—Slaught	•		•	Fees		3,669
Drays, Hackney Ca	•		_			1,725
Other Licences	urrages, rrain	s, and mo	Mis	••		433
Other Licences	••	. ••	• •	• •	• •	
Fees under Dog Act		• •	• •			996
City Baths						4,177
Market and Weighbri	idge Fees					41,112
Lighting—Sale of Ele	etric Current	and Rent	of Meters	, &c.		155,497
Fines and Costs				• •		1,943
Rents—						
						10.470
Abattoirs	••	• •	• •	••	• • •	10,479
Markets and Shops		••	• •	• •	•••	36,366
Boat Sites and Sho	-	••	• •		••	790
Town Hall Premise	es and Rooms	• •				3,258

# CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1914—continued.

Hea	ds of Revent	1e.				Amount.
		<u> </u>				
						£
Interest on Fixed Deposits	& c.					7,082
Miscellaneous—	, 000.	••	••	••	••	1,002
Desiccators						6,904
Public Conveniences, Cle	anging Stre	eata ka		* · · · · · · · · · · · · · · · · · · ·	•	4,257
Tree Planting	wing but	0000, 000.	••	••	• • •	186
Fees under Building Act	••	••	•••	••		1,490
Sundries			••			6,123
	••	•	• • •		••	0,123
Total						439,139
	••	••	••	as .	•••	100,100
		12.	5 1 2		1	l de la company
	eads of Expe	enditure.				Amount.
				·		
3_1	dita. Ta				ا۔	
Balaries (including clerical	assistance,	expense	s of aud	it, collecti	on of	£
statistics, making val	uation, an		issions I	oaid in iic	ar or	0.000
salaries, &c.)	••	••	••	• •	•••	21,290
Allowance to Lord Mayor	····· 100	• •	••		• •	1,500
Closet Cleansing and Sanita	iry works		19. <b>* *</b> 19		•••	151
Street Cleansing, &c	••	••	• •	••		36,602
Lighting—Electric and Gas Fire Brigades Board—Cont		• •	• • •	••	• • •	20,899
Public Works—Maintenance	ribution	••	••	• •	• •	6,758
	<del>;0</del>				1.11	00 505
Roads and Bridges	• •	••	• •	• • •		66,587
Markets and Weighbridg	es	D-41.		•••	• • •	25,901
Public Buildings (including	ng Abatton	rs, Baths	s, &c.)	5. · · · · · · ·	•••	23,081
Parks and Planting Trees			• •	• • •	• •	9,155
Interest on Loan from the		15	• •	• •		240
", ", Loans from the Repayment of Public Loan	Public	• •	• •	• •		83,612
		••	• •	••	• • •	10,000
", ", Government	Loan	• •		• •	•••	210
linking Tunda I come from						14,293
Sinking Funds—Loans fron	a the Publi	G		••	••	
Electric Supply—Depreciat	ion and Re	newal F	unds, &c	···		100,424
Electric Supply—Depreciat Expenses of paying In <b>te</b> res	ion and Re t on Loans	newal F	unds, &c	 		489
Electric Supply—Depreciat Expenses of paying Interes Interest on Bank Overdraft	ion and Re t on Loans ts	enewal F	unds, &c			489 391
Electric Supply—Depreciat Expenses of paying Interes Interest on Bank Overdraft Contributions to Charitable	ion and Re t on Loans ts Institution	enewal F	unds, &c			489 391 1,315
Electric Supply—Depreciat Expenses of paying Interest interest on Bank Overdraft Contributions to Charitable ,, ,, Infectious	ion and Re t on Loans ts Institution	enewal F	unds, &c			489 391 1,315 1,363
Electric Supply—Depreciat Expenses of paying Interes interest on Bank Overdraft Contributions to Charitable ,,, Infections aw Costs	tion and Ret on Loans Institution Diseases H	enewal F	unds, &c			489 391 1,315 1,363 609
Electric Supply—Depreciat Expenses of paying Interes interest on Bank Overdraft Contributions to Charitable "Infectious Law Costs Printing, Advertising, and S	tion and Ret on Loans Institution Diseases H	enewal F	unds, &c			489 391 1,315 1,363 609
Electric Supply—Depreciat Expenses of paying Interes interest on Bank Overdraft Contributions to Charitable ,, Infectious Law Costs Printing, Advertising, and Miscellaneous—	tion and Ret on Loans Institution Diseases H	enewal F	unds, &c			489 391 1,315 1,363 609 1,786
Electric Supply—Depreciat Expenses of paying Interest interest on Bank Overdraft Contributions to Charitable ,, Infectious Law Costs, Infectious fixed laneous— Rat Destruction	tion and Ret on Loans Institution Diseases H	enewal F	unds, &c			489 391 1,315 1,363 609 1,786
Electric Supply—Depreciated Expenses of paying Interest on Bank Overdraft Contributions to Charitable "Infectious aw Costs". Infectious Advertising, Advertising, and Miscellaneous—  Rat Destruction  Gas Conferences	tion and Ret on Loans Institution Diseases H	enewal F	unds, &c			489 391 1,315 1,363 609 1,786 656 181
Electric Supply—Depreciat Expenses of paying Interest interest on Bank Overdraft Contributions to Charitable ,,, Infections aw Costs Printing, Advertising, and Stiscellaneous— Eat Destruction Gas Conferences Fees—Dog Act	ion and Ret t on Loans ts Institution Diseases H Stationery	newal F	unds, &c			489 391 1,315 1,363 609 1,786 656 181
Electric Supply—Depreciat Expenses of paying Interest interest on Bank Overdraft Contributions to Charitable ,, Infectious Law Costs Printing, Advertising, and Stiscellaneous— Rat Destruction Gas Conferences Fees—Dog Act Insurance and Guarantee	ion and Ret t on Loans ts Institution Diseases H Stationery	ns Iospital	unds, &c			489 391 1,315 1,363 609 1,786 656 181 511
Electric Supply—Depreciat Expenses of paying Interest interest on Bank Overdraft Contributions to Charitable ,, Infectious Law Costs ., Infectious Printing, Advertising, and Miscellaneous— Bat Destruction Gas Conferences Fees—Dog Act Lissurance and Guarantee Elections .	ion and Ret t on Loans ts Institution Diseases H Stationery	newal F	unds, &c			489 391 1,315 1,363 609 1,786 656 181 511 1,647 144
Law Costs Printing, Advertising, and S Miscellaneous—  Rat Destruction Gas Conferences Fees—Dog Act Insurance and Guarantee Elections Analyst's Salary	ion and Ret t on Loans ts Institution Diseases H Stationery	ns Iospital	unds, &c			489 391 1,315 1,363 609 1,786 656 181 511 1,647 144
Electric Supply—Depreciat Expenses of paying Interest interest on Bank Overdraft Contributions to Charitable ,, Infectious Law Costs ., Infectious Printing, Advertising, and Miscellaneous— Bat Destruction Gas Conferences Fees—Dog Act Lissurance and Guarantee Elections .	ion and Ret t on Loans ts Institution Diseases H Stationery	ns Iospital	unds, &c			489 391 1,315 1,363 609 1,786 656 181 511 1,647 144
Electric Supply—Depreciat Expenses of paying Interes interest on Bank Overdraft Contributions to Charitable  ", Infectious .aw Costs Printing, Advertising, and Miscellaneous—  Bat Destruction Gas Conferences Fees—Dog Act Insurance and Guarantee Elections . Analyst's Salary	ion and Ret t on Loans ts Institution Diseases H Stationery	ns Iospital	unds, &c			489 391 1,315 1,363 609 1,786 656 181 511 1,647 144

City of Ballarat revenue and expenditure, 1914. Of the total revenue received by the City of Ballarat in 1914, about 54 per cent. was obtained from rates, 8 per cent. from licences, 13 per cent. from sanitary rates, 8 per cent. from market and weighbridge dues, 5 per cent. from rents, and 12 per cent. from all other sources. The expendinguired in connexion with the following services:—42 per

ture was incurred in connexion with the following services:—42 per cent. for public works, 13 per cent. for interest, sinking funds, and repayment of loans, 12 per cent. for sanitary work, 7 per cent. for lighting, 6 per cent. for salaries and allowances, 7 per cent. for street cleaning, &c., and 13 per cent. for all other items.

# CITY OF BALLARAT: REVENUE AND EXPENDITURE FOR THE YEAR ENDED 30TH SEPTEMBER, 1914.

Revenue.	Amount.	Expenditure.	Amount.
	£		£
Special Grants-From Go-		Salaries	1,644
vernment	1,143	Allowance to Mayor	400
General Rates	19,207	Sanitary Expenses	4,707
Licences-From Licensing		Street Cleaning, &c	2,470
Fund	2,684	Lighting	2,481
,, Other	191	Fire Brigades Board-	
Market and Weighbridge		Contribution	897
Dues	2,747	Construc-	
Contributions for Forma-	-,	tion	2,470
tion of Private Streets,		Public Works Mainten-	
Roads, Lanes, &c	264	ance	13,155
Dog Fees	262	Repayments of Loans-	
Pound Fees	102	To the Public	1,342
Closet Cleansing and	102	Corrormment	407
Sanitary Rates and Fees	4,719	Payment to Sinking Funds—	6
Rents	1,546	Loans from the Public	<b>2</b> 50
T .	127	Interest—Government Loan	139
Botanic Gardens	295	Loons from the	
0.1 0	2,120	D. hlia	2,556
Other Sources	2,120	Bank Overdraft	180
		Contributions to Charitable	. 100
		T (1) 11	357
		Printing, Advertising, and	001
		Ctationers	334
		Stationery	500
		Agricultural College	2,639
		Other Expenditure	2,000
Total	£35,407	Total	£36,928

In the City of Bendigo in 1914, the following were the proportions of total revenue obtained under the different headings:—General rates, 52 per cent.; licences, 13 per cent.; sanitary rates and fees, 16 per cent.; market and weighbridge dues, 8 per cent.; rents, 7 per cent.; and other sources, 4 per cent. The proportions of the total expenditure on various services were:—Public works, construction and maintenance, 38 per cent.; sanitary expenses, 16 per cent.; interest on loans and payments to sinking funds, 11 per cent.; salaries and

allowances, 7 per cent.; lighting, 9 per cent.; street cleansing, 8 per cent.; and miscellaneous expenditure, 11 per cent.

# CITY OF BENDIGO: REVENUE AND EXPENDITURE FOR THE YEAR ENDED 30th SEPTEMBER, 1914.

·			
Revenue.	Amount.	Expenditure.	Amount.
Special Grants—From Govern		Salaries	•••
			. 2,162
Concret Dates	114	Allowance to Mayor .	. 400
			6,128
Licences—From Licensing			. 3,175
Fund	-,	Lighting	. 3,316
,, Other	2,008	Fire Brigades Board—Contri	i-
Market and Weighbridge Dues	3,197	bution	. 560
Dog Fees	000	Construc-	
Closet Cleansing and Sani		tion	. 1,105
tary Rates and Fees	0 4 7 0	Public Works   Mainten.	. 1,100
Rents	0 = 01	1	19 909
Interest	999		
Sporta Grounda	910	Payment to Sinking Funds-	
Other Sources		Loans from the Public	1,900
Other Sources	649	Interest on Loans from th	
		Public	
		Interest on Bank Overdraft.	. 383
		Contributions to Charitabl	е
		Institutions	. 487
		Street Trees	400
		Grant for High School .	100
		Printing, Advertising, and	
7 - 4		Ctationor	
		Other Expenditure	. 2,106
Total	40,518	Total	. 37,696

# MUNICIPAL OFFICERS' FIDELITY GUARANTEE FUND.

An Act was passed in 1907 (No. 2080) incorporating Municipal the Municipal Association of Victoria, and authorizing it to institute a "Municipal Officers' Fidelity Guarantee Fund," to which any municipality, any authority constituted under any Water Act or any Weights and Measures Union may contribute such sum as may be fixed by the association for a guarantee against loss by the dishonesty of its officers. The Act provided, however, that the fund could not be established until three-fifths of the municipalities in Victoria had agreed in writing to contribute and that the amount to be contributed for a guarantee must not be less than that payable in 1907 for a like guarantee to any incorporated company or society in Victoria. At any time after the fund has reached £3,500 the rates of contribution may be altered, so that it will be maintained at that sum, and in the event of the amount at credit being at any time insufficient to pay all the liabilities and expenses, the difference must be made up by payments from all the contributors, each paying pro rata to its contributions. If the association determines to discontinue business, the funds are to be divided proportionately to the sums contributed during the preceding five years.

Payment of contributions is to be made within one month after a written notification has been sent by the secretary. Full and accurate accounts are to be kept of all moneys received and expended, and of the details of the transactions. A balance-sheet, made up to the 30th September of each year, must be prepared, exhibiting a true statement of receipts and expenditure and the balance to the credit of the fund.

More than the required number of municipalities agreed to cooperate, and the fund was inaugurated on 1st January, 1908. Guarantee policies have been applied for and granted to the whole of the municipalities in the State. The operation of the fund was, at first, restricted by the association to guarantees in respect of municipal officers, but the rules have been altered, and since 1st October, 1914, they have permitted of guarantees being obtained by any waterworks authority or Weights and Measures Union, such authority or union is required, however, to make a preliminary payment into capital account. The premium revenue for the year ending 30th September, 1915, in respect of guarantees amounting to £198,320, was £1,115, but under the reduced scale of premiums which came into force on 1st October, 1914, municipalities will obtain like guarantees for about £635 per annum, and similarly reduced rates will be charged in the case of waterworks authorities and Weights and Measures Unions. The amount to the credit of the fund on 30th September, 1914 (including amount invested in purchase of debentures and accrued interest, £5,041), was The claims paid from the inception of the fund to 30th September, 1914, amounted to £1.027 12s. 6d.

#### MELBOURNE HARBOR TRUST.

The Melbourne Harbor Trust is a corporate body, Harbor Trust

-receipts and Port of Melbourne and portions of the Yarra and Saltwater

Rivers of the Port of Melbourne and portions of the Yarra and Saltwater Rivers adjacent, for which purpose certain lands and properties are vested in Commissioners. On 31st December, 1912, an Act was passed by the State Parliament which altered the constitution of the Trust. Instead of seventeen Commissioners, of whom six were appointed by the municipalities concerned, three by the owners of ships registered at Melbourne, three by merchants and traders paying wharfage rates, and five by the Governor-in-Council, there are substituted five Commissioners to be appointed by the Governor-in-Council. Other than the chairman, one member is to be an owner of ships registered at some British port and trading at Melbourne, one a person engaged in the business of an exporter by sea of Victorian produce, one an importer by sea of goods into Victoria, and one identified with primary production in Victoria. The chairman's salary is not to exceed £1,500; and the attendance fees of the other Commissioners are fixed at £2 2s. per meeting, the remuneration not to exceed £250 in any year. The borrowing power of the Trust is increased from £2,000,000 to £3,000,000. The payment to the Consolidated Revenue is not to be greater than £60,000 per annum for five years from 1st January, 1913. The following are particulars of the ordinary receipts and ordinary and capital expenditure during each of the last five years:—

MELBOURNE HARBOR TRUST.—RECEIPTS AND EXPENDITURE: 1910 TO 1914.

Heads of Revenue and Expenditure.	1910.	1911.	1912.	1913.	1914.
		<del>,</del>	REVENUE.		
Wharfage and Quayage	£	£	£	£	£
Rates	297,081	312,616	314,447	312,151	315,721
Rents	17,004	17,336	19,001	20,424	22,833
Interest	410	2,039	2,375	665	2,284
Other Revenue	1,505	2,210	3,792	4,299	11,194
	316,000	334,201	339,615	337,539	352,032
Less Amount paid to Consolidated Revenue	62,603	65,413	68,344	60,960	60,000
Total	253,397	268,788	271,271	276,579	292,032
		200,100		<b>2</b> .0,0.0	
		REVEN	JE EXPENI	OITURE.	
General Management and				•	
Expenses	19,352	20,841	27,453	28,622	34,180
Maintenance—Dredging	13,750	13,267	32,559	32,014	24,758
,, Harbor	1,410	2,266	1,159	2,107	1,698
Wharfs	11,558	12,489	17,350	20,583	13,370
" Approaches	8,847	9,430	11,666	9,207	10,83
nterest on Loans	69 <b>,409</b>	69,366	69,264	59,494	69,981
Depreciation, Renewals Ac- count, and Sinking Fund	32,000	35,000	17,500	29,188	30,114
Total	156,326	162,659	176,951	181,215	184,936
Surplus on Revenue Account	<u>-</u>	106,129	94,320	95,364	107,096
341P1445 OH 140 VOHAO 21000UH)		100,120	01,020	00,001	101,000
		CAPITA	L EXPEND	ITURE.	
		<u> </u>			
and and Property	54		1,119	46,007	5,534
Deepening Waterways	23,559	31,531	21,845	49,620	96,198
Wharfs Construction	9,842	14,202	85,227	115,244	87,88
Approaches Construction	311	454	9,854	16,354	7,029
Other Harbor Improve-		-			
ments	6,254	787	2,735	2,713	1,376
Floating Plant	490	16,721	72,078	9,744	33,451
General Plant	369	5,214	102	2,910	3,364
Stock Account	3,518	9,096	14,543	44,572	32,070
Total	44,397	78,005	207,503	287,164	266,907

#### GEELONG HARBOR TRUST.

An Act to provide for the construction of works in connexion with the harbor at Geelong was passed on 12th December, 1905. This measure made provision for the constitution of the Geelong Harbor Trust and the appointment of three commissioners, the chairman to receive £400 per annum, and each of the other commissioners £200 per annum. The management of the port and shipping is vested in the commissioners. Power is given to the Trust to borrow £500,000 and to issue debentures, which may be made payable in London or Melbourne. The following is a summary of the receipts and expenditure for the last two years, the expenditure from ordinary revenue being distinguished from loan expenditure:—

## GEELONG HARBOR TRUST—REVENUE AND EXPENDITURE.

	1913.	1914.
	£	£
REVENUE.		1 144
Wharfage and Quayage Rates	15,182	13,495
Rents, Fees, and Licences	3,423	3,750
Sparrovale Farm	5,459	7,281
Corio Freezing Works and Abattoirs	. 5,592	12,404
Other Revenue	1,146	1,064
	30.802	37,994
T 1 (1) (1) (1) (1) (1) (1) (1) (1)	619	• 01,001
Less Amount paid to Consolidated Revenue	019	
Total	30,183	37,994
70		
REVENUE EXPENDITURE.	5,665	6.610
General Management and Expenses		2.10
Maintenance—Wharfs and Approaches	1,663	
,, Harbor	685	831
" Floating Plant	161	326
,, Other	480	676
Interest on Loans and Sinking Fund	17,091	19,167
Sparrovale Farm	4,927	6,22
Corio Freezing Works and Abattoirs	3,789	1,934
Corio Quay Power-house		2,548
Miscellaneous		894
Total	34,461	41,308
Total	02,202	
CAPITAL EXPENDITURE.		70.01
Land and Property	13,919	19,61
Deepening Waterworks	10,619	11,970
Wharfs and Approaches Construction	11,026	7,30
Other Harbor Improvements	6,440	9,48
Floating and General Plant	1,702	2,13
Stock Account	567	45
Miscellaneous	2,219	69
Total	46,492	51,65

# THE MELBOURNE AND METROPOLITAN BOARD OF WORKS.

The Board was established by Act of Parliament No. 1197, which came into force on 20th December, 1890, and it entered upon its duties on 18th March, 1891.

It consists of 40 members, of whom one is the Chairman, who is elected every four years by the other members, the retiring Chairman being eligible for re-election. The other members must be also members of the respective councils which they represent, and are elected as follows:—Nine by the Melbourne City Council, four by the South Melbourne Council, three by the Prahran Council, two each by the Fitzroy, Richmond, St. Kilda, and Collingwood Councils, and one each by the other fifteen suburban municipal councils returning a representative, viz., Footscray, Hawthorn, Brunswick, Essendon, Malvern, Brighton, Northcote, Port Melbourne, Williamstown, Caulfield, Camberwell, Kew, Coburg, Heidelberg, and Preston.

Thirteen of the members retire annually in the month of February, but are eligible for re-election if they remain members of their respective councils.

The functions of the Board are to control and manage the Board. the Metropolitan water supply system, including watersheds, reservoirs, weirs, aqueducts, pipes, &c.; to provide the metropolis with an efficient system of sewerage and drainage; and to prevent the pollution of the River Yarra and other public streams and water-courses within the metropolis.

The District over which the Board exercises control consists of fifteen cities, five towns, two shires, and parts of three other municipalities, or twenty-five municipalities in all, embracing a total area of 109,009 acres, and containing an estimated population (including that supplied with water outside the Board's sewerage area), on 31st December, 1914, of 662,500.

The Board is authorized to borrow £9,750,000, exclusive of loans amounting to £2,389,934 contracted by the

The liability for Government loans on 30th June, 1914, was £1,559,786, and for loans raised by the Board, £10,175,160, a portion of which has been applied in repayment of Government loans falling due. The Board was at that date empowered to borrow £404,988 before reaching the limit of its borrowing powers.

Government and taken over by the Board.

#### WATER SUPPLY FINANCE.

By Act of Parliament the rate to be paid in respect of any lands and tenements for the supply of water for domestic purposes, otherwise than by measure, is limited to an amount not exceeding 8d. in the £1 on the annual valuation of the lands and tenements served. The water rate levied in the year 1913-14 was 7d. in the £1 on the annual value of property served. Assessments of £17 and under are charged a minimum rate of 10s. per annum. There is a charge of 1s. per 1,000 gallons for water supplied

by meter, with the assessed rate as a minimum. For shipping at Melbourne wharfs the charge is 3s. per 1,000 gallons, and at special berths at Melbourne wharfs, with fixed meters, it is 1s. 6d. per 1,000 gallons.

Water meters may be hired from the Board at the following annual rentals, payable quarterly in advance:— For a  $\frac{1}{2}$ -in. meter, 5s.;  $\frac{3}{2}$ -in., 6s.; 1-in., 8s.;  $1\frac{1}{4}$ -in., 10s. 6d.; and  $1\frac{1}{2}$ -in., 14s.

Areas not exceeding 100 square yards (including paths) are supplied with water without meters on payment of a special rate of 10s. per annum each.

Assessed water supply purposes and liable to water rates was £6,217,841 in 1913-14.

Water rate receipts were as follows:—

				£	8.	d.
Water rate (in	cluding	arrears)		157,153		
Meters	,,	,,	••	139,962		
Special rates	<b>,</b>	"	••,	4,140	3	Ð
Total	• •	. • • ' ﴿	••	301,256	0	6

The total revenue amounted to £332,930, as against £287,342 in the previous year. The cost in 1913-14 of maintenance and management was £56,873, and of interest £128,292, the total charges being £185,165, compared with a cost in 1912-13 of £52,151 for maintenance and management, and of £114,440 for interest, or a total charge of £166,591. The net profit in 1913-14 was thus £147,765, being equivalent to 3.2 per cent. of the mean capital cost, as compared with £120,751, or 2.7 per cent. in 1912-13.

Cost of the Meibourne and Metropolitan waterworks system. Up to 30th Metropolitan waterworks system.

Original water supply works, tank pumping station, &с. £84.885 631,269 Yan Yean system 778,944 Maroondah system 399,296 O'Shanassy system . . 230.314 Service reservoirs 1,091,390 Large mains Reticulation 1,398,114 .. £4,614,212\* Total

<sup>\* £516</sup> written off for Depreciation.

#### SEWERAGE FINANCE.

In 1891 the annual value of rateable property within the area then to be sewered was £6,866,313, of which about £1,000,000 related to vacant lands. The collapse of the land boom was followed by a heavy shrinkage in the value of rateable property. A recovery in values has since taken place, and the total of the sewerage assessments for 1914–15 is £6,833,120 inclusive of assessments on vacant lands.

By Act of Parliament the Board is empowered to levy a general sewerage rate not exceeding 1s. 2d. in the £1 in sewered areas. The present general sewerage rate is 1s. 1d. in the £1 in the sewered area. The total annual value of property assessed for sewerage purposes and liable to the 1s. 1d. rate was, in 1913-14, £5,680,481.

The receipts from the general sewerage rate in 1913-14 amounted

to £311,178.

The sewerage revenue for 1913-14 amounted to £338,459, as against £303,376 in the previous year. The cost in 1913-14 of management, working expenses, repairs, and renewals, was £67,580, and of interest £314,126, the total charges being £381,706, compared with a cost in 1912-13 of £67,874 for management, working expenses, repairs, and renewals, and £298,964 for interest, or a total charge of £366,838.

The deficiency in 1913-14 was £43,247, as against £63,462 for the

previous year.

Cost of the The cost of sewerage works and house connexions up Methopolitan to 30th June, 1914, was £6,983,757, divided as follows:—sewerage system.

Farm purchase and	d prepara	ition			£501,260
Outfall sewer and	rising m	ains		• •	423,024
Pumping station b	uildings	and eng	ines		207,748
Main and branch	sewers		• •		2,027,067
Street reticulation					2,038,343
Reticulation of rig	hts-of-wa	у			915,917
House connexions			• •		363,599
Cost of house conn	exions ch	argeable	to capita	ıl	384,556
Cost of sewerage s	ystem	• •		£	6,861,514*
Householders' debt	s for ho	use conr	exions	•	118,563
River improvemen	ts	• •	••	••	3,680
Total	• •	• •	••	£0	6,983,757

#### DESCRIPTION OF WATER WORKS.

The Metbourne pendent sources—one known as the Yan Yean system, Metropolitan waterworks. fed by the watershed of the Plenty River and Jack's Creek from the southern slopes of the Great Dividing Range, supplemented by the Wallaby and Silver Creeks, tributaries of the Goulburn, whose waters have been diverted over the range by

means of weirs, aqueducts, and tunnels; a second, known as the Maroondah system, whose watershed is in the Healesville district, and which takes in the water of the Maroondah or Watts River, the Graceburn, Donnelly's and Coranderrk Creeks, and other smaller streams; and a third, known as the O'Shanassy and Upper Yarra system, whose watersheds are in the Upper Yarra above Warburton. As regards the last-mentioned system, at present only the O'Shanassy River, a main tributary of the Upper Yarra, has been tapped.

Total catchment area from which water is collected at present from the three systems is 102,000 acres, the whole of which is vested in the Board, and free from settlement or grazing.

#### YAN YEAN SYSTEM.

The Yan Yean watershed embraces Silver and Wallaby Creeks, 12,000 acres; Plenty River and Jack's Creek, Yan Yean system. 12,000 acres; and the catchment areas of Yan Yean Reservoir, 5,000 acres, totalling 29,000 acres. The water is collected into the Toorourrong Reservoir, and taken thence to the Yan Yean Reservoir, where it is stored. This reservoir is an artificial lake situated 22 miles northerly from the city, and 602 feet above sea-level. formed by the construction of an earthen bank 49 chains long, 30 feet high, and 20 feet wide on top, with a slope next the water of three to one and an outside slope of two to one. The reservoir when full covers an area of 1,360 acres, or  $2\frac{1}{8}$  square miles, with a maximum depth of 26 feet, and an average depth of 18 feet. The maximum depth of water in the reservoir in 1914 was 22 ft. 43 in. on the 1st January, and the minimum depth 12 ft. 7½ in. on the 12th May. Its total capacity is 6,400,000,000 gallons, of which 5,400,000,000 gallons are available for consumption. In the year ended 31st December, 1914, the total intake of the Yan Yean Reservoir was 3,474,036,000 gallons, and the total output was 4,566,194,000 gallons exclusive of loss by evaporation. The mean evaporation from the surface is about 3 feet during the year. The intake for the twelve months ended 31st December, 1914, was the lowest on record.

From this reservoir the water is forwarded to Morang Pipe Head Reservoir through an open aqueduct capable of delivering 33,000,000 gallons a day when full, and thence to Preston Reservoir, or to Mel-

bourne direct, by a series of pipes.

There is also a direct main, called the high-level system, from Yan Yean to Surrey Hills Reservoir, for supplying the high levels of the eastern suburbs of Melbourne in conjunction with the O'Shanassy and Upper Yarra System. It is capable of delivering 9,000,000 gallons a day.

#### MAROONDAH SYSTEM.

The Maroondah water is taken by means of small weirs from the watershed of 40,000 acres situated above Healesville, and it is thence conveyed to the Preston Service Reservoirs along an aqueduct (about 411 miles of open channels, tunnels, and syphons), which is capable of delivering 28,000,000 gallons daily.

#### O'SHANASSY AND UPPER YARRA SYSTEM.

O'Shanassy and Upper Yarra watershed. The watershed of the O'Shanassy River comprises 33,000 acres, situated near Warburton. The water is diverted by means of a weir and conveyed to Surrey Hills by way of Mitcham in an aqueduct, and in tunnels, syphons,

by way of Mitcham in an aqueduct, and in tunnels, syphons, and pipe line of an aggregate length of 48 miles  $24\frac{1}{2}$  chains. The complete length will be 49 miles  $53\frac{3}{4}$  chains. The aqueduct is capable of delivering 20,000,000 gallons daily, but it has been completed in the tunnels and some other parts to a capacity of 60,000,000 gallons to provide for further diversions from the Upper Yarra and its tributaries.

Storage and service reservoirs.

There are two storage and thirteen service reservoirs (also four other service reservoirs proposed) as under:—

#### STORAGE RESERVOIRS.

Description.	Capacity.	Reduced Level at By-wash.
Yan Yean	Gallons. 6,400,000,000* 60,000,000	602 feet above L.W.M.
Total (storage)	6, 69,000,000	

<sup>\*</sup> Of this quantity 5,400,000,000 gallons are available for consumption.

#### SERVICE RESERVOIRS

Description.		Capacity.	Reduced Level at By-wash.
		Gallons.	
Preston No. 1		13,500,000	326 50 feet
" No. 2	••	24,500,000	326.50 ,,
" No. 3		26,300,000	326.50 ,,
Essendon No. 1		1,000,000	209 · 25 ,,
" No. 2		4,000,000	209 25 ,,
Caulfield		10.000,000	166.00 ,,
Kew	• • • • • • •	3,000,000	281 · 50 ,,
Surrey Hills No. 1		9,000,000	429.50 ,,
" No. 2		15,000,000	429.50 ,,
Morang (Pipe Head)		3,000,000	485.00 ,,
		1,000,000	325.00 ,,
Notting Hill		10,000,000	332.50 ,,
Olinda	• ••	11,000,000	671 · 00 ,,
Total (service)	•	131,300,000	
North Essendon (proposed for 10,000,000 gallons)	d provision	erita in in	290.00 ,, (approx.)
Mitcham (proposed pro three reservoirs with	vision for		515.00 ,, ,,
of from 20 to 25 milli each)	on gallons		
,			

Aqueducts, &c., The following is the mileage return of aqueducts, &c., mains, and reticulation pipes up to the 30th June, 1914:-Miles Chs. YAN YEAN SYSTEM-Aqueducts, &c., between watersheds and Yan Yean 23 62 Reservoir × . Aqueduct-Yan Yean Reservoir to Morang 331 6 30 154 Total MAROONDAH SYSTEM 41 28 Main Maroondah Aqueduct ... . . 6 8 Tributary Aqueducts ٠. 2 521 Scours at Preston Reservoirs 50 81 Total O'SHANASSY SYSTEM-O'Shanassy Weir to Olinda Pipe Head Reservoir (incom-54 Olinda Pipe Head Reservoir to Surrey Hills Reservoir 25 11 (36-in. steel main) . . 0 49 Scour at Surrey Hills Reservoir 241 \*48 Total. 128 484 Grand Total, Aqueducts, &c. †220 603 Large Mains, 54-in to 12-in. diameter (inclusive) 1,209  $72\frac{1}{2}$ Retaculation under 12-in. diameter Grand Total, Aqueducts, Mains, &c., Mains and Reticulation 1,559

The average number of people supplied with water during 1914 was 651,000, and the average daily consumption was 62 64 gallons per head. Some districts are supplied outside the Board's sewerage area. The total consumption and average consumption per day are shown hereunder for each month during 1914:—

TOTAL AND DAILY AVERAGE CONSUMPTION OF WATER IN MELBOURNE AND SUBURBS DURING EACH MONTH OF THE YEAR, 1914.

<b>Month.</b>	Total Consumption of Water.	Daily Average Consumption of Water.
	Gallons.	Gallens.
January	1,709,221,000	55,136,161
February	1,700,213,000	60,721,893
March	1,664,040,000	53,678,710
April	1,116,521,000	37,217,367
May	1,112,114,000	35,874,645
June	999,467,000	33,315,567
July	934,091,000	30,131,968
August	996,365,000	32,140,806
September	1,011.747,000	33,724,900
October	1,283,258,000	41,395,419
November	1,187,355,000	39,578,500
December	1,169,886,000	37,738,2 <b>5</b> 8
Total for the year Daily average for the	14,884,278,000	
year year	diga 🚜 🚧 🚧	40,778,844

Length unfinished, 65 chains. † Exclusive of O'Shanassy Main Pipe line.
 5309.—R.

The following table shows for each year since the establishment of the Board in 1891 the daily average consumption of water, and the daily average per head:—

DAILY AVERAGE QUANTITY OF WATER CONSUMED IN MELBOURNE AND SUBURBS, 1891 TO 1914.

Year.	Population supplied with Water to 30th June.	Houses supplied with Water to 30th June.	Tenements Con- nected with Sewerage System to 30th June.	Daily Average of Annual Consumption of Water to 31st December.	No. of Gallons of Water per Head Daily.
1891	482,600	00 904		Gallons.	
1892	486,620	99,364	•••	25,747,761	53 35
1893	469,390	106,772	•••	23,476,780	48.24
1894	449,560	107,125	•••	24,290,041	51 . 75
1895	444,340	107,764	•••	27,071,106	60.22
1000	452,210	107,260	•••	26,689,683	60.07
		106,486	•••	23,837,695	52.71
1897	458,300	105,710	•••	24,665,607	53.82
1898	466,895	104,861	3,899	28,253,294	60 · 51
1899	480,390	103,981	1 <b>3,59</b> 3	27,068,465	56 · 37
1900	489,600	104,050	28,300	28,230,690	57·66
1901	494,905	104,548	38,696	29,427,589	59 46
1902	501,580	105,051	47,172	29,080,027	57.98
1903	502,840	106,176	55,929	28,858,633	57 · 39
1904	505,760	107,701	64,487	29,523,153	58:37
1905	511,520	109,393	71,689	32,400,286	63 · 34
1906	519,925	111,494	79,597	33,479,900	64 · 39
1907	<b>530,655</b>	114,049	87 <b>,85</b> 3	35,212,222	66.36
1908	543,115	116,781	94,067	31,559,830	58.11
1909	557,350	119,650	99,955	33,047,340	59 29
1910	<b>573,2</b> 55	123,227	105,993	33,272,490	58.04
1911	588,000	128,036	112,293	36,110,115	61.41
1912	604,275	133,122	118,350	38,569,566	63 83
913	628,430	140,351	125,103	41,642,926	66 27
1914	651,000	147,442	131,168	40,778,844	62 64

## DESCRIPTION OF SEWERAGE SYSTEM.

While the Board took over from the State Government the branch which had the management of the Melbourne Water Supply, still the chief object of its creation was to carry out the long-called-for and pressing want of an efficient system of sewerage in the Metropolitan area. The plans and estimates of the cost of the Metropolitan sewerage scheme were originally prepared by the late Mr. James Mansergh, an expert civil engineer from England, and were furnished to the Board on its creation. The scheme recommended by the designer and selected by the Board's Engineer-in-Chief (the late Mr. William Thwaites) was estimated to cost £5,030,000, but was modified by Mr. Thwaites, with the concurrence of the Board, so as to reduce the estimated cost to £3,451,000.

The original Act of Parliament contemplated only the construction of sewers in the streets, but this was altered by an Act passed in 1897, which added the duty of constructing sewers in rights-of-way and the branches from the sewers to the building line of each property, and in consequence has added considerably to the original estimate of cost.

Tenements sonnected with the sewerage system. The first tenement was connected in Port Melbourne in August, 1897. On 31st December, 1914, 140,614 tenements had been gazetted as within sewerage areas, and applications received re 433 outside gazetted areas, making a total of 141,047 tenements. Out of this number 140,594

were provided with sanitary fittings which required to be connected with the sewerage system, and 134,590 had been connected, including the 433 outside gazetted areas. Of the remaining 6,004 tenements, 2,436 were in progress of connexion, while on 3,568 tenements connexions work had not been commenced.

The following statement shows the progress of house connexions

to the 31st December, 1914:-

# PROGRESS OF HOUSE CONNEXIONS WITH THE SEWERAGE SYSTEM IN MELBOURNE AND SUBURBS.

Municipality.	No. of Tenements connected on 31st December, 1914.
Melbourne City	26,245
South Melbourne City	10,659
Prahran City	11,344
Fitzroy City	7,777
Richmond City	10,037
St. Kilda City	6,359
Collingwood City	8,189
Footscray City	5,651
Hawthorn City	5,890
Brunswick City	7,486
Essendon City	6,350
Malvern City	4,154
Caulfield City	3,225
Northcote City	4,088
Camberwell City	2,597
Brighton Town	3,149
Port Melbourne Town	2,965
Williamstown Town	2,885
Kew Town	2,300
Coburg Town	921
Heidelberg Shire	76
Preston Shire	680
Moorabbin Shire	1,014
Nunawading Shire,	116
Total in Gazetted Areas	134,157
,, outside Gazetted Areas	433
Grand Total	134,590

PROGRESS REPORT OF SEWERAGE WORK.

On the 31st December, 1914, the sewerage system was practically completed in the following districts within the Board's Metropolitan area, viz.:—

Melbourne, South Melbourne, Port Melbourne, Collingwood, Fitzroy, Richmond, Prahran, St. Kilda, Moorabbin, Nunawading, and the thickly populated portions of Essendon and Malvern.

The system was nearly completed in Brighton, Hawthorn, Footscray, and Williamstown, and the more densely settled parts of Camberwell and Northcote, as well as in the greater portions of Brunswick, Coburg, Kew, and Preston, and, in a lesser degree, Caulfield; a small portion

of Heidelberg has also been completed.

During the preceding twelve months the work progressed principally in Coburg, Williamstown, Camberwell, and Brunswick; also in Kew, Preston, and Malvern, and, in a lesser degree, in Moorabbin, Essendon, Footscray, Northcote, and Caulfield. Main and branch sewers have been extended to meet the requirements of the new reticulation areas, and further extensions are being carried out.

Reticulation area contracts have been completed in Coburg, Kew, Williamstown, Camberwell, Malvern, and Preston; also in Essendon, Footscray, Brunswick, Northcote, and Heidelberg; and reticulation extensions by contract and day labour have been carried out to provide for new buildings, or fresh subdivisions in various districts of the

Metropolitan area.

Reticulation area contracts are now being carried out in Brunswick, Caulfield, and Heidelberg; also reticulation extensions by contract and day labour in Malvern, Caulfield, Footscray, Brighton, Brunswick, Camberwell, and several other parts of the Metropolitan area.

The whole system was so far advanced that on the date mentioned above the sewage from 141,047 tenements could be collected, including those inside and outside gazetted areas, and 140,594 tenements could be connected. Of these, 134,590 tenements were connected, and work was in progress on 2,436 other premises. The total number of fittings connected with the system was as follows:-52 public conveniences and 77 public urinals, 154,896 water closets, 114,450 baths, 88,166 sinks, 85,212 sets of wash troughs, 40,688 lavatories, 15,016 stables, 8,937 urinals, 7,264 polluted areas and paved yards, 1,900 cellars, 1,026 slop hoppers, 295 latrines, and 303 dairies, there being also 453 tenements with no fittings to connect. The house connexions pipes join the 9-inch reticulation pipes, which are gradually collected into 12-inch, 15-inch, and 18-inch pipes, and then again into brick and concrete branch sewers, which join the sub-mains and mains. In all  $1.311\frac{1}{2}$ miles of reticulation and 1433 miles of mains and branch sewers have been completed, making a total length of 1,454? miles.

Particulars of the system are as follows:-

The sewage of the metropolis is delivered into two main sewers and a subsidiary main leading to the pumping station at Spotswood.

The two main sewers are-

1. The North Yarra main sewer (North Yarra system), which commences with Heidelberg, and thence takes up East Kew, Preston, Coburg, Northcote, Brunswick, the Clifton Hill part of Collingwood, also Fitzroy, and the North Carlton, North Melbourne, and Flemington and Kensington parts of Melbourne, together with Essendon and Footscray.

2. The Hobson's Bay main sewer (South Yarra system), which starts at Sandringham, picking up Brighton, Caulfield, Malvern, St. Kilda, Camberwell, and a small part of Nunawading, besides the remaining part of Kew, also Hawthorn, Prahran, South Melbourne, Port Melbourne, Richmond, and the remaining part of Collingwood, with East Melbourne, and other remaining parts of Melbourne.

The subsidiary main, which takes in Williamstown, joins the

Hobson's Bay main before it enters the pumping station.

### PUMPING STATION, RISING MAINS, AND OUTFALL SEWER.

When collected at Spotswood the two systems are dealt Pumping station. with in separate buildings, and are arranged to be worked either separately or unitedly. The sewage enters the pumping station at a level of 50 feet below low-water mark through straining wells, one of which is established on each system. The wells are of 22 feet internal diameter, and each contains two straining cages, one of which is always in position. The solid matter caught in them is transferred to a drier in the building over the wells, where it is subject to steam pressure and consequently to a high temperature, which renders the material innocuous. The material from the drier is of no manurial value and is destroyed in a furnace. The sewage is raised by the pumps 125 feet through two 6-feet and one 4-feet wrought-iron rising mains -the three lengths running side by side, each 2:794 miles long (an aggregate length of 8.38 miles)—to the head of the outfall sewer, at Brooklyn, 75 feet above low-water mark, whence it gravitates to the Metropolitan Sewage Farm at Werribee in a partly-open and partlyclosed channel 16 miles long, of 11 feet diameter, and having a grade of 2 feet to the mile. The full capacity of the outfall sewer is 18,000 cubic feet a minute.

#### METROPOLITAN SEWAGE FARM.

The purification of the sewage of Melbourne and Suburbs is effected by filtration and aeration through the natural soil of the Sewage Farm, which contains 11,153 acres 1 rood 5½ perches of land situated about 24 miles south-west of Melbourne and 4 miles south-west of the township of Werribee in open plain country, enjoys an average rainfall of 18 inches, and has for its eastern boundary the Werribee River, with a long frontage to Port Phillip Bay on the south, (extending from the mouth of the Werribee River to the mouth of the Little River), to which the land gradually slopes from the north, the highest point being 44 feet above low-water mark. The head of the rising main at Brooklyn is 75 feet above low-water mark and the sewage flows by gravitation from there to the farm, a distance of 16 miles, where the point of delivery is 37 25 feet above low-water mark.

To irrigate the portion of the farm above that level necessitates pumping, and in the meantime most of the high land is being used

for dry farming, cereal crops being grown.

The farm originally comprised 8,847 acres 0 roods 51 perches of virgin unimproved land, which (together with a strip 111 miles long, containing 1681 acres, on which the greater portion of the main outfall sewer from the pumping station to the farm is constructed) cost the Board £159,873 in 1892. By an Act of Parliament passed on 11th August, 1911, the Crown was authorised to sell to the Board at £2 per acre an area of 305 acres 3 roods 11 perches of low-lying Crown land along the foreshore of the bay adjoining the sewage farm. By another Act of Parliament, passed on 11th December, 1912, a further area of 815 acres 1 rood 8 perches of foreshore land was acquired from the Government at £2 per acre. This land, extending westerly to the mouth of the Little River, gave the Board a frontage to the bay, extending from that river to the Werribee River. An area of 252 acres 3 roods 7 perches of irrigable land adjoining the sewage farm on the south-west was acquired by private treaty at £15 per acre during 1913; 120 acres 2 roods 38 perches of private land adjoining the above area has since been acquired at £5 12s. 6d. per acre, and 811 acres 2 roods 16 perches at the north-east corner of the original farm area has been purchased from the Lands Purchase and Management Board at £25 per acre. The last two purchases were made in 1914. acquirement of these areas has increased the size of the Sewage Farm to 11,153 acres 1 rood  $5\frac{1}{2}$  perches.

Before being required for sewage disposal the greater portion of the farm was leased by the Board to hay and grain growers, and proved highly productive under wheat, oats, and barley. The rents ranged up to about 30s. per acre, and for a number of years averaged over £1 per acre over the whole area let.

The method followed by the Board was to gradually resume the land from the tenants as it was required for sewage filtration purposes in order to keep pace with the progress of the sewerage house connexions work in the Metropolis. It has now all been resumed, but there is a considerable area yet to be brought under irrigation, preparation for which is carried on continuously.

The process of preparation generally followed is as follows:—After being divided by roads into rectangular blocks of 80 acres the blocks are again subdivided into paddocks of 20 acres (20 chains by 10 chains). The soil is broken up by steam ploughs, the bottom being subsoiled to a depth of about 2 ft. 6 in., and, where necessary, underdrained with agricultural pipes. The blocks are then graded into bays of about half an acre each, and commanded by distributing drains to facilitate rapid flooding—where the natural contour of the country is uneven it is found necessary to grade the blocks in small terraces; deep drainage channels are cut, the earth from same being thrown up to form embankments to carry the main supply carriers along the boundaries of these 20-acre blocks, which are at the same time securely fenced, and planted with trees for shelter and breakwinds. The main carriers and drains run

parallel north to south through the farm being half a mile apart; the sub-carriers and drains branch east and west every 10 chains. The available area of the 20-acre block is reduced to about 18 acres by the space occupied by the carriers, drains, roads, and plantations. The prepared blocks are generally sown with lucerne or perennial grasses (chiefly prairie or rye) or a mixture of lucerne and prairie grass, and in a few months are ready to be flooded with sewage. The resultant growth is very rapid, and (with the exception of a few hundred acres of lucerne reserved for hay) the irrigated lucerne and grasses are pastured with sheep, cattle, and horses; the practice being to keep the stock shifting from block to block (in flocks of about 500 sheep or an equivalent number of horses or cattle to each 18 acres) to eat the feed down in front of the sewage water. The filtered sewage is discharged into the bay by a series of main effluent channels running parallel north and south through the farm.

A large proportion of the farm lands will necessarily never be available for irrigation purposes. One hundred and twenty-nine acres have been devoted to sites for townships and manager's and workmen's cottages, of which last there are 56 on the farm. There are at present 431 acres of plantations and reserves, and the private roads and channels account for a further 445 acres; the area so utilized must of course increase as additional sections of the farm are brought under irrigation. These three items—cottage and township sites (129 acres), plantations and reserves (431 acres), and private roads and channels (445 acres)—

at present account for 1,005 acres.

As each acre of properly prepared land under irrigation suffices to deal with the sewage of only 100 persons, and as there are upwards of 6,000 additional tenements connected with the sewerage system each year (in 1913-14 there were 6,065 additional tenements connected), it will be seen that it is only a matter of a few years before all the available land of the original purchase will be under intense irrigation; hence the necessity for the acquirement of the additional areas previously referred to.

The total area available for sewage disposal at 30th June, 1914, was 7,119 acres, and the average quantity of sewage delivered daily on to this area during the year 1913-14 was 31,851,181 gallons = 117\frac{1}{3} acre-feet per day = 6 feet per annum over the whole of the prepared

part of the farm.

Of the area under irrigation, 214 acres were sown with maize for grain, and 435 acres of lucerne were cut for hay, leaving 5,288 acres of grasses, and small areas under fodder crops of maize and rape

(totalling 290 acres) to be depastured with stock.

Notwithstanding the large quantity of sewage water required to be put on the pastures summer and winter alike, the effective filtration of which must be the Board's first consideration, a considerable profit is derived from the farming and grazing operations. The principal sources of revenue are from the fattening of store sheep and cattle and the grazing of horses on agistment. The stock carried in the spring of 1913 was 19,626 sheep, 361 horses, and 2,186 cattle; and in the winter of 1914, 2,324 sheep, 924 horses, and 2,842 cattle, the general practice being to gradually reduce the stock from the spring maximum to the minimum in winter. The profits from transactions in sheep and cattle for the year 1913–14 were—from sheep, £8,595; from cattle, £6,199. The revenue from agistment (principally horses) was £2,603. The fat stock from the farm always excite keen competition from butchers and freezers, and command high prices.

In the year ended 30th June, 1914, 447 tons of lucerne hay and chaff were sold for a gross return of £1,439; while from 214 acres of maize an average yield of 38 bushels of grain per acre was harvested, which brought an average price of 4s. 1½d. per bushel.

Experiments are being carried on to ascertain the varieties of lucerne and maize best suited for growing on the sewage farm, and the varieties of grasses likely to flourish under the largest amount of winter irrigation.

The total capital cost of the farm for purchase and preparation was at 30th June, 1914, £501,260, and after paying interest on this sum and all charges in connexion with the disposal of the sewage the profits resulting from the various farming operations and the receipts from rents of cottages, &c., reduced the net cost of sewage purification for the year 1913–14 to £10,504 for an estimated population served by the sewerage system of 579,145 persons, or 4.35d. per head. The profitableness of the farming and grazing operations is largely influenced by the climatic conditions of the State generally, and the net cost of sewage purification varies accordingly from year to year. The average for the five years 1909–10 to 1913–14 was 5.38d. per head per annum.

The sewage farm is supplied with water for stock and domestic purposes from the metropolitan water supply system.

Statistical details relating to the farm for the year 1913-14 or as at 30th June, 1914, are as follows:—

Total area of farm	Acres. 11,153
Area sown with grasses  Area of settling pits under fodder crops other than lucerne or grasses—	5,288
Maize, 135 acres; Rape, 155 acres	290
Total area of irrigated pasture available for grazing.  Area under lucerne for hay  maize for grain	5,578 435 214
Total area under irrigation and intense culture	6,227

## Municipal Statistics.

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Area prepared for settling pits for winter sewage	892
Total area prepared for irrigation and sewage	
disposal	7,119
Area under preparation for irrigation	430
ent a T	7,549
Total	1,010
Area under cereal crops (wheat, barley, and oats) not	715
included above	961
Area under bare fallow	923
" of swampy ground reserved for settling pits	943
Areas reserved for cottage sites (102 acres) and town-	100
ship sites (27 acres)	129
" plantations and reserves	431
" private roads and channels	445
Total area of farm	11,153
A awar	435
Lucerne hay—area cut Acres	
Total yield of lucerne hay for season Tons	1,500 214
Maize for grain—area harvested Acres	
Average yield per acre Bushels	38
Fodder crops (other than lucerne or grasses)—	Acres.
Maize	135
Rape	155
H-4-1	290
Total	5,288
Irrigated pasture available for grazing Portion of area under lucerne for hay	145
mains for avain	71
", ", " maize for gram	112
Total area available for stock	5,794
Acreage carrying sheep	3,000
004+10	2,000
,, cather horses (on agistment)	794
	5,794
Number of sheep and cattle purchased and sold for year ended 30th June, 1914—	
Sheep. Cattle	•
Purchased	
DUILL	Section 1

Stock carried—			No.
Maximum in spring—Sheep			19,626
Horses	••		361
- Cattle	• •		2,186
Minimum in winter—Sheep	••		2,324
Horses		•	924
Cattle	• •		2,842
Profits from transactions in live-stock-			
Sheep		• •	£8,595
Cattle	••	• •	6,199
Agistment (principally horses)			2,603
Total	• •	• •	£17,397
			No.
Men employed by Board	••	• •	154
Danulation regident on form over 91 wee	ma of on		150
Population resident on farm over 21 year, ,, ,, under 21 year	ra or ab	υ. MA	$\begin{array}{c} 158 \\ 142 \end{array}$
,, ,, under 21 ye	ats of a	80	
Total	••		300
Houses on farm owned by Board			56
,, ,, tenant		• •	1
		7.7%	
Total			57
	5 A		<del></del>
Working horses on farm hired by Board	• •	••	38
Horses owned by Board—			
Working horses—Draught	••	••	49
", ", Light		•• •	16
Brood mares	• •	••	24
Boais	•	1. * *A	4
Total	•/•	• •	93
Progress of Construction W	orks.		
Progress of Construction W	orks.		Acres.
Progress of Construction W  Area steam ploughed for irrigation	orks.		Acres. 6,805
Area steam ploughed for irrigation ,, ,, for plantations as		<b>ves</b>	
Area steam ploughed for irrigation		ves.	6,805

				Iiles.	Chai
ength of main carrier emba	ınkments-		$\mathbf{ned}$	8	10
<b>n</b> , , , , , , , , , , , , , , , , , , ,		unlined	• •	20	45
Total	••	• •		28	55
ength of subsidiary carrie	rs—				
C.I. flumes	• •	• •	. · ·	15	62
C.C. flumes	• •			4	72
Embankments unlined	• •	••	• •	34	77
Total	••		••	55	<u>51</u>
ength of main drains				29	58
	• •	• •	• •	85	58
	••	••	• •	27	1
	• •	•	• •	32	49
", agricultural pipes	••	• •	••		<del></del>
Total	•.• • .,	• • •	••	175	6
ength of water pipes laid-	-6-inch			2	25
" "	4-inch			11	7
<b>39</b>	3-inch			0	7
99	2-inch			14	7
<b>)</b>	1½-inch			2	33
35	1-inch	• •		3	<b>53</b>
Total		· · · · · · · · · · · · · · · · · · ·		33	52
F					
Length of roads formed	• •	••	• •.	32	
" fencing erected		••	••	307	34
,, ,, wire nette	<b>u</b>	• • • •	••	6	23
in the comment of the					No.
Frees planted					
Average quantity of sewage	e delivered	l daily on	to		,000
farm for year $1913-14 = 117\frac{1}{3}$ acre-feet per da	y = 6 fee	t per ann	ım	1,891	,101
over the total area availa viz., 7,119 acres.			· ·		
Total capital cost of farm to	o 30th Jun	ie, 1914	••	£501	,260
Net cost of sewage purificat	tion for ve	ar 191314	į	£10	,504
Population served by sewer	age systen	<b>1</b>		579	,145
Net cost per head of sewag 1913–14	ge purinca	tion for y	ear	4 •	35d.

#### FIRE BRIGADES BOARDS.

Constitution of Fire Brigades is the service of water required for fire extinction.

Under the Fire Brigades Act 1890, there are constituted a metropolitan fire district, controlled by the Metropolitan Fire Brigades Board, and nine country fire districts, controlled by the Country Fire Brigades Board. The supervisors are the chief officers of the respective Boards, who are aided by deputies and other assistants.

The arrangements for fire extinction in the metropolis are closely allied to those for the Melbourne water supply, the service having been provided under the clauses of the *Fire Brigades Act* 1890, and its amendments.

The Metropolitan Fire District embraces the area included in the various municipalities within a radius of ten miles from the General Post Office. The area vested in the Melbourne and Metropolitan Board of Works is included in this area, but the Metropolitan Fire Brigades Board has jurisdiction over portions of the shires of Wyndham, Braybrook, Keilor, Broadmeadows, Heidelberg, Templestowe, Nunawading, Mulgrave, and Moorabbin, within the 10-mile radius, which are not vested in the Melbourne and Metropolitan Board of Works. The Metropolitan Fire District includes the greater portion of the shire of Moorabbin, and it extends in a southerly direction as far as Mordialloc, that township being included.

The Metropolitan Fire Board is composed of nine members, of whom three are appointed by the Governor in Council, three by the municipal councils, and three by the insurance companies.

A section of the Fire Brigades Act provides that the Board for the purpose of extinguishing any fire, the chief officers of the fire brigades may in the areas under their respective control "cause water to be shut off from any main or pipe in order to obtain a greater pressure and supply of water for the purpose of extinguishing any fire, and no person or body having the management of any water supply shall be liable to any penalty or claim by reason of any interruption of the supply of water occasioned by compliance with the provisions of this section."

Another section of the Act provides that "each Board, its officers and servants, any local committee, its officers and servants, and any brigade registered under this Act shall have the use of all water mains, water plugs, valves, pipes, vested in or belonging to the Board of Land and Works or any public or municipal corporation, or local body whatsoever, and of all water therein, or in any well or tank, free of charge, for the purpose of extinguishing any fire, or for the purpose of drills, competitions, and practice, conducted under the authority of either board or any local committee."

Local councils have the right, in the interests of fire prevention, with the approval of the Governor in Council, of making, altering, or repealing by-laws for the purpose of regulating the height of all buildings erected in their own municipality, or in any part of it, and also for providing means of escape from such buildings during a fire.

The general duties of the Fire Brigades Boards are defined to be those "of taking, superintending, and enforcing all necessary steps for the extinguishment of fires, and for the protection of life and property in case of fire, and the general control of all stations and of all fire brigades shall be vested in the Boards for the metropolis and country districts respectively. The Boards may purchase or lease property for fire brigade stations, and control the formation of permanent and volunteer fire brigades, and schools of instruction, the maintenance of fire alarms, and the establishment of communication, telephonic and other."

The Metropolitan and Metropolitan Board of Works under the Water Act 1890 must, upon the request of any municipal council within its boundaries, fix proper fire plugs, in the main and other pipes belonging to the Board at convenient distances, and at such places as the Board may consider proper and convenient for the supply of water for extinguishing any fire which may break out within its limits. The cost of fixing fire plugs and notice boards, together with the cost of their maintenance, must be defrayed by the municipal council within whose limits the fire plug is fixed. The Board may also fix fire plugs for private owners, provided they pay the cost and maintenance.

The Melbourne and Metropolitan Board of Works is bound to keep all its pipes, to which fire plugs are affixed, charged with water, unless prevented by unusual drought or other unavoidable cause, or during necessary repairs, and shall allow all persons at all times to take and use such water for extinguishing fires. On 30th June, 1914, the Board had fixed to its 220 miles 603 chains of leading mains and 1,209 miles 721 chains of reticulation mains, 2,525 pillar hydrants, 123 Tregear patent hydrants, and 14,586 ball fire plugs, viz., 14,564 Bateman and Moore (of which 1,241 are with spring) and 22 Fowler patent—a grand total of 17,234. Except in case of accident, repairs, or cleaning, these mains are kept constantly full of water under pressure.

Outfit of the

bination

600 miles.

1914, had under its control the following: -- Forty-seven stations, 241 members of permanent staff, 35 members of special service staff, 7 members of clerical staff, 10 men engaged in the workshops, 130 partially paid firemen, 10 steam fire engines, 5 gasolene engines, 3 petrol motor fire engines, 1 motor chemical engine and hose waggon combined, 1 motor salvage waggon and chemical engine combined, 2 motor comappliances, 6 motor hose waggons, motor cycles, 1 Chief Officer's motor car, 34 horse hose reels, 33 hand hose reels, 8 extension ladders and fire escapes, 6 Pompier ladders, 10 exercise and supply carts, 1 salvage van, 1 brake, 69 horses, 110,395 feet of hose, 46 hand pumps, 6 smoke helmets, 2 smoke jackets, and 268 fire alarm circuits having 851 street fire-alarms, of which 791 contained telephones, and the remaining 60 were fire alarms only. There were also 418 auxiliary boxes and 19 automatic systems in public and other buildings, 136 direct telephone lines, 58 of which were acting as fire alarms to buildings, and 28 circuits to sprinkler installations, with 58 sprinkler call transmitting instruments. The total length of

The Metropolitan Fire Brigades Board on 31st December,

During 1914 the cost of maintenance of the Metropolitan Fire Brigade was £79,369, one-third being contributed by each of the contributing bodies, viz., Government of Victoria, municipalities within the Metropolitan Fire District, and the insurance companies carrying on

wire in use outside stations for fire alarms and telephones is about

business in that district. The municipalities' contribution is equal to '78d. in the £1 over an area wherein the property is valued at £6,954,190, and that of the insurance companies is equal to £417s. 7d. for every £100 of premiums on insured property. The premiums received in the Melbourne Fire District in 1913 amounted to £465,526, and the total of the payments made by the companies in 1914 for the maintenance of the fire brigade system was £22,724.

The Country Fire Brigades Board consists of nine members. Three are appointed by the Governor in Council, Country Fire two are elected by the municipal councils of the districts in which there are brigades registered under the Board, two are elected by the fire insurance companies carrying on business in such districts, and two by the registered fire brigades. annually elects one of its members as president. The tenure of the Board members is two years. The Board's revenue in 1914 was £16,699, which was obtained from the following sources:—(a) Government, £5,755; (b) municipalities, £5,164; (c) insurance companies, £5,684; and (d) other sources, £96. The expenditure for the year amounted to £16.561. There are 104 municipal councils and 66 insurance companies included in the operation of the Act. The premiums received by the insurance companies in country districts during the year 1913 amounted to £197,473, and the total of their contributions in 1914 for the up-keed of the brigades was £5,684. The total value of rateable property assessed within the Board's district in 1914 was £1,765,763. All brigades under the control of the Board are volunteer brigades, but in the large towns a few permanent stationkeepers and watchmen are also employed. There are 124 registered brigades, and four more are about to be registered. The number of registered firemen is 2,444, but in many brigades there is, in addition to the registered firemen, a number of "reserve members." The Chief Officer and the Deputy Chief Officer of the Board frequently inspect the brigades, and also pay them "surprise visits." They report monthly to the Board as to the efficiency of the service, and in regard to the equipment necessary to be supplied. In 1914 the chief items of the plant consisted of 5 steam engines, 1 motor engine, 63 manual engines, 11 horse brakes, 61 apparatus carriages, 3 fire escapes, about 280 hose reels, and approximately 180,000 feet of canvas hose.

Particulars of receipts and expenditure of both Boards during the five years ended 30th June, 1914, are as follows:—

# REVENUE AND EXPENDITURE OF FIRE BRIGADES BOARDS: RETURN FOR FIVE YEARS.

	1010.	1911.	1912.	1913.	1914.
Ordinary Receipts. Contributions — Govern-	£	£	•	<b>.</b>	Æ
ment, Municipal, and			1		
Insurance	69,375	69,837	78,206	82,540	85,036
Receipts for Services	3,226	3,106	5,172	5,941	8,241
Interest and Sundries	2,141	3,039	2,109	3,725	1,261
Total	74,742	75,982	85,487	92,206	94,538
Ordinary Expenditure.					
Salaries	36.589	40,939	48,798	50.426	54,285
Fire Expenses	3,216	3,297	3,183	3,233	3,312
Administrative Charges, &c.	14,653	13,874	16,517	15,584	19,515
Plant—Purchase and Re-	• • • • • • • • • • • • • • • • • • • •	,		,	
pairs	6,011	4,185	7,176	4,592	4.112
Interest	<b>5,83</b> 8	5,806	5,995	5.928	7.217
Sinking Fund	2,000	2,000	2,000	2.430	2,215
Firemen's Accident Fund	450	500	550	550	650
Miscellaneous	4,112	6,456	6,243	4,580	4 624
Total	72,869	77,057	90,462	87,323	95,9 <b>30</b>
Loan Expenditure.					
Purchase of Land and		to be a section			
Erection of Buildings, &c.	155	72	417	14,796	19, <b>373</b>